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DETAILED SCHEME FOR THE OPENING OF A DISCIPLINE
AT UNDERGRADUATE LEVEL

Discipline Title: Economics

Code: 7310101

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1. SECTION 1: GENERAL INFORMATION ABOUT THE INSTITUTION

1.1. AN OVERVIEW OF THE BRITISH UNIVERSITY VIETNAM

British University Vietnam (BUV) began operations in 2009 in a small, city-centre campus in the city of Hanoi, Vietnam. The initial cohort of 20 students joined in May 2010; studying BUV developed English and foundation programmes as an approved pathway to beginning Staffordshire University (SU) degree programmes at BUV in September 2010. With its ongoing development of programmes and growth in student numbers, BUV moved to a state-of-the-art campus in Ecopark township, Hung Yen province, on the edge of Hanoi in 2018, which has a planned capacity for over 5000 students in the first two phases of its development. BUV has experienced significant development with the opening of the new campus, growing from:

- Three faculty members to 53 higher education faculty and 13 non-higher education teaching staff, with a total number of 192 full and part-time staff members.
- Two undergraduate programmes initially offered, to 11 undergraduate degree programmes and an MBA.
- 20 initial students to over 1600 students currently studying for undergraduate and post-graduate degrees.

As well as offering degrees from its UK partners of SU and University of London (UoL), BUV is, as part of its Vietnamese governmental licence, a fully established and licenced Vietnamese University. As an internationally owned Vietnamese company, BUV has contextualised the requirements of operating as a British university within an international environment and operates within both an academic and ownership related governance structure.

Mission

BUV's mission is to develop highly employable and confident graduates who are first and foremost 'good' human beings with an ethics of kindness and caring. They will also be cross-disciplinary in skills and language; creative and adaptable; respectfully confident; and committed to continuous learning and self-development.

Above all else, BUV expects all its staff and students to care about the wellbeing of people; respect their environment; and be socially and culturally inclusive.

BUV Drivers/Objectives.

Our three main drivers in achieving our mission are:

1. To offer accredited British and international higher education and training in Vietnam.
2. To provide five-star university campuses, learning experiences, and services.
3. To include an international learning experience with a unique program of personal and social growth.

BUV Core Values.

Kindness & Respect - embodied in our commitment to maintaining peaceful, safe learning and working environments for all; demonstrated by our focus on embracing diversity with compassion and care; evident in our commitment to behaving politely and respectfully; and, embedded within our personal and social growth programme for students and the actions of our staff.

Collaboration & Innovation - showing how diversity in the ways we work enriches creativity, new ideas and forms of expression, and intellectual curiosity and willingness to take risks to make real and meaningful impact.

Sustainability & Responsibility - illustrated in our University-wide commitment to lead by example in preserving and protecting our natural resources and environment, and in our approach to responsible financial planning.

Learning & Relearning - understanding that in today's ever-changing environment of political, social, and technological change, it is important to accept the need for life-long learning for all our students and every member of staff at BUV.

SECTION 2: THE NECESSITY TO OPEN THE DISCIPLINE

2.1. SUITABILITY FOR LOCAL, REGIONAL AND NATIONAL HUMAN RESOURCE DEVELOPMENT NEEDS

In the era of global integration, the economy plays an important role for every nation. A developed economy is considered as a solid foundation for a country's integration into the international economy. As a trend of globalization, international business is constantly developing and has become an attractive field, bringing enormous income for all participants. Integration brings lots of chances for developing countries; however, it also poses huge challenges for those who have inadequate internal strength. In order to strengthen the economy, we need to enhance our competitiveness not only in agriculture or industry but also in commerce and services, as these sectors directly impact the Vietnamese economy when joining organizations and agreements in the region and around the world, such as the WTO (World Trade Organization), ASEAN (Association of South-East Asian Nations), WB (World Bank), IMF (International Monetary Fund). Globalization is an irreversible trend and is the goal of the Vietnamese government; therefore, international business management is becoming a potentially interesting field.

According to the World Labor Organization (ILO) forecast, Vietnam will be able to create 6 million more jobs, equivalent to one tenth of the total number of jobs increased by 2025 in the entire ASEAN region due to the impact of the formation of the AEC. When joining the AEC, the number of jobs in Vietnam will increase by 14.5% by 2025.

From 2020 to 2025, Hanoi and nearby provinces like Hung Yen needs around 270,000 employees for jobs related to business management. With more than 700,000 existing businesses, which are expected to grow to 1 million enterprises by 2025, the demand for high-quality workers with bachelor's degrees and vocational education with practical skills in the labor market in big cities and industrialized urban areas is relatively low. At the same time, under the pressure of the 4.0 technology revolution, businesses worry about falling behind. Report by Statista in 2023 indicated that by December 2021, there were about 11.2 thousand new business registrations in Vietnam. In total, approximately 111.8 thousand new businesses were registered in that year, which showed a strong trend of recovery after COVID pandemic.

According to recent research by economic experts published on SaigonPress in 2018, the shortage of highly qualified human resources in business sectors accounts for about 40% of the total labor demand in the market and the growth rate must reach about 50% new to meet the current market. Through a survey of 100 enterprises, 85% said they had to spend an average of 3-6 months to train new graduates who could meet the minimum work requirements. That is to say, businesses are willing to pay higher for graduates who are well trained in business administration and are equipped with practical knowledge and experience, rather than spending time and money on training so that they know how to work.

2.2. SUITABILITY FOR THE HUMAN RESOURCE NEEDS FOR INDUSTRIES

The Covid-19 pandemic has and is posing many challenges and difficulties in ensuring the maintenance of the supply chain of goods and services, in particular essential goods, and ensuring economic growth in general. On the overall level of Vietnam's economy, economic growth fell from 7% in 2019 to 2.9% in 2020. (GSO, 2021). It also means that the output of goods and services and the actual income decreased at such levels. In terms of the number of jobs lost due to the influence of Covid-19, by the end of 2020, an estimated 32 million people will be affected by the pandemic. Of these, 69% had lost their income, 40% had to cut their working hours, and 14% had to resign or be fired. The most affected sectors are services with 72% of workers affected, followed by industry and construction (65%), and agriculture (26%) (GSO, 2021). With the role of regulating the economy, the government has also implemented a series of measures aimed at two main objectives, both controlling the flow and ensuring sustained economic growth. But ensuring these two goals at the same time (also called dual goals) is extremely difficult. Faced with such difficulties and challenges, the supply of human resources in the economic sector continues to play an important role in promoting Vietnam's economic recovery and development in the coming period. The sections below will provide some basic information on the issues posed, the knowledge and skills that the discipline of economics equips students, job positions and prestigious academic training facilities.

The economics sector provides a broad knowledge capital and is the fundamental foundation of deep specialisations. Because of this, students in this discipline are able to quickly adapt to career changes in today's times. In addition to basic economic knowledge, students are equipped with essential skills such as problem detection, application of technology 4.0 in the search and synthesis

of information, data processing, presentation, and decision making based on the amount of information obtained. These knowledge and skills play an essential role in promoting self-learning and self-finishing knowledge for each specific job position that the student pursues. It is also one of the most suitable learning methods to help learners develop their future careers after graduation in the face of today's rapid economic structural shift.

In a more understandable way, many questions from different perspectives can be answered as students pursue Economics as some of the suggestions below:

From the perspective of the buyer of goods and services: after completion of the study, the student can explain the price of services and goods is determined by what factors, the behavior of the manufacturing enterprises in the competitive or exclusive market, how to optimize the spending budget while ensuring satisfaction of demand, etc.

From the perspective of manufacturing enterprises: learners can understand the factors affecting consumer behavior in order to come up with effective marketing and business strategies, decide on strategies to reduce or raise prices to increase sales and profits, etc.

From the perspective of job seekers: learners are able to identify and evaluate structural changes in the economic sector, leading to changes on the labour market (demand, salary, job position and skills needed). This helps to select the economies that fit the future coin with the desired income level.

With the government in the role of regulating the economy: learners can understand why the government has to intervene in the economy, how intervention through specific tools and policies will affect the income, employment of subjects (business, workers, consumers) in the economics...

An additional advantage of students enrolling in Economics is that there are many opportunities to find diverse job positions that are highly adaptable to career changes or career structural shifts, as well as the strong development of today's information technology.

The economic sector is considered to be the " cradle" that produces fundamental economic theoretical systems, contributing to a powerful impact and transforming the way people make

decisions in the more efficient use of resources. The prestigious Nobel Prize in Economics is a recognition of the great contribution in the theoretical field of the industry.

Students pursuing economics can adapt to a variety of job positions as follows:

(i) Researchers, teaching in educational institutions in the field of economics

With the basic knowledge capital, along with the essential skills in data analysis and processing equipped as above, the learner has a passion for research, updating data, discovering economic relationships that can continue in higher education to later become faculty, economic researchers. These up-to-date knowledge and good data analysis skills can provide many benefits for students and learners in universities or research institutes.

(ii) Economic analyst, market research in private companies

In today's digital age, the trend of building and mining big data (Big Data) plays an essential role in decision-making. After graduation, students can find suitable positions in market research companies, or large companies/concerns where behavioral studies (such as consumer, manufacturer) or market trends analysis are essential in building and adjusting manufacturing/business strategies. Of course, in order to do well this job placement, the learner needs to continue to learn practical and be involved and specific projects to perfect skills

iii) The business expert

Economics learners also easily find a job directly related to the goods and services business. Skills in presentation, teamwork, and negotiation with economically sensitive thinking are key factors that enable learners to succeed in the position of a business employee. If learners equip themselves with in-depth knowledge of a specific product/service of the workplace, combined with accumulated experience, they will later become excellent entrepreneurs.

Investor and Financial Analyst/Securities

The development of the financial/banking sector also opens up many opportunities for students to study economics. Based on the basic knowledge and skills equipped, students can take additional short-term courses on banking or finance, or can study on their own by accessing huge databases on the Internet. This will enable students to succeed in conquering employers or engaging in financial investments on their own.

(v) The business manager

The start-up trend is very developing and is an encouraged direction for educational institutions in the economic sector. Thanks to the formation of entrepreneurial ideas, enterprise passion and especially knowledge capital as well as the basic skills equipped by studying economics, students can build their own business. In addition, learners can become good business managers after a period of work in enterprises, business manufacturing departments.

(vi) Economic managers in state management bodies

Management and economic operation of a country or territory (province, district, municipality) requires basic economic knowledge and essential skills such as problem detection, planning, organization, coordination of work, and decision-making. Economics is considered to be the key to equipping those essential knowledge and skills.

2.3. SUITABILITY FOR THE UNIVERSITY'S MISSIONS & DEVELOPMENT STRATEGY

British University Vietnam is a foreign-invested university established under Decision No. 1428 / QĐ-TTg of the Prime Minister dated September 9, 2009 to provide undergraduate and postgraduate degrees. BUV has a range of different responsibilities for its higher education provision which differ depending on the programme of study and partner. At all levels, BUV is responsible for the provision of learning opportunities to students, ensuring the quality of teaching provided, managing student registrations and behaviour within BUV, and ensuring the needs of students from a non-academic perspective are met.

With its ongoing development of programmes and growth in student numbers, BUV moved to a state-of-the-art campus in Ecopark township, Hung Yen province, on the edge of Hanoi in 2018, which has a planned capacity for over 5000 students in the first two phases of its development

Following the move to the new EcoPark campus in 2018, and the subsequent growth in staff and student numbers, BUV have experienced a series of significant changes related to this growth. The governance system has become increasingly formalised, including the creation of a University Senate and associated committees. The goal of this change was to allow for a system of governance that recognises BUV's unique position as a university licenced and operating within Vietnam but operating on the principles of providing significant learning autonomy from students and allowing a student-centred approach enabling them to develop their own learning journey.

Faced with the above changes and challenges and BUV's stated strategic priorities, there are two key implications related to the safeguarding of academic standards and ensuring the quality of students' learning experiences. The first of these is the move to a new system of School level management. This move will allow BUV to scale-up the opportunities it provides to students and means that processes and policies can be adapted where needed based on the need of individual Schools.

The second implication of the changes is the progression to the next phase of the growth of the campus. Building for the second phase has now commenced, and this means that our planned increased growth in the period post 2025 will not be limited by classroom, student support, or facilities constraints, and that student's learning opportunities will not be negatively impacted as we increase our student numbers. Phase two of the campus also includes further specialised facilities, plans of which are being developed with input from faculty from the relevant Schools. Along with the physical growth in facilities, the operation of academic centres will bring benefits to student learning, faculty research and opportunities for further international study options.

Professor Dr Raymond Gordon, Vice-Chancellor, and President, stated: "2023 marks the 50th anniversary of bilateral relations between Vietnam and the United Kingdom. Since its inception, BUV has contributed to the strength of the relationship between the two nations, and it will continue to do so. BUV will continue to contribute resources to the Vietnamese Government's education

priorities. Receiving the highest level of accreditation from both QS and QAA is a result of the University's goal to invest in a world-class higher education learning environment in Vietnam."

In the immediate future BUV will focus on activities ranging from: continuing to align its academic curriculum to the practical needs of the Vietnam labour market; continuing to provide students with internship opportunities in a wide range of industries and positions; striving to maintain its record 100% of students attaining employment or moving on to higher studies within 3 months of graduation; completing the third phase of its campus construction by 2028 with a planned total investment of more than USD 165 million; expanding its market reach and services throughout Vietnam; attracting international students and academics to Vietnam; facilitating high-quality research on Vietnam's economic and social priorities; and, increasing access to British degree programmes through a Scholarship and Financial Aid Fund worth billions of VND.

BUV's mission is to develop highly employable graduates who are first and foremost good human beings with an ethic of kindness and caring. Graduates will also be cross-disciplinary in skills and language; innovative, imaginative, respectfully confident; and committed to continuous learning and development. BUV expects all its staff, students, and stakeholders to be courteous and care about the wellbeing of other people; to respect their environment; and be socially and culturally inclusive.

In short, BUV is committed to the bilateral relations between Vietnam and the UK and will continue to turn young Vietnamese students into talented and respectful adults that are confident and caring, but most importantly they are prepared to lead the way and thrive in a challenging and exciting future in which the jobs and roles they will play are yet to be invented.

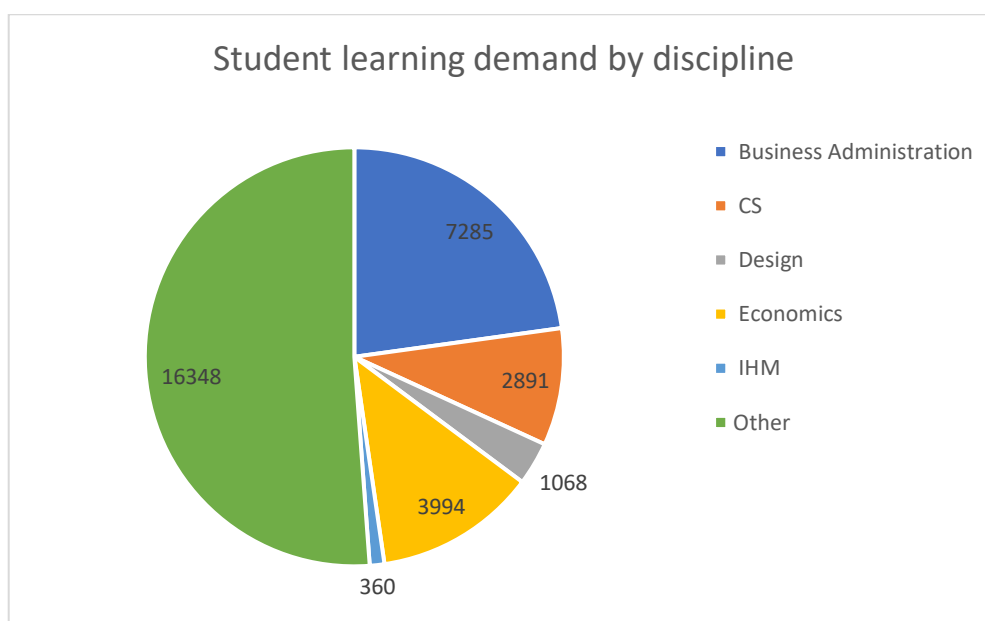
2.4 RESULTS OF THE SURVEYS, ANALYSIS AND ASSESSMENT OF THE NEED FOR HUMAN RESOURCES WITH AN UNDERGRADUATE DEGREE IN BUSINESS ADMINISTRATION

2.4.1. Results of the surveys on students

As part of the process to open the Discipline, BUV conducted a survey to analyze the assessment of the demand for human resources in relation to the expected Discipline in order to obtain opinions from students, the opinions of experts in the field, employers and faculties.

- Objectives of the survey: Identify the actual status of the learning needs of the student, the recruitment needs for the quantity and quality that meet the requirements for employment in the unit; training orientation that meets the social needs; assess the need for the opening of the training sector.
- Subjects of the survey: students, students, employers, alumni, faculty staff of the School and partner schools.
- Survey method: The survey sample is designed with the content of questions in line with the purpose of the survey of each subject. The survey copy after being sent to the survey subjects will be collected and validity checked then conducted aggregation and analysis of the information obtained.
- Survey forms: Live polls, email, phone calls, online surveys and collaboration with Times and Education newspapers.

The total number of votes issued to 12th grade students across the country is unlimited, the number received is 31,946 votes. Among them, the number of students choosing the disciplines of Business Administration was 7285, accounting for 22.8%. From the survey result, it is clear that Business Administration is demanded the most among students, followed by Economics and Computer Sciences.



2.4.2. Results of the surveys on alumni's opinions

BUV closely monitors the post-graduation success of our former students and engages in both formal and informal communication with our graduates. Formal channels such as graduate surveys and phone calls are used to determine our post-graduation statistics as shown in 255 Post-graduation Summary Figures, and BUV are extremely proud of our 100% rate of employment or education within three months of graduation, which prove that there is high market demand for this discipline.

This information is also used by the team to invite them to relevant events and therefore improve our ability to provide opportunities for current students, as well as to broaden our alumni network who can provide support for current students in BUV.

BUV are proud of the destinations of our graduates, which include Big Four professional services firms, world leading multinational enterprises such as Samsung and Heineken, as well as leading local technology and banking firms.

SECTION 3: CONDITIONS ON THE TRAINING PROGRAMME TO OPEN A TRAINING DISCIPLINE

3.1. TRAINING OBJECTIVES

3.1.1. General Objectives

This programme aims to provide students with a strong basis for a future career in finance and economics related fields of work, where skills in both the areas are required. Students are engaged in analysing and evaluating the economic and financial aspects in management decision making. The programme also equips students to be effective decision makers in business, commerce and public policy as well as competent in professional knowledge and skills in the Business Administration and Economics disciplines in preparation for entry into careers that involve the extensive study of these 2 areas.

Upon successful completion, students will graduate with an award from British University Vietnam. At the end of the programme, students will have met the learning outcomes from both awards and have achieved two sets of credit. The learning outcomes and credits are detailed below.

- Encourage the development of a range of skills, both subject specific and more general employability skills, which will enhance career opportunities.
- Provide a stimulating and accessible course of study that gives students a sound grasp of contemporary accounting and finance issues which the students can develop and apply in their future employment.
- Develop students who have an awareness of finance and economics, and are willing and able to embrace change and are focused on achievement.
- Provide students with an opportunity to undertake a year of work experience through the placement, with support from the Students Experience Office.

3.1.2. Specific Objectives

The programme will have at its core the notion of Economics as well as Business Administration being about transformation, of individuals and their lives and of organizations and communities, and the role that our graduates will have in those communities as business transformers. There will be engagement with employers, a focus on real-life scenarios and activities to foster

understanding of the integrated nature of business functional areas. The focus and development of employability skills is a cornerstone of the award. This means acquiring and understanding academic knowledge and being able to confidently apply this knowledge in practice through being adept communicators, good team workers, having good interpersonal skills, being critical (and able to accept and build on criticism), having the ability to solve problems, make decisions and being able to manage their own time.

Students will develop these skills as a distinctive part of their learning journey, being able to demonstrate impact, excellence and distinctiveness in their chosen field of work.

As students progress through their academic and personal development journey Finance and Economics students will develop:

Awareness - understanding and appreciation of the community in which business is conducted and their role in reflecting and shaping the future agenda of business in practice.

Altruism - become purposeful and focused on achievement and empathetic of the impact of their decisions, agendas and action on the experiences of others.

Articulation - confidence in their ability to communicate their ideas and requirements using a range of media and tools of analysis.

Adaptability - ability to be flexible and willing to address and embrace change in the pursuit of better solutions and environments.

Authenticity - a genuine, respectful and sincere approach to their dealings with others and able to lead and engage with others to share with and learn from diverse communities of practice.

These attributes will be embedded in the learning outcomes of the total learning experience requiring an innovative and evolving approach to learning and development of business knowledge and skills, which encourages partnership in design and delivery and engagement in assessment and progression. They support development of the Graduate qualities as indicated below.

3.2. EXPECTED LEARNING OUTCOMES

3.2.1. Knowledge

Knowledge & Understanding

Graduates should be able to demonstrate relevant knowledge and systematic understanding and critical evaluation of organisations, the business environment in which they operate and their management. Programmes emphasise understanding, responding and shaping the dynamic and changing nature of business and the consideration of the future of organisations within the global business environment, including the management of risk.

Learning

Carry out enquiry-based learning, critical analysis and evaluation, and creative thinking to provide opportunities and solutions for business success. This encompasses organisations internal functions, the business environment and management processes, procedures and practices for effective management of organisations. Engage in strategic thinking and development and apply ethical reasoning to issues facing contemporary organisations, management and leadership.

3.2.2. Skills

Enquiry

Justify and apply appropriate and ethical approaches to research and investigation in the field of management and apply skills and knowledge of enterprise in the pursuit of new business solutions and opportunities. Evaluate the effectiveness and ethical use of Information in a global business management context.

Analysis

Describe, comment on and critically evaluate contemporary research into business management and its application related to decision making and the judgement of strategic decisions. Be entrepreneurial in your way of thinking and behaving, and in your approach to problem and opportunity analysis. Throughout students will reflect on the application of creative thinking, risk analysis and innovation.

Communication

Communicate complex information, ideas, problems and solutions through a variety of media and display confidence in their communication and presentation abilities and your ability to network and interact.

3.2.3. Autonomy and Responsibilities

Problem Solving

Demonstrate a range of approaches to solving complex and interrelated business problems, displaying judgement of appropriate and different perspectives and the knowledge and understanding of what is right and ethical.

Application

Apply, with reasoned judgment the research and analysis skills, problem-solving techniques and business knowledge to business problems review, extend, devise and sustain arguments to complex organisation problems, scenarios and opportunities to demonstrate your capabilities as entrepreneurs and enterprising individuals.

Reflection

Demonstrate a high level of competence in personal development, showing initiative, responsibility, reflection and the transferable skills necessary for employability and understanding of your role in a globalised economy, through highly developed skills of personal awareness and critical review.

3.2.4. Learners' Career Prospects after Graduation

Through the Finance and Economic programme, students should be prepared for a worldwide career with opportunities covering different sectors and industries. Employers typically expect graduates to be equipped with real experience of working in a business environment, so it is a good idea to have relevant experience before students graduate. students will benefit from their internships from the very first year by studying with BUV.

The Finance and Economics programme will prepare students for graduate careers working abroad or in organizations that conduct business on a global scale by providing them with an understanding of various business management activities found around the world.

Business in the digitally connected world today is becoming more global. Numerous international graduates work in various sectors and often join employers in sectors closely related to the subject, such as marketing, event, tourism management, finance and economics, and many others. This degree assists students in becoming a Business development manager, Supply chain manager, Logistics manager, Event Manager, Marketing Manager, Hospitality and Tourism operation manager, Financial analyst, HR Manager and many others.

Employability commitment to BUV students and Graduates

At BUV we are continually developing our courses to be relevant to the working world, leading to better jobs for you, our students. We ensure the best outcomes for students by offering a well-designed curriculum, with a strong focus on developing skills and knowledge which prepares students for your chosen careers, alongside excellent support services. This is achieved through our Employability Framework that will be embedded into every course. The Framework will ensure that:

- Students develop a career/life plan that students can revisit throughout your University journey
- Students understand the importance of and are well prepared to secure work experience opportunities
- Students develop the ability to recognise and articulate the skills that students have developed throughout your University journey in different settings

We offer lifetime access to our careers support, and we also have our Graduate Success Programme for those who need a little extra help and guidance securing their dream job.

BUV Career Services and Support

Internship Support from A-Z since Year 1

BUV's Internship Programme is open to all BUV students from Year 1 all the way to alumni. Internships can be paid or unpaid. While SE-Careers Team assists all students from the

application round to interview and placement, the company will conduct their own recruitment assessment and decide who is the best fit for a spot. Our range of support includes, but is not limited to:

- Opportunities: Internship Opportunities from BUV Industrial Partners are posted on Facebook Fanpage BUV Career Services, Instagram @buvcareerservices, and the internal BUV Job Portal.
- Personal Preparation for the Internship
 - Career consultation regarding the Internship Choices
 - CV review & advice
 - Mock interview & advice on interview tips
- Sending your applications to potential employers.
- During & After the Internship: Ensuring the quality of your learning experience and BUV students' image by providing advice on any difficulty or concern during and after the internship and any other form of involvement where necessary.
- Internship Completion Certificate: An Internship Completion Certificate from BUV will be awarded for each intern after completion of each internship to recognise your hard work in an official manner.

Note that we provide the above support for all internship opportunities, applied via SE or on your own. Students can take the initiative in reaching out to us via SE-careers@buv.edu.vn.

Your work experience record will count as credits towards your Personal Development Programme Transcript.

One to One Career Consultation with SE Careers Team

The 1:1 Career Consultation can be about your internship choices, career options, alongside any other concerns or questions related to your career and employability. Each session is expected to last 45 minutes to 60 minutes. The 1:1 discussion is confidential and only communicated internally within the Students Experience team, so we can support students most effectively.

To book an appointment, book via the portal: <https://buv.simplybook.asia/v2/>.

Careers & Employability Activities

At BUV, we believe that studying with lectures, textbooks, and the internet in a four-walled classroom is not enough. We offer BUV students a wide range of activities to interact with professionals and experience real-world working environments. This includes:

- Skills Workshops
- Seminars
- Career Talks
- Company Visits/ Fieldtrips

Information about those activities is communicated on our Facebook fanpage, Instagram, BUV internal email, as well as notice screens on the BUV Campus.

Your proper attendance will be counted as credits in your Personal Development Programme Transcript.

BUV Professional Mentorship Programme

The programme is open to all BUV students and alumni. It aims to create a meaningful connection between BUV students and alumni (mentees) and BUV's partners and alumni (mentors) to achieve short-term and long-term goals, overcome difficulties in your personal and professional development.

For further information about the programme and how to apply to become a mentee, keep an eye out for our official announcement on our Facebook fanpage, Instagram, and emails from SE-careers@buv.edu.vn.

Personal Career Counselling for Final Year - Final Semester students with Professional Employers and a Recruitment Consulting Company

This service is provided only for final year – final semester students to help them get ready to join the labour market after graduation. The 1:1 session allows students to receive detailed information regarding their chosen industry as well as to reflect on their own knowledge, skills, and abilities to map a career path that is aligned with their values.

Further information about the service will be sent to students via email from SE-careers@buv.edu.vn when students reach your final year - final semester and is communicated on our Facebook fanpage and Instagram.

Personal Development Programme and Career Readiness Transcript

Personal Development Programme (PDP) aims to enhance your career readiness and employability during your journey at BUV as a BUV students. Align with BUV's mission to create a new generation of discoverers, explorers and creative thinkers who are educated, trained and prepared to thrive in future (4IR) fields of work and life, through this programme, all your participation in BUV activities related to skill development activities, work experience, extra-curricular courses, community engagements as well as projects and achievements within clubs and societies which add values to your personal development will be recorded and counted as credit points towards your PDP Transcript.

These compulsory elements apply to students from October 2021 intake onwards. Upon graduation, students will receive a Career Readiness Certificate together with the PDP Transcript to prove your employability and give students a great advantage in your future career.

Carefully refer to the document "Students Guide: Personal Development Programme" on your Canvas account to find more details on this programme.

3.2.5. Postgraduate Study Potential

The programme will have at its core the notion of business being about transformation, of individuals and their lives and of organisations and communities, and the role that our graduates will have in those communities as business transformers. There will be engagement with employers, a focus on real-life scenarios and activities to foster understanding of the integrated nature of functional areas. This means acquiring and understanding academic knowledge and being able to confidently apply this knowledge in practice through being adept communicators, good team workers, having good interpersonal skills, being critical (and able to accept and build on criticism), having the ability to solve problems, make decisions and being able to manage their own time. students will develop these skills (as a Staffordshire University Business

School Graduate) as a distinctive part of their learning journey, able to demonstrate impact, excellence and distinctiveness in their chosen field of work.

As students's progress through their academic and personal development journey they will develop:

- Awareness - understanding and appreciation of the community in which business is conducted and their role in reflecting and shaping the future agenda of events in practice.
- Altruism - become purposeful and focused on achievement and empathetic of the impact of their decisions, agendas and action on the experiences of others.
- Articulation - confidence in their ability to communicate their ideas and requirements using a range of media and tools of analysis.
- Adaptability - ability to be flexible and willing to address and embrace change in the pursuit of better solutions and environments.
- Authenticity - a genuine, respectful and sincere approach to their dealings with others and able to lead and engage with others to share with and learn from diverse communities of practice.

These attributes will be embedded in the learning outcomes of the total learning experience requiring an innovative and evolving approach to learning and development of knowledge and skills, which encourages partnership in design and delivery and engagement in assessment and progression.

Global Connections

During your course students will be encouraged to think globally and consider issues from a variety of perspectives, ensuring students have the knowledge and skills necessary to build your future career in an increasingly connected world.

We are committed to supporting students who wish to undertake study, work or volunteering placements abroad. In business programmes, students will conduct research in real-life international case studies to gain global perspective. students of specialised programmes such as International Hospitality Management and Tourism Management have opportunity to attend international study trips to gain in-depth understanding on the international tourism context. If

students would like to explore these opportunities, contact the University's dedicated International Office (buv-internationaloffice@buv.edu.vn) to make an enquiry and book a virtual appointment.

3.3. ACADEMIC LOAD

The Finance and Economics programme at British University Vietnam offers a life-changing journey for participants, elevating one's lifestyle and broadening their vision through a combination of highly applicable knowledge and international business networks. This opportunity provides course participants with unique advantages to succeed in both their career and social life:

- World-class Quality education
- State-of-art city campus
- Enhanced career prospects and personal value
- Exclusive access top-tier professional networks

The programme brings together global business knowledge. Course participants exchange and learn from one another as well as from the faculty, sharing valuable insights from their part of the world. We focus on personal development, supporting participants in achieving their own plans for the future. Our approach emphasises proactive studying, utilising personal working experience as a foundation for building new knowledge. Rather than opt for traditional, passive learning methods, our Business Management is a tour de force in active learning and high-level problem solving.

Business Management graduates will be well prepared for high level management roles, with the ability to solve problems, apply theory and demonstrate a unique and deep understanding of management skills and leadership. The detailed syllabus has been fully developed to ensure the objectives of the program and the output standards, to ensure the organisation of the training.

Total credits:

BUV Finance and Economics programme is credit-based that has a modular structure and each module has a credit rating with a total of 131 credits. We will also integrate additional activities throughout our course, including regular workshops, company visits, and guest lectures on campus in order that students benefit from outside viewpoints and perspectives.

- Common skills and knowledge: 51 credits (including 11 credits of mandatory modules)
- Specialised skills and knowledge: 80 credits

3.4. ADMISSION REQUIREMENTS

Academic Requirements:

Aged 17 or over

One of the following qualifications:

- Vietnamese High School Diploma and Pathway to Staffordshire University Programme
- Pass 2 subjects at Advanced GCE (A-Level)
- An access programme passed at the required QAA-recognised standard for entry to Higher Education
- An award of the European Baccalaureate Diploma, with at least 60 percent overall; English at 60 percent
- An award of the International Baccalaureate Diploma with a minimum of 24 points; English at 4 points

English Language Requirements:

One of the following:

A proficiency test within the last 2 years:

- IELTS (non UKVI): 6.0 overall with a minimum of 5.5 in each component; or
- TOEFL IBT: Listening: 17; Speaking: 20; Reading: 18; Writing: 17
- A proficiency test within the last 5 years:
- International Baccalaureate (taught in English) Pass in English B at Standard Level grade 5 or High Level grade 4; or
- IGCSE English: IGCSE English as a first or second language: Grade C; or
- Cambridge International English GCE O-Level/GCSE: English Language grade A - C

3.5. TRAINING PROCEDURE & GRADUATION REQUIREMENTS

Training procedure and graduation requirements strictly follow Circular 08/2021/TT-BGDDT of Ministry of Education and Training dated 18 March 2021 that regulated higher education training policy and Decision No. 2809/2020/QĐ-BUV dated 28 September 2020 of Vice Chancellor of British

University Vietnam that approved 22 policies of British University Vietnam Senate, including Progression policy.

3.6. METHODS OF ASSESSMENT

Learning and Teaching

Recognising the diverse skills and styles of our students community places an emphasis on ensuring that a range of learning environments and media are available and enabling students to engage in learning in a variety of ways. The emphasis on practice-based learning in a professional environment creates the need for additional learning environments such as taking responsibility for hosting your own events and learning by doing to supplement the more traditional approaches of lectures, guest speakers, tutorials, workshops, seminars and VLE to complement and enhance traditional, face-to-face learning experience. Knowledge and skills will be developed through case-studies, role-plays, simulations, presentations, projects (work-based and academic), reflective portfolios and the extended use of technology supported activities.

The curriculum will develop and evolve so that knowledge and skills learned in modules will be transferred, re-applied and developed in related modules at higher levels. Students will be guided through your studies through a teaching support network of module tutors, personal tutors, award leaders and supporting academic and managers, and dedicated and involved support and pastoral staff. Learning and teaching will be an enriching experience for students that reflects the value the school places on effective, innovative and research informed teaching. Learning and teaching will foster your critical intellectual development and the business capabilities required to engage in contemporary organisations.

In your learning situations students will be acting in partnership with module deliverers and facilitators who, through a programme of study designed to develop an evolving body of knowledge and portfolio of skills will be:

- Encouraging active learning and a confidence to learn
- Making explicit the skills to be developed through the curriculum
- Stimulating intellectual curiosity and excitement in learning through engagement with up to-date and contemporary, well researched subjects.

- Encouraging critical reasoning about the world of business to achieve well informed judgements and conclusions
- Challenging and shaping new learning experiences and opportunities through application of research informed pedagogy

And students will be:

- Engaging with complex, challenging problems and real-world issues
- Proactively using available resources, technical, digital and paper-based to address problems, construct solutions and identify new topics for research
- Engaging in constructive reflection on learning and new ideas
- Communicating and sharing with others in effective teams and collaborative activities, demonstrating a sense of community through active involvement with individuals and groups from differing backgrounds, communities and value systems

Practice Based Learning

Practice Based Learning is based on students experiencing the learning curve through applying your knowledge by running and hosting events in conjunction with a range of stakeholders.

Teaching and Learning Methods

Students will experience a variety of teaching and learning methods which incorporate both formal types of teaching and independent learning.

Examples of the types of learning experiences that students will encounter on the Events awards include:

- Lectures
- Tutorials and seminars
- Group tasks
- Students-led and tutor-led independent exercises
- Workshops
- Examinations
- Assignments
- Case based assignments

- Presentations
- Investigations
- Literature review

The start of each module students will be given a Module handbook. This should contain further details about the specific teaching and learning methods employed advice on how to manage your own learning and how students will be assessed. Each module has a specified module leader all module-related enquiries should be directed to the module leader in the first instance.

Assessment

Assessments are marked in 100 scale and classified into letter grades of units.

Marking system comply with Circular 08/2021/TT-BGDĐT of Ministry of Education and Training dated 18 March 2021 that regulated higher education training policy and Decision No. 2809/2020/QĐ-BUV dated 28 September 2020 of Vice Chancellor of British University Vietnam that approved 22 policies of British University Vietnam Senate, including Progression policy, assessment and calculation of grades of units of study must be fair to all students in one class, all classes, all courses and all modes of study.

A focus on employability will be intrinsic throughout the award. The modules at level 4 covers careers talks, visits and guest speakers from industry along with the opportunity to take up a role within the team on live projects throughout your course, therefore allowing for live experience of a number of roles over the duration of the course. At Level 5 students will develop their reflective practise when they are required to assess their employability skills reflecting on the business skills that they have developed.

At Level 6 students will incorporate their skills assessment and research a topic of their own choice that reflects their interests and demonstrates their ability to apply skills they have developed throughout their course. Moreover, we have designed into our programmes opportunities for formative assessment and feedback and encourage students to reflect and evaluate their

contribution and development. Our assessment strategies are based on an integrative approach which addresses the elements of assessment for learning, accessibility, diversity and efficiency. Assessment will enable students to make increasingly effective and confident judgements within their courses of study and within professional and employment contexts. The Staffordshire graduate attributes have been embedded within our assessments to enable our students to engage in learning and development and effective employment beyond their ongoing involvement in the school.

Module assessments are built into Global Entrepreneurship Week, creating opportunities for students to present their work to invited business partners, guest lecturers and University staff. Furthermore, throughout the course assessments are usually linked to real-life business challenges, developed through close interactions with a developing network of businesses that engage with the School.

To achieve this, we will:

- Design into our programmes opportunities for formative assessment and feedback and encourage students to reflect and evaluate their contribution and development.
- Design assessment strategies based on an integrative approach which addresses the elements of assessment for learning, accessibility, diversity and efficiency.
- Assessment will enable students to make increasingly effective and confident judgements within their courses of study and within professional and employment contexts.
- Underpinning our strategy will be the 5A* graduate attributes that will enable our students to engage in learning and development and effective employment beyond their ongoing involvement in the school.
- Assessment design will be informed by the 11 principles identified by the REAP Project:
 - Engage students actively in identifying or formulating criteria
 - Facilitate opportunities for self-assessment and reflection
 - Deliver feedback that helps students self-correct
 - Provide opportunities for feedback dialogue (peer and tutor-students)
 - Encourage positive motivational beliefs and self-esteem
 - Provide opportunities to apply what is learned to new tasks
 - Yield information that teachers can use to help shape teaching

- Capture sufficient study time and effort in and out of class
 - Distribute students' efforts evenly across topics and weeks
 - Engage students in deep not just shallow learning effectively
 - Communicate clear and high expectations to students.
- We will ensure that the volume of assessment is not greater than is necessary for the testing of appropriate learning outcomes
 - Assessment design will give students the best opportunity to demonstrate their potential.
 - We will provide timely and constructive feedback to enable students to learn and develop through the assessment process.

We will encourage students to reflect on all forms of feedback to enhance their ongoing learner development. We will encourage students to share their reflections with staff to enable critical review and analysis.

Assessment design will also be informed by JISC Effective Assessment in a Digital Age and will focus on providing the following benefits:

- Greater variety and authenticity in the design of assessments
- Improved learner engagement through interactive formative assessments with adaptive feedback
- Capture of wider skills and attributes, for example through simulations, e-portfolios and interactive games.

Programme Handbook provides details of the assessment strategy for the course. Assessments include debates, reports, presentations, team events, essays and portfolios.

Where students are required to undertake research requiring ethical approval, follow the ethical review procedures published on the university website. This is likely to be at level 6 in your final year, however students may require ethical approval when working on internal or external projects as part of your programme of study.

Submitting Assignments Online

Online assignments will be submitted through Canvas, using one of a number of methods that would be explained to students via a Canvas training session hosted by the Exam Office before your first submission at BUV. All assignments are marked anonymously.

Anonymous Submission

Note that most assignments are marked anonymously, and that students are asked to not include your name in submitted work unless specifically requested in the assessment document.

For online submissions, we will use the tools available in Canvas and our grading system Turnitin to ensure anonymity wherever possible.

Keeping a Backup

It is good practice to keep a hard or (backed-up) electronic copy of any assignment students submit, whether that assignment is submitted on paper or electronically. Should the assignment students submit get lost, then students will have the receipt to prove that students handed it in, and a copy to replace what has been lost.

Exceptional Circumstances

Students must submit all pieces of assessment required for each module on or before the submission date for each piece of assessment. Failure to do so is likely to result in failure of the module overall. There may be occasions when students are unable to submit or undertake a piece of assessment due to circumstances beyond your control.

Feedback on your Work

Seven principles of good feedback

Good feedback should:

- Be an interactive process involving students-tutor and students-students dialogue.
- Facilitate the development of self-assessment and reflection.
- Clarify for students and staff, through dialogue, what good or bad performance actually is in the assignment or task.
- Be developmental, progressive and transferable to new learning contexts.
- Be ongoing and embedded in the learning process.
- Motivate, build esteem and confidence to support sustainable lifelong learning.

- Support the development of learning groups and communities.

Submission and Feedback

All assignments should be submitted via Canvas. Feedback for the assignment will be provided after the approval and permission from the relevant Examinations Board.

Furthermore, feedback on your performance is provided in a variety of ways throughout your study period, students will be receiving informal feedback on your performance, via your discussions with teaching staff in tutorials for instance. Feedback should help students to self-assess your work as students progress through the module and help students to understand your subject better.

Feedback is not just the marks at the end of the module - it could be regular verbal advice about your work, perhaps as students develop a portfolio of work; comments made by tutors or fellow students in group discussions; or the written comments on your work.

External Examiners

External examiners help the University to ensure that the standards of your course are comparable to those provided by other universities or colleges in the UK. More information on the role performed by external examiners can be found in our External Examiner Policy.

3.7. TRAINING PROGRAMME CONTENT

Year/ Semester	Details	Module	Module code	Credit
Year 1 - Semester 1	Sem 1A (12 teaching weeks)	English for Higher Education	BUVBS101	9
		Business Communication	BUVBS227	3
	Sem 1B (12 teaching weeks + 2 revision and exam weeks)	Economics	BUVBS161	3
		Quantitative Analysis	BUVBS162	3
		Introduction to Business	BUVBS122	3
		IT for Global Business	BUVBS123	3
		Business Skills	BUVBS121A	3

		English for Academic Purpose	BUVEAP101	3
Semester break				
Year 1 - Semester 2	Sem 2A (12 teaching weeks + 2 revision and exam weeks)	Introduction to Accounting	ACCT40288	3
		Introduction to Management	ACCT40290	3
		Microeconomics	ACCT40292	3
		Quantitative methods for Business	ACCT40294	3
	Introduction to Finance	ACCT40289	3	
	Sem 2B (02 intensive weeks)	Employability, IT and Reasoning techniques	ENTP40034	3
Semester break, including <i>National defense</i> course and <i>Physical Education 1</i> course (5 weeks)				
Year 2 - Semester 1	Sem 1A (12 teaching weeks + 2 revision and exam weeks)	Organisational Behavior	ACCT40293	3
		Macroeconomics	ECON40222	3
		Management Information Systems	ACCT40291	3
		Corporate Finance	ACCT50536	3
	Financials Markets	ACCT50523	3	
	Sem 1B (02 intensive weeks)	Professional Development (Enterprise, Entrepreneurship & Citizenship)	ENTP50075	3
Semester break				
Year 2 - Semester 2	Sem 2A (12 teaching weeks + 2 revision and exam weeks)	International Trade and Multinational Business	ACCT50524	3
		Modelling and Estimation	ACCT50526	3
		Credit management	ACCT50522	3
		Investment Management	ACCT50525	3
	Advanced Corporate Finance	ACCT50537	3	
	Sem 2B (02 intensive weeks)	Research Methods	ACCT50527	3

Semester break				
Year 3 - Semester 1	Sem 1 (12 teaching weeks + 2 revision and exam weeks)	International Finance	ACCT60304	3
		Project	XXSE60108	3
		Applied Econometrics	ACCT60301	3
		Risk management	ECON60082	3
		Work experience 1	ORGB60292	3
Semester break				
Year 3 - Semester 2	Sem 2 (12 teaching weeks + 2 revision and exam weeks)	Futures and Options	ACCT60302	3
		International Economic Theory and Policy	ACCT60303	3
		Strategic Human Resource Management	HRMG60050	3
		International Marketing	MKTG60318	3
		Work experience 2	ORGB60292	

3.8. IMPLEMENTATION GUIDE

3.8.1 General Principles

- Training direction: The training programme is application-oriented, so when implementing the programme, related personnel must pay attention to:
 - prioritise application to potential;
 - keep the common and foundational knowledge at a reasonable amount;
 - increase the specialised knowledge, mainly in the practical sessions
- Bases for the implementation of the program: Consolidated Document No. 17/VBHN-BGDĐT dated May 15, 2014 of the Minister of Education and Training; other State regulations on the field of training; effective regulations & policies in BUV: Teaching Load Policy, BUV Academic Teaching Classifications and Standards of Faculty, Teaching and Learning Performance Evaluation Policy, Performance Management Policy, Policy on Employee Recognition Programmes.
- When implementing the programme: the related personnel and departments must strictly follow the training programme that has been approved.

- Training plan and teaching staff allocation: must be reasonably arranged in terms of expertise as per programme and must be approved by the Dean.
- The Discipline Leads and Module Leaders must develop lectures and test banks for all modules, implement the programme with a student-focused method, and encourage students' autonomy in studying and research.

3.8.2. Implementation plan

The programme operates over the span of 03 years with 06 semesters. Each academic year is divided into 02 semesters.

Semester 1 includes:

- Learning, teaching and Examinations: 14 weeks
- Semester break includes:
- Internships
- Resit examinations

Semester 2 includes:

- Learning, teaching and Examinations: 14 weeks
- Semester break includes:
- Internships
- Resit examinations

SECTION 4: CONDITIONS ON THE LECTURING STAFF AND SCIENTISTS TO OPEN THE DISCIPLINE

BUV offers 100% international faculty. We will arrange 5 full-time lecturers with Doctor of Philosophy (PhD) degrees to be in charge of Business Administration and other 5 full-time lecturers with Doctor of Philosophy (PhD) degrees to be in charge of Economics discipline. All lecturers will have to be in the same or close to the registered course, and who must go through a careful interview and selection basing on their qualifications and relevant teaching experience. One Doctor of Philosophy (PhD) will take charge and administer the training curriculum and is held accountable for training quality.

BUV aims to recruit faculty with cross-cultural experiences from a diverse range of countries that have recognised educational systems, and who are able to provide students with a quality of education that meets or exceeds the standards set for teaching staff within BUV. BUV's faculty members are regularly assessed on their appropriateness and suitability for teaching on the academic programmes, and the outputs of the students feedback process and formal teaching evaluations are integrated into the performance evaluations of faculty. This is done through annual, and (if necessary) bi-annual, performance reviews in compliance with the Performance Management Policy which sets out the guiding principles and processes for how performance reviews will be carried out for both faculty and professional staff. These reviews provide opportunities for faculty and line managers to reflect on the performance attained over the period in question, for support to be provided as needed, as well as allowing for the monitoring of individual and departmental level Key Performance Indicators.

These performance evaluations draw on evidence from students feedback on modules, as well as formal teaching observations that have been carried out throughout the year by senior academic faculty. Using this system of performance management, BUV ensures that academic standards are maintained, and that any potential issues with academic faculty are addressed as rapidly as possible to maintain an effective learning environment for students. The academic performance management process at BUV allows for issues to be resolved through a progressive system of disciplinary actions, which may eventually result in non-renewal of contracts.

BUV supports all faculty to engage in Continuous Professional Development (CPD), whether through formal education, development and accreditation of their teaching practices, or skills development. All faculty are provided with an annual hours allocation for CPD in their overall workload calculations and this can be used in a variety of ways based on identified training needs by either faculty or line managers.

Curriculum Vitae of lecturers and publications are attached in appendix of this document, including copy of publication, recruitment decision, contracts and qualification.

4.1. FULL-TIME LECTURERS AND SCIENTISTS

Form No.1, Appendix 3, Circular 02/2022/TT-BGDĐT

No. (1)	Full name, DOB (2)	Passport number/ID Card (3)	Academic title, Awarding year (4)	Academic qualifications, Awarding country, Awarding year (5)	Major (Highest qualification) (6)	(Full time contract with BUV) Recruitment		Insurance number (9)	Academic experiences (10)	Public research		Signature (13)
						Recruitment date (7)	Labour contract (8)			MOET (11)	Institution (12)	
1	Shashi Kant Prasad Chaudhary	11756286	Dr., 2017	Dr., Vietnam, 2017	International Trade	01/09/2014	x	0128175497	12	0	11	
2	Jason Alexander MacVaugh	563376605	Assoc. Professor, 2014	Assoc. Professor, 2014; Dr., UK, 2009	Knowledge Management	30/01/2023	x	0132338097	19	0	13	
3	Maren Viol	C4KPGPL3L	Dr., 2016	Dr., UK, 2016	Tourism and Events	30/01/2023	x	0128175579	12	0	3	
4	Christopher David Jeffery	508469336	Master, 2017	Master, Vietnam, 2017	Business Administration	24/09/2010	x	0128175537	25	0	0	
5	Edward Anthony Summers	128776843	Master, 2016	Master, UK, 2016	Business Administration	19/12/2011	x	0128175458	14	0	0	
6	Joao Manuel Ferrao Fialho	CC762287	Dr, 2012	Dr., Portugal, 2012	Mathematics; Differential Equations, Functional Analysis	01/09/2017	x	0128977592	11	0	14	
7	Michael George Perkins	536578269	Dr, 2013	Dr., UK, 2013	Management	03/09/2013	x	0128175566	10	0	10	
8	Michael Alan Lomax	547709829	Master, 2013	Master, UK, 2013	Mass Communications Management	13/04/2020	x	0131763415	4	0	0	
9	Jonathan Alexander Neale, 12/07/1960	AG621356	Master, 1996	Master, Scotland, 1996	Business Administration	01/09/2013	x	0128175526	21	0	0	
10	Lai Chong Yee, 25/07/1976	A40214104	Master, 2002	Master, Malaysia, 2002	Financial Economics	01/03/2016	x	0128175567	11	0	1	
11	Jed Clarke, 08/06/1993	518117629	Master, 2021	Master, UK, 2021	Business Administration	01/03/2022	x	0131927236	1	0	0	
12	Lamet Treasure Mahlatsi	M00229076	Master, 2015	Master, South Africa, 2015	Financial Management	30/01/2023	x	7940087095	13	0	0	

	Maredi, 19/03/1986											
13	Adrian Wee Tiong Weng, 27/04/1968	A54886757	Dr, 2016	Dr., Australia, 2016	Business Management	01/04/ 2020	x	793747304 5	24	0	5	
14	Jyotsna Ghildiyal Bijalwan, 18/11/1983	Z3636990	Dr, 2013	Dr., India, 2013	Management/ Business Management	13/05/ 2022	x	013205909 6	15	0	8	
15	Aiman Ameen Abousher, 20/02/1975	N6442431	Master, 1999	Master, Australia, 1999	Finance	14/09/ 2015	x	012817556 3	18	0	4	
16	Sandra Natalie Schneiderm an, 30/05/1959	PA8957790	Master, 2013	Master, Australia, 2013	Education	28/11/ 2020	x	013184488 1	18	0	0	
17	Jamie Lee McGaughra n, 28/02/1973	567877876	Master, 2015	Master, Columbia, Missouri, 2015	Strategic Leadership & Communicati on	01/11/ 2022	x	013203647 8	7	0	0	
18	Don Hickerson, 17/08/1968	AC785827	Master, 2013	Master, Canada, 2013	Sociology	01/09/ 2020	x	#N/A	10	0	0	
19	Ajaykumar Pillai, 22/12/1968	Z2168910	Master, 2005	Master, UK, 2005	Business Administratio n	07/09/ 2020	x	013181757 3	17	0	7	
20	Francesco Meca, 22/03/1980	YB9159516	Master, 2015	Master, Italy, 2015	Business Administratio n/ Project and Information Management	03/06/ 2019	x	013160800 4	6	0	0	
21	Hamza Mutaher Abdu Al_Shameri, 18/07/1991	08404124	Dr, 2022	Dr., India, 2022	Computer Science (Computer Network)	11/04/ 2022	x	013204853 3	6	0	4	
22	Jose Luis Rojas Roman, 19/10/1973	G41912981	Dr, 2011	Dr., UK, 2011	Computer Science	27/07/ 2022	x	013223199 6	17	0	0	
23	Sven Pfrommer, 11/10/1965	CK4KC8V6 VX	Master, 1994	Master, German, 1994	Graphic Design	17/10/ 2022	x	013227911 0	11	0	25	
24	Richard Paul Child, 14/08/1973	548040555	Master, 1999	Master, UK, 1999	Visual Communicati on	04/09/ 2018	x	013128479 1	20	0	3	
25	Pham Thuy Duong, 06/05/1996	001196011 846	Master, 2019	Master, UK, 2019	Vissual Communicati on Design	03/01/ 2023	x	012378294 2	0	0	0	
26	Olivier Georges Yves Marie de Chauliac, 10/08/1986	17FV08202	Master, 2020	Master, USA, 2020	Hospitality and Tourism Managemet	01/03/ 2023	x	013235385 8	8	0	0	
27	Konstantino s Tsontos, 08/04/1964	AT5697698	Master, 1989	Master, UK, 1989	Operational Research	01/09/ 2017	x	012897783 5	8	0	0	
28	Joseph Anthony Schurley, 24/07/1950	548616411	Master, 1983	Master, USA, 1983	Hotel Administratio n	09/09/ 2015	x	012817554 6	22	0	0	
29	David René Joffre Vanhove, 11/10/1976	13AB79405	Master, 2020	Master, Australia, 2020	Business Administratio n	03/01/ 2022	x	012816885 9	1	0	0	
30	Darius Postma, 11/10/1974	510623204	Master, 2014	Master, UK, 2014	Business Admistration/ Strategic Management and Leadership	11/04/ 2020	x	013176341 3	5	0	0	

31	Patricia Lee Glancy, 24/08/1977	556795701	Master, 2000	Master, UK, 2000	Historical Studies	01/09/ 2020	x	013181759 5	4	0	0	
32	Prabu Mohan, 04/05/1981	Z3084544	Dr, 2019	Dr., Spain, 2019	Mathematics	19/01/ 2012	x	012817546 5	19	0	0	
33	John Mark Patrick Harris, 17/03/1962	554135487	Master, 1990	Master, UK, 1990	Economics	01/11/ 2015	x	012817547 9	24	0	0	
34	Mohamed Reda Harchaoui, 16/06/1992	VI7514536	Master, 2016	Master, Marocco, 2016	Finance and Economics	20/12/ 2021	x	131863835	2	0	0	

* No.18 Don Hickerson - No Insurance number as the lecturer marries to a Vietnamese woman and choose not to join the insurance scheme.

4.2. LIST OF LECTURERS TO OPERATE AND IMPLEMENT THE TRAINING PROGRAMME

Form No.2, Appendix 3, Circular 02/2022/TT-BGDĐT

No (1)	Full Name (2)	Modules (3)	Semester and Year (4)	Number of credits				Leading lecturer, tenure lecturer, etc. (9)
				Compulsory		Optional		
				On Camp us (5)	Onli ne (6)	On Camp us (5)	Onlin e (6)	
1	Shashi Kant Prasad Chaudhary	International Trade and Multinational Business	Year 2 Semester 2	3				Leading lecturer
		Introduction to Business	Year 1 Semester 1	3				
2	Jason Alexander MacVaugh	Work experience	Year 3 Semester 1&2	3				
3	Maren Viol	Work experience	Year 3 Semester 1&2	3				
4	Christopher David Jeffery	Work experience	Year 3 Semester 1&2	3				
5	Edward Anthony Summers	International Marketing	Year 3 Semester 2	3				
6	Edward Anthony Summers	Introduction to Business	Year 1 Semester 1	3				
7	Joao Manuel Ferrao Fialho	Quantitative Analysis	Year 1 Semester 1	3				
		Research Methods	Year 2 Semester 2	3				

8	Michael George Perkins	Investment Management	Year 2 Semester 2	3				
		International Finance	Year 3 Semester 1	3				
9	Michael Alan Lomax	Project	Year 3 Semester 2	3				
		Business Communication	Year 1 Semester 1	3				
10	Michael George Perkins	Credit management	Year 2 Semester 2	3				
		Advanced Corporate Finance	Year 2 Semester 2	3				
		International Finance	Year 3 Semester 1	3				
11	Lai Chong Yee	Modelling and Estimation	Year 2 Semester 2	3				
		Applied Econometrics	Year 3 Semester 1	3				
		Quantitative methods for Business	Year 1 Semester 2	3				
12	Lai Chong Yee	Introduction to Accounting	Year 1 Semester 2	3				
		Financials Markets	Year 2 Semester 1	3				
13	Jonathan Alexander Neale	Modelling and Estimation	Year 2 Semester 2	3				
		Applied Econometrics	Year 3 Semester 1	3				
14	Lai Chong Yee	Futures and Options	Year 3 Semester 2	3				
		Corporate Finance	Year 2 Semester 1	3				
15	Jed Clarke	International Trade and Multinational Business	Year 2 Semester 2	3				
		Introduction to Accounting	Year 1 Semester 1	3				
16	Lamet Treasure Mahlatsi Maredi	Corporate Finance	Year 2 Semester 1	3				
		Futures and Options	Year 3 Semester 2	3				
17	Adrian Wee Tiong Weng	Introduction to Management	Year 1 Semester 2	3				
18	Adrian Wee Tiong Weng	Credit management	Year 2 Semester 2	3				
		Risk management	Year 3 Semester 1	3				
19	Michael Alan Lomax	International Marketing	Year 3 Semester 2	3				
20	Jyotsna Ghildiyal Bijalwan	Risk management	Year 3 Semester 1	3				

21	Aiman Ameen Abousher	Introduction to Management	Year 1 Semester 2	3				
		Financials Markets	Year 2 Semester 1	3				
		Advanced Corporate Finance	Year 2 Semester 2	3				
22	Sandra Natalie Schneiderman	Professional Development (Enterprise, Entrepreneurship & Citizenship)	Year 2 Semester 1	3				
23	Jamie Lee McGaughran	Work experience	Year 3 Semester 1&2	3				
24	Don Hickerson	Research Methods	Year 2 Semester 2	3				
25	Ajaykumar Pillai	Investment Management	Year 2 Semester 2	3				
		Business Skills	Year 1 Semester 1	3				
26	Francesco Meca	Business Skills	Year 1 Semester 1	3				
		Introduction to Finance	Year 1 Semester 2	3				
27	Jamie Lee McGaughran	Work experience	Year 3 Semester 1&2	3				
28	Hamza Mutaher Abdu Al-Shameri	IT for Global Business	Year 1 Semester 1	3				
29	Jose Luis Rojas Roman	IT for Global Business	Year 1 Semester 1	3				
30	Sandra Natalie Schneiderman	Professional Development (Enterprise, Entrepreneurship & Citizenship)	Year 2 Semester 1	3				
31	Don Hickerson	Work experience	Year 3 Semester 1&2	3				
32	Don Hickerson	Project	Year 3 Semester 2	3				
33	Hamza Mutaher Abdu Al-Shameri	Management Information Systems	Year 2 Semester 1	3				
34	Aiman Ameen Abousher	International Trade and Multinational Business	Year 2 Semester 2	3				
35	Olivier Georges Yves Marie de Chauillac	Strategic Human Resource Management	Year 3 Semester 2	3				

36	Hamza Mutaher Abdu Al_Shameri	Management Information Systems	Year 2 Semester 1	3				
37	Konstantinos Tsontos	Quantitative methods for Business	Year 1 Semester 2	3				
38	Joseph Anthony Schurley	Strategic Human Resource Management	Year 3 Semester 2	3				
39	David René Joffre Vanhove	Organisational Behavior	Year 2 Semester 1	3				
40	Darius Postma	Organisational Behavior	Year 2 Semester 1	3				
		International Economic Theory and Policy	Year 3 Semester 2	3				
41	Patricia Lee Glancy	Professional Development (Enterprise, Entrepreneurship & Citizenship)	Year 2 Semester 1	3				
42	Prabu Mohan	Quantitative Analysis	Year 1 Semester 1	3				
43	John Mark Patrick Harris	Economics	Year 1 Semester 1	3				
		Microeconomics	Year 1 Semester 2	3				
		Macroeconomics	Year 2 Semester 1	3				
44	Patricia Lee Glancy	English for Higher Education	Year 1 Semester 1	3				
		English for Academic Purpose	Year 1 Semester 1	3				
45	Sandra Natalie Schneiderman	English for Higher Education	Year 1 Semester 1	3				
		English for Academic Purpose	Year 1 Semester 1	3				
46	John Mark Patrick Harris	Macroeconomics	Year 2 Semester 1	3				
		Microeconomics	Year 1 Semester 2	3				
47	Mohamed Reda Harchaoui	Introduction to Finance	Year 1 Semester 2	3				
		Economics	Year 1 Semester 1	3				
		International Economic Theory and Policy	Year 3 Semester 2	3				
48	Hamza Mutaher Abdu Al_Shameri	Employability, IT and Reasoning techniques	Year 1 Semester 2	3				

49	Francesco Meca	Employability, IT and Reasoning techniques	Year 1 Semester 2	3				
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4.3. LIST OF MANAGERS

Form No.2, Appendix 3, Circular 02/2022/TT-BGDĐT

No.	Full name, DOB, position	Education, year	Discipline	Note
1	Jason MacVaugh, 16 February 1978	PhD University of Gloucestershire, 2009	Knowledge Management	Dean
2	Jonathan Alexander Neale	Master, Heriot-Watt University, Scotland, 1996	MBA	Discipline Lead
3	Tony Summers, 14 July 1954, University Registrar	Master, Kingston University - London, 2005	MBA	University Registrar
4	Tran Duc Trung, 25 February, 1989, Deputy University Registrar	Master, Royal Melbourne Institute of Technology, 2019	MBA	Deputy University Registrar
5	Hoang Phuong Yen, 12 September, 1988	Master, University of Adelaide, 2018	International Trade & Development	Course Office Manager

4.4. SCIENTIFIC RESEARCH TOPICS OF THE INSTITUTE, LECTURERS AND SCIENTISTS RELATED TO THE DISCIPLINE

Form No.4, Appendix 3, Circular 02/2022/TT-BGDĐT

No.	Code	Research Topic Level	Research Topic	Lead Author	Reviewed by	Received Date	Review Results, Date	Names of contributing authors	Remarks
1	HECA-01/2021-AJAY	Institutional	An Empirical Study on Teacher's	Ajay Kumar Pillai	BUV Human	4/1/2021	Satisfactorily,	N/a	

			Attitudes towards Curriculum Innovation in Vietnam		<i>Ethics Sub-committee</i>		10/1/2021		
2	HECA-08/2021-SHASHI	Institutional	Utilisation of remittance income in Nepal	Dr. Shashi Kant Prasad Chaudhary	<i>BUV Human Ethics Sub-committee</i>	2/8/2021	Satisfactory, 8/8/2021	N/a	
3	HECA-03/2021-MIKE	Institutional	The impact of training on the identification of the use of Online Paraphrasing Tools	Dr Mike Perkins	<i>BUV Human Ethics Sub-committee</i>	24/08/2021	Satisfactory, 1/9/2021	N/a	
4	HECA-01/2022-MAREN	Institutional	Ethical consumers post-COVID-19: Sustainable travel behaviours of young Vietnamese tourists	Dr. Maren Viol	<i>BUV Human Ethics Sub-committee</i>	12/10/2022	Satisfactory, 2/11/2021	N/a	
5	HECA-02/2022-MAREN	Institutional	Decolonising the tourism curriculum - experiences of faculty in Asian transnational education contexts	Dr. Maren Viol	<i>BUV Human Ethics Sub-committee</i>	12/10/2022	Satisfactory, 2/11/2021	N/a	

6	HECA-04/2023-MIKE	Institutional	Robustness testing of assessments to GPT4	Dr Mike Perkins	BUV Human Ethics Subcommittee	28/03/2023	Satisfactory, 5/4/2023	N/a	
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4.5. PUBLISHED SCIENTIFIC WORKS OF LECTURERS AND SCIENTISTS RELATED TO THE DISCIPLINE (Template 5, Appendix 3, Circular 02/2022/TT-BGDĐT)

Form No.5, Appendix 3, Circular 02/2022/TT-BGDĐT

No.	Publications	Remarks
1	Chaudhary, S. K., and Nguyen, K.V. (2018), ' <i>An Empirical Analysis of Export-led Growth of Vietnam: Trade in Value Added (TiVA) Approach</i> ', <i>The Journal of Business and Management</i> , 5(1), p.1-15.	
2	J. Fialho (2018), ' <i>A biomechanical model for the idiopathic scoliosis using spinal traction devices</i> ', <i>Journal of Physics: Conference Series</i> , 1141, p.012022.	
3	Kais Mejri, Jason Alexander MacVaugh, Dimitrios Tsagdis (2018), ' <i>Knowledge configurations of small and medium-sized knowledge-intensive firms in a developing economy: A knowledge-based view of business-to-business internationalization</i> ', <i>Industrial Marketing Management</i> , 71, p.160-170.	
4	Perkins, M., Gezgin, U. B., & Roe, J. (2018), ' <i>Understanding the Relationship between Language Ability and Plagiarism in Non-native English Speaking Business Students</i> ', <i>Journal of Academic Ethics</i> , 16(4), p.317-328.	
5	Viol, M., Todd, L., Theodoraki, E. & Anastasiadou, C. (2018), ' <i>The role of iconic-historic commemorative events in event tourism: Insights from the 20th and 25th anniversaries of the fall of the Berlin Wall</i> ', <i>Tourism Management</i> , 69, p.246-262.	

6	Yam, L., Raybold, M, Gordon, R.D. (2018), 'What Makes People Stay? An investigation of job embeddedness construct, and the exploration of the effects of on-the-job and off-the-job embeddedness on voluntary turnover in the hospitality industry', <i>Journal of Human Resources in Hospitality and Tourism</i> , 17(4).	
7	Chaudhary, S. K., and Nguyen, K.V. (2019), 'Assessing Position of Vietnam in Global Value Chain (Vietnamese)', <i>VNU Journal of Humanities and Social Sciences</i> , 5(3), p.292-313.	
8	Chaudhary, S. K., and Nguyen, K.V. (2019), 'Re-assessing the export competitiveness of Vietnam', <i>VNU Journal of Social Sciences and Humanities</i> , 5(5), p.539-549.	
9	Chaudhary, S. K., and Pandit, K. R. (2019), 'Price Elasticity of Sectoral Lending in Nepal', <i>NRB Economic Review</i> , 31(2), p.1-24.	
10	F. Minhós, J. Fialho (Eds.), (2019), <i>New Trends in Differential and Difference Equations and Applications</i> , MDPI, Switzerland.	
11	Fialho, J and Minhós, F. (2019), 'Existence results for functional first order coupled systems and applications', <i>Mathematical Methods in the Applied Sciences</i> , 42(7), p.2398-2403.	
12	Fialho, J and Minhós, F. (2019), 'First order coupled systems with functional and periodic boundary conditions: existence results and application to SIRS models', <i>Axioms</i> , 8(1), p.23.	
13	J. Fialho, F. Minhós (2019), 'Existence results for functional first-order coupled systems and applications', <i>Mathematical Methods in the Applied Sciences</i> , 42(7), p.2398-2403.	
14	Jyotsna Bijalwan (2019), 'Corporate Governance System in India', <i>International Journal of Management</i> , 3(2), p.260-269.	
15	Jyotsna Ghildiyal, RC Joshi (2019), <i>Business Ethics and Corporate Governance</i> , , McGraw Hill, US.	
16	Nguyen, K. V., and Chaudhary, S. K. (2019), [in] Nguyen, T., and Nguyen. N. (Eds.), <i>Vietnam National Economic Report 2019: On the Doorstep to the Digital Economy</i> (Chapter 4), Vietnam Institute for Economic and Policy Research, Hanoi.	

17	Nguyen, K.V., Phan, H.T.T., and Chaudhary, S. K. (2019), ' <i>Small and Medium Enterprises' Participations in Global Value Chains (Vietnamese)</i> ', <i>Review of the World Economic and Political Issues</i> , 4(276), p.23-35.	
18	Perkins, Gezgin & Gordon (2019), ' <i>Plagiarism in higher education: classification, causes and controls</i> ', <i>Pan-Pacific Management Science</i> , 2, p.3-21.	
19	Pillai, A.K (2019), ' <i>Modelling Cost Allocation Adoption as an Endogenous Consequences of Senior Executives' Characteristics</i> ', <i>Journal of Business, Sciences and Technology</i> , 2(1), p.1-47.	
20	Roe, J., Perkins, M. (2019), ' <i>Learner Autonomy and English Learning in the Vietnamese HE Context: A Literature Review</i> ', <i>Asian Journal of University Education</i> , 16(1), p.13-21.	
21	F. Minhos, J. Fialho, R. Souza, (2020), ' <i>Periodic n dimensional first order coupled systems and periodic schizophrenia phenomena</i> ', <i>Journal of Mathematical Analysis and Applications</i> , 492(2), p.124482.	
22	Malhotra R.K., Jyotsna Bijalwan, Thapliyal B.L. (2020), ' <i>Corporate governance in emerging economies : An Indian Insight</i> ', <i>International Journal of Management</i> , 11(9), p.663-670.	
23	Pang, J.M. and Wee, A.T.W. (2020), ' <i>Corporate Social Responsibility Reporting in Locally Owned Hotel Chains in Singapore</i> ', <i>ASEAN Journal on Hospitality and Tourism</i> , 18(1), p.43-57.	
24	Perkins, M., Gezgin, U., & Roe, J. (2020), ' <i>Reducing plagiarism through academic misconduct education</i> ', <i>International Journal For Educational Integrity</i> , 16(3).	
25	Perkins, M., Gezgin, U.B, Gordon, R. (2020), ' <i>Plagiarism in higher education: classification, causes and controls</i> ', <i>PanPacific Management Science</i> , 2.	
26	Perkins, M., Roe, J., Gordon, R (2020), ' <i>Management Versus Measurement: A Renewed Categorization of Performance Terminology</i> ', <i>Pan Pacific Management Science</i> , 3, p.3-16.	

27	Pillai, A.K., Tan, K.C., and Teo, Z.X.H (2020), 'Key Influences of Cost Allocation Adoption: The Role of Managerial Characteristics, Personality Traits, Behavioural Intention and Decision Styles', <i>Journal of Business, Sciences and Technology</i> , 2(1), p.10-47.	
28	Benjamin Chiao, Jason MacVaugh (2021), 'Open innovation and organizational features: An experimental investigation', <i>European Management Journal</i> , 39(3), p.376-389.	
29	Chaudhary, S. K. (2021), 'Assessing Participation and Position of Vietnam in Global Value Chains', <i>Journal of Nepalese Business Studies</i> , 14(1), p.29-39.	
30	Dana Alshwayat, Jason Alexander MacVaugh, Hammad Akbar (2021), 'A multi-level perspective on trust, collaboration and knowledge sharing cultures in a highly formalized organization', <i>Journal of Knowledge Management</i> , 25(9), p.2220-2244.	
31	F. Minhós, J. Fialho (Eds.), (2021), <i>Nonlinear Differential Equations and Dynamical Systems: Theory and Applications</i> , MDPI, Switzerland.	
32	F. Minhos, J. Fialho, R. Souza (2021), 'On coupled systems of Lidstone-type boundary value problems', <i>Mathematical Modelling and Analysis</i> , 26(3), p.358-371.	
33	J Fialho (2021), 'Key performance indicators and individual prediction models for penalty kicks', [in] <i>Recent Developments in Mathematical, Statistical and Computational Sciences</i> , 18-23 August, 2019, 137-146.	
34	Viol, M. & Southall, C. (2021), 'A conceptual framework for understanding Western-centrism in transnational education in tourism', <i>Current Issues in Tourism</i> , 26(1), p.1-5.	
35	Chaudhary, S. K. (2022), [in] Dhami, N., Shrestha, D., Chhetry, T., Gurung, S., Thapa, A.(Eds.), <i>Transformation of Higher Education in Nepal: Dimensions, Dynamics and Determinants</i> (p.119-124), Pokhara University, Nepal.	
36	Chaudhary, S. K. (2022), 'Remittances, Economic Growth and Investment Nexus: Evidence from Nepal', <i>NRB Economic Review</i> , 34(1), p.1-23.	

37	J. Fialho, F. Minhos (Eds.), (2022), <i>Advances in Nonlinear Boundary Value Problems: Theory and Applications</i> , MDPI, Switzerland.	
38	Jasper Roe & Mike Perkins (2022), 'What are Automated Paraphrasing Tools and how do we address them? A review of a growing threat to academic integrity', <i>International Journal for Educational Integrity</i> , 18(1).	
39	Jyotsna G Bijalwan, Anchit Bijalwan (2022), 'Multivariate Analysis for Overcoming Complexities of Corporate Governance and Managerial Dilemma using Data Mining Technique', <i>Discrete Dynamics in Nature and Society</i> , 2022, p.1-12.	
40	Nguyen, B. L. and Viol, M. (2022), [in] Stylidis, D., Kim, S., & Kim, J., (editors), <i>Tourism Marketing in Southeast and East Asia</i> (p.22-38), CABI.	
41	Nguyen, K. V., and Chaudhary, S. K. (2022), 'Position of Vietnam in global value chains: an empirical approach', <i>International Journal of Value Chain Management</i> , 13(4), p.383-394.	
42	Pillai, A.K. (2022), 'Using Decomposed Theory of Planned Behavior (DTPB) to examine educators' behavioural intention towards TPACK', [in] <i>Redesigning Pedagogy International Conference 2022: Transforming education & strengthening society: Conference proceedings</i> , Singapore, 30 May - 1 June, 2022, National Institute of Education, Nanyang Technological University (NIE NTU), Singapore.	
43	Pillai, A.K., Pereira, M., Luong K.H., & Roe J. (2022) (2022), 'Curriculum Innovation in Vietnam: A Study on Teachers' Attitudes Using the Dimensions of ACB (Affective, Cognitive and Behavioral) Model', <i>Vietnam Journal of Education</i> , 6(1), p.20-30.	
44	Pillai, A.K., Pereira, M., Luong K.H., & Roe J. (2022) (2022), 'Implementing Curriculum Innovation in Vietnam: Exploring Four Teachers Narrative Experiences', <i>Journal of Business, Sciences and Technology</i> , 4(1), p.7-21.	
45	Fialho, J. and Diep, N. (2023), 'Brand equity and purchase intention for ecommerce platforms in Vietnam', [in] <i>Proceedings of the International Conference on Application of AI and Statistical Decision Making for the</i>	

	<i>Business World, ICASDMBW 2022, Rukmini Devi Institute of Advanced Studies, 16-17 December 2022, EAI, Delhi.</i>	
46	Mike Perkins (2023), ' <i>Academic Integrity considerations of AI Large Language Models in the post-pandemic era: ChatGPT and beyond</i> ', <i>Journal of University Teaching & Learning Practice</i> , 20(2).	
47	Jyotsna G. Bijalwan, Malhotra R.K (), ' <i>Corporate Governance Policies and Practices: With Special Reference to Private Sector Firms in Ethiopia</i> ', Shodh Sarita.	

SECTION 5: CONDITIONS FOR FACILITIES TO OPEN THE DISCIPLINE

5.1. FACILITIES AND EQUIPMENT FOR THE TRAINING PROGRAMME AT UNDERGRADUATE LEVEL

Infrastructure and facility: The area of Campus in Ecopark is 6,5ha. The timeline for construction of new Campus consists of 3 phases: Phase 1- 2,84ha and Phase 2 and 3 - 3,66ha. Phase 1 was completed and the current facilities in Ecopark Campus includes:

Order	Category	Number	Total area (m2)
1	Library	01	1.230,1
2	Classrooms	23	1.947,5
3	Lecture hall	02	851,4
4	Teacher office	02	258,5
5	Research area	06	490,4
6	Sport area	03	654,7
7	Canteen	02	4,096
8	Others		4.887,8
Total			14.416,4

The library building is designed in a contemporary style, which includes Library area, 24-hour study area, specialised discussion rooms for students and computer access.

Classrooms: 23 classrooms with open design and flexible to serve the various needs. These room can accommodate 30-45 students and are fully equipped modern teaching auxiliaries, projectors, LCD screens, high-quality audio system, air conditionings, standard light system.

02 large lecture halls: with an average area of 425 m2 accommodating 250 students per lecture hall, 6m high, equipped with smart board, projector, LCD screen, high quality sound system, air conditioning, system Standard lighting system. In addition, large lecture halls also have an online system that allows students to sit anywhere in or outside the Ecopark Campus to participate in interactive lectures through online tools.

The construction of the BUV campus Phase 2 at Ecopark started in August 2022, with an investment of 33 million USD, and is expected to be completed in early 2025.

Specifically, BUV invested in building a new canteen with a total floor area of 4,096m², a sports complex including basketball and badminton courts, and a new academic building. The indoor and outdoor spaces are arranged in harmony in an open, green landscape. The iconic minimalist and liberal architectural style indicative of 4IR reflects the educational approach at BUV.

All of the spaces at BUV are designed for Higher education level students. Our Learning Studio, Learning Cluster, X-space, Theater Pod & Halls were designed for the delivery of lectures. BUV also has functional classrooms that customised for the delivery of our specific higher education programmes. This includes, for example, Art Studio & Photo Studio; Learning kitchen, Restaurant, Front Office & Housekeeping; Digital Lab, Computer Games Design Lab & Cyber Security Lab, Motion Capture Studio.

Outside of standard & functional classrooms, BUV also provides a wide range of discussion & break-out rooms with various capacities that students can use for group work or individual study. There is also a 24/7 Study Area that serves as a Quiet Study Area during LRC operational hours.

(Form No.6, Appendix 3, Circular 02/2022/TT-BGDĐT)

Order	Category	Number	Total Area (m²)	Module	Usage Schedule (Semester, Academic year)	Remarks
1	Lecture Halls, classrooms, discussion rooms multimedia rooms, multi-purposes rooms, faculty rooms	45	2651	All modules	All semester	

1.1	Learning Theatres, Halls, Classrooms with over 200 pax	1	464		
1.2	Classrooms with 100-200 pax	1	370		
1.3	Classrooms with 50-100 pax	1	84		
1.4	Classroom with less than 50 pax	19	966		
1.5	Multipurpose Rooms	6	608		
1.6	Discussion Rooms	15	159		
1.7	Faculty Rooms	2	258,5		
2	Libraries/Learning Resources Centres	1	1230,1		
3	Research centre, laboratories, practical rooms	12	1121		

5.2. RESEARCH CENTRES, LABORATORIES, AND PRACTICE FACILITIES FOR THE DISCIPLINE

(As per Form No.8, Appendix 3, Circular 02/2022/TT-BGDĐT)

List of Equipment					Module	Time of use	No. of user/unit
Order	Name of Equipment, Product Code, Usage Purposes	Country of Origin, Model Year	Number	Unit			
Computer Lab 1-4					All modules	All academic year	1
1	PC Computer (Gigabyte Workstation W281-G40)	China / 2021	31	pcs			

2	Monitor Gigabyte 27 inch Gaming monitor	China / 2021	62	pcs			1
3	Wacom tablet						1
Digital Lab 2-4							
4	Apple iMac 27 inch	2019	16	pcs			1
5	Color printer Epson SC-P807	2019	1	pcs			1
6	Scanner Epson Perfection V600	2019	6	pcs			1
LRC Computer Lab							
7	PC Computer (HP Elitedesk 800 G3)	2018	24	pcs			1
8	Monitor HP Z24i G2	2018	24	pcs			1

5.3. LIBRARIES, COURSEBOOKS, BOOKS, REFERENCE MATERIALS

5.3.1 Libraries

BUV recognises the important role of literacy in all walks of modern professional life, including technical, creative and critical thinking. Therefore, alongside providing adequate access to technology to complete assignments, BUV works closely with industry partners to ensure that students have valuable experience in the hardware and software typically used in their industries, and to anticipate future needs. BUV understands the value of rich content in student engagement and the value of on demand learning that gives student access to specialised information beyond the core deliverables of a semester.

BUV understands that technology is not just defined by digital, or even electronic technology. BUV will invest in specialised spaces and teaching facilities geared to its portfolio of courses and activities.

Alongside a well-resourced physical library and breakout workspace (designated in the Learning Resource Centre), BUV provides students and lecturers access to Kortext, a specialist digital platform delivering over 2 million digital textbooks and other learning content to universities. Additionally, a tablet is provided to each student upon entry to the University allowing them to access digital textbooks with ease anywhere, at any time.

BUV provides open access of 24 PCs and 13 iMacs for students in the LRC's Lab & shared space. To ensure that students could easily access all digital learning resources, all students entering degree programmes from April 2019 were issued Apple iPads.

Students can loan 1494 titles of print books from LRC with a maximum of 5 books each time for 14 days in total. LRC users have access to a range of digital databases and online resources including e-books, journals, articles, case studies, and reports, which are available 24 hours, 7 days/a week on and off campus.

During operation hours between 8.30 am and 6.30 pm from Monday to Friday, there are 13 discussion rooms with a capacity of 4-6 people/room & 26 classrooms with a capacity of 30 people/rooms available for students to book. Students can book rooms with Student Information Office 1 day in advance at the earliest. Each student can use rooms for at most 1 hour per booking & at most 2 hours per week.

The LRC opens from 8.00 to 18:30 from Monday to Friday; and from 9.00 to 16.00 on Saturday during the teaching & non-teaching period. The LRC also includes a 24-Hour Study Room. This facility is open 24 hours per day, 7 days per week.

Outside operation hours of between 8.30 am and 6.30 pm from Monday to Friday, BUV provides a range of Out-of-hours campus access facilities including the 24/7 Study Area, 6 normal classrooms & 8 functional classrooms for students to book. Students can request Out-of-hours campus access to 24/7 Study Area and classrooms with Student Information Office by 4 pm from Monday to Friday.

5.3.2 Course books, books, reference materials

(Form No.7, Appendix 3, Circular 02/2022/TT- BGDĐT)

No	Name of books or journals (published in the last 5 years)	Name of author	Publishing House, Year, Country	Number of publications	Module that uses the the books or journal	Module Code	Time of use (semester, year)
1	Pathways: Reading, Writing, and Critical Thinking	Laurie Blass (Author), Mari Vargo (Author)	Heinle ELT, 2018	53	English for Higher Education	BUVBS101	Y1S1
2	Business Communication Essentials: Fundamental Skills for the Mobile-Digital-Social Workplace (What's New in Business Communication), 8E	Bovee, C & Thill, J	Pearson, 2018	53	Business Communication	BUVBS227	Y1S1A
3	Economics, Global Edition 8E	Hubbard, Glenn/O'Brien, Anthony Patrick	Pearson, 2022	67	Economics	BUVBS161	Y1S1B
4	Statistical Techniques in Business & Economics 18E	Douglas Lind and William Marchal and Samuel Wathen	McGraw-Hill, 2020	67	Quantitative Analysis	BUVBS162	Y1S1B
5	Business Essentials, Global edition 13E	Ebert & Griffin	Pearson - US, 2017	67	Introduction to	BUVBS122	Y1S1B

					Busines s		
6	Digital Planet: Tomorrow's Technology and You 10e - Complete PNIE	George Beekman, Ben Beekman	Pearson, 2013	67	IT for Global Business	BUVBS123	Y1S1B
7	The Study Skills Handbook (Macmillan Study Skills) 5th ed	Stella Cottrell	Bloomsbury Publishing, 2019	67	Business Skills	BUVBS121A	Y1S1B
8	Academic Writing: A Handbook for International Students 5E	Stephen, B	Taylor and Francis, 2017	67	English for Academic Purpose	BUVEAP101	Y1S1B
9	Frank Woods's Business Accounting, 15E	Frank Woods	Pearson, 2021	32	Introduction to Accounting	ACCT40288	Y1S2A
10	Contemporary Management, 12E	Gareth R Jones, Jennifer M George	McGraw-Hill Education, 2021	32	Introduction to Management	ACCT40290	Y1S2A
11	Economics 13E global	MICHAEL PARKIN	Pearson, 2019	32	Microeconomics	ACCT40292	Y1S2A
12	Statistics for Business and Economics, 9E	Paul Newbold	Pearson, 2012	32	Quantitative methods for Business	ACCT40294	Y1S2A

13	Business Finance: Theory & Practice, 11E	Eddie McLaney	Pearson, 2017	32	Introduction to Finance	ACCT40289	Y1S2A
14	Critical Thinking Skills Developing Effective Analysis and Argument 3E	Stella Cottrell	Macmillan, 2017	30	Employability, IT and Reasoning techniques	ENTP40034	Y1S2B
15	Work in the 21st Century: An Introduction to Industrial and Organizational Psychology 6E	Conte, Jeffrey M./Landy, Frank J.	Wiley, 2018	27	Organizational Behavior	ACCT40293	Y2S1A
16	Economics	Michael Parkin	Pearson, 2020	27	Macroeconomics	ECON40222	Y2S1A
17	Information Technology For Management NJ: John Wiley & Sons 10th International student edition	Efraim Turban, Dorothy E. Leidner, Ephraim R. McLean, James C. Wetherbe	Wiley, 2015	27	Management Information Systems	ACCT40291	Y2S1A
18	Principles of Corporate Finance, 14E	Richard A. Brealey	McGraw-Hill International Edition, 2022	27	Corporate Finance	ACCT50536	Y2S1A
19	Finance and Financial Markets, 4E	Keith Pilbeam	Bloomsbury	27	Financial Markets	ACCT50523	Y2S1A

			Publishing, 2018				
20	Skills for success: Personal development and employability, 4E	Stella Cottrell	Macmillan, 2021	11	Professional Development (Enterprise, Entrepreneurship & Citizenship)	ENTP5007 5	Y2S1B
21	International Economics, 7th Edition	James Gerber	San Diego State University, 2017	11	International Trade and Multinational Businesses	ACCT505 24	Y2S2A
22	Mathematics for Economics and Business (9th Edition)	Ian Jacques	Pearson, 2018	11	Modelling and Estimation	ACCT505 26	Y2S2A
23	"Credit Management", 6th edition	Glen Bullivant (FICM)	Gower (Routledge), 2010	10	Credit management	ACCT505 22	Y2S2A
24	Investment Analysis and Portfolio Management 11th Edition	Frank K. Reilly (Author), Keith C. Brown (Author),	Cengage Learning, 2018	10	Investment Management	ACCT505 25	Y2S2A

		Sanford J. Leeds (Author)					
25	Corporate Financial Management 6th Edition	Glen Arnold / Deborah Lewis (Author)	Pearson, 2019	10	Advanced Corporate Finance	ACCT50537	Y2S2A
26	Research Methods for Business Students, 8th Edition	Adrian Thornhill / Philip Lewis / Mark N. K. Saunders (Author)	Pearson, 2019	10	Research Methods	ACCT50527	Y2S2B
27	CTE International Financial Management Mindtap+ Supplement 13E	Jeff Madura (Author)	Thompson, 2010	8	International Finance	ACCT60304	Y3S1
28	Research Methods for Business Students, 8th Edition	Adrian Thornhill / Philip Lewis / Mark N. K. Saunders (Author)	Pearson, 2019	8	Project	XXSE60108	Y3S1
29	CTE Introductory Econometrics with Mindtap+ Supplement 6E	Jeffrey M. Wooldridge	Cengage Learning; 2015	8	Applied Econometrics	ACCT60301	Y3S1
30	Corporate Finance, 7th edition	Denzil Watson (Author)	FT Prentice Hall, 2016	8	Risk management	ECON60082	Y3S1
31	Research Methods for Business Students, 8th Edition	Adrian Thornhill / Philip Lewis /	Pearson, 2019	6	Work experience 1	ORGB60292	Y3S1

		Mark N. K. Saunders (Author)					
32	Options, Futures, and Other Derivatives, Global Edition 9th edition	HULL (Author)	Pearson, 2014	6	Futures and Options	ACCT603 02	Y3S2
33	International Economics: Theory and Policy 11th edition	Paul R. Krugman; Maurice Obstfeld; Marc Melitz	Pearson, 2018	6	International Economic Theory and Policy	ACCT603 03	Y3S2

5.3.3 Online libraries

Title	Type	Quantity
ACM Digital Library	Article	117500
Arts & Humanities Database	Journal	7818
	eBooks	21515
	Newspaper	2176
BMJ Journals Online	Journal	70
Ebook Central (formerly known as ebrary)	eBooks	100000
eBooks on EBSCOhost	eBooks	2400000
Emerald Management eJournal collection	Journal	100
Internurse.com (off-campus access)	Article	700
JSTOR	Article	1150
Newspapers - Global Newsstream	Newspaper	2800
Performing Arts Database	Journal	100
RCN Journals (Royal College of Nursing)	Journal	11
ScienceDirect - Elsevier	Journal	4603
	eBooks	32662
Scopus	Journal	2960

	eBooks	48300
VLeBooks	eBooks	7667
Wiley Online Library	eBooks	20000
	Journal	1600
TOTAL	eBooks	2630144
	Journal	141588

5.3.4 Academic databases in use

No.	Titles	Publisher	Description
1	Academic Search Ultimate	EBSCO	Academic Search Ultimate offers students an unprecedented collection of peer-reviewed, full-text journals, including many journals indexed in leading citation indexes indexed in leading citation indexes to meet the increasing demands of scholarly research.
2	ProQuest ABI/Inform Global	ProQuest	The database features thousands of full-text journals, dissertations, working papers, key business, and economics periodicals such as the Economist, country- and industry-focused reports, and downloadable data. Its international coverage gives researchers a complete picture of companies and business trends around the world.
3	Euromonitor	Euromonitor	This online market research tool monitors industry trends and gives you strategic analysis and market size and market share database for all your products across all key countries.
4	Emerald Market Case Studies Collection 2022	Emerald	Emerald Market Case Studies Front List Collection 2022 offers over 600 cases is the product to encourage entrepreneurial thinking and critical exploration. Each case is accompanied by complimentary teaching notes that have been compiled by teaching faculty at some of the world's best business schools.

5	Emerald eBooks Business, Management & Economics & Social Sciences collection	Emerald	Emerald eBooks Business, Management & Economics Collection offers over 1,600 eBook titles (1991-2022) broken into 7 subject collections, highlighted below. As well as via the individual collections content from the portfolio can be accessed in full on a rental basis: Accounting, Finance & Economics; Business, Management & Strategy; Marketing; HR & Organization Studies; Public Policy & Environmental Management; Library & Information Sciences; Tourism & Hospitality Management.
Emerald eBooks Social Sciences collection offers over 1,000 eBook titles (1999-2022) broken into two subject collections, Education & Sociology.			
6	PressReader Annual Subscription	Emerald	Multidisciplinary e-Journal suite , including more than 7,000 articles from magazines such as The Washington Post, The Guardian, and The Globe and Mail, to Forbes, Vogue, Bloomberg Businessweek, Elle, and GQ.

5.3.5 Online learning system

There is a strong focus at BUV on the use of digital tools to help prepare students for future 4IR modes of work, and this supports strategic objective 4: 'Deliver cutting-edge British pedagogical models, teaching methods and education technologies'. BUV has invested heavily in digital learning resources and this investment has enabled BUV to continue to deliver its high-quality programmes despite the challenges Covid-19 has presented.

From an academic perspective, BUV was well equipped to pivot to online and hybrid learning strategies during the Covid-19 pandemic. In April 2019, BUV introduced the digital textbook system of Kortext to increase the speed in being able to access textbooks as well ensuring the most up to date editions were accessible by students. Prior to this, if module leaders wished to adjust a textbook for a module, this would have to be done three months prior to the commencement of the module due to checks required by government ministries

on physical learning materials imported into the country. With a digital textbook system in place, this meant that there was an increased amount of flexibility to choose the most appropriate learning resources for the module.

In the October 2019 semester, BUV introduced the Canvas Learning Management System (LMS) from Instructure, which is used as the core BUV digital learning environment. Through Canvas, students can access learning resources for modules, access documentation and training relevant to their programme of study, access and complete formative and summative assessments (including proctored online exams), and connect to BUV's online teaching platform of BigBlueButton. To ensure that students could easily access all digital learning resources, all students entering degree programmes from April 2019 were issued with Apple iPads.

These investments have enabled BUV to continue to deliver its programmes uninterrupted throughout the pandemic, as well as supporting our communications with our students.

Although BUV have always made learning resources available to students online, this was previously done through a relatively basic file management system of Google Drive. To support our strategic objective 4 as discussed above, we introduced the Canvas Learning Management System (LMS) in October 2019. Through this system, students can access learning resources for modules, access documentation and training relevant to their programme of study (and other training provided by the Learning Resources team), access and complete formative and summative assessments, and connect to BUV's online teaching platform of BigBlueButton. As we continue to add functionality to the LMS (for example, with the introduction of the Proctorio online proctoring system for exams) training and support is provided by the LMS team to students and faculty on an ongoing basis, so that all members of the University are both aware of and can utilise the full range of functionality of the LMS. The LMS team also monitor the content provided on Canvas and provide support to faculty where technical errors have been made in the use of the system.

Improving the use of digital tools by faculty is an academic priority, and faculty members must demonstrate a broad use of these tools in their teaching. BUV have recruited a LMS Curriculum Designer to support faculty with the development of new learning materials, so

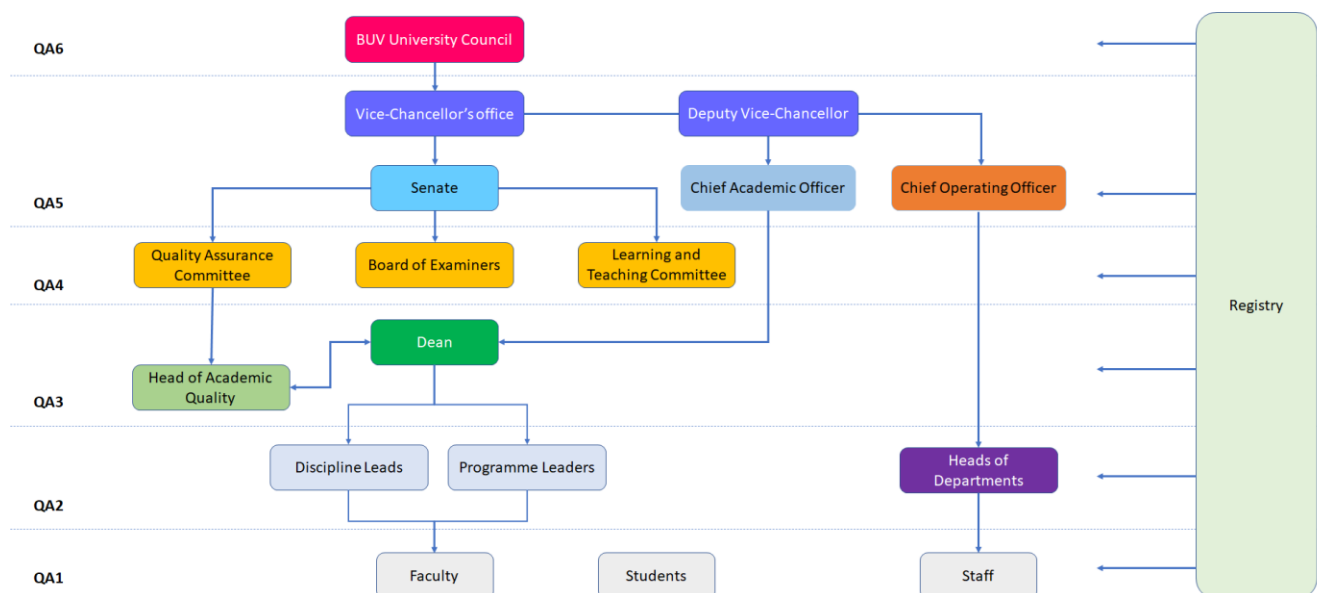
that we can continue to expand our capacity in this area. This position will work closely with the LMS team and the academic leadership team to ensure that all material available is modern, up-to-date and relevant for each module.

Students studying with collaborative academic partners have access to the online journal, database, and textbook resources of the relevant partner. Over the last two years, BUV have begun investing in access to our own digital databases and online resources that go beyond what is available through our collaborative academic partners, and specifically support students on our own-degree programmes. Academic Databases Summary shows the databases currently in use at BUV, as well as previous databases that have been trialled. It also shows the feedback mechanisms that are used with both faculty and students so that we can make investments in the databases that faculty and students find helpful.

Following the introduction of the Canvas LMS (discussed in paragraph 33), BUV were then equipped to use online learning where required and appropriate. This was used in occasional circumstances where faculty or guest speakers were unable to be physically present on campus but was not a primary mode of delivery.

These investments have enabled BUV to continue to deliver its programmes uninterrupted throughout the pandemic, as well as supporting our communications with our students.

SECTION 6: CONDITIONS ON THE ORGANIZATION OF THE MANAGEMENT APPARATUS TO OPEN THE DISCIPLINE



6.1 QUALITY ASSURANCE STRUCTURE

BUV approach to QA is based on a hierarchical structure, as shown in the diagram in Appendix 1 and explained in Section 5. There are six levels of formal QA responsibilities as follows:

QA Level 1 - Faculty, Students, and Staff

QA Level 2 - Discipline Leads(DLs), Program leaders(PLs), and Heads of Departments (HoD).

QA Level 3 - Dean, Head Academic Quality (HAQ).

QA Level 4 - Quality Assurance Committee, Board of Examiners, Learning and Teaching Committee.

QA Level 5 - Senate, Chief Academic Officer(CAO), Chief Operating Officer(COO),Deputy Vice Chancellor(DVC) Vice Chancellor's Office (VC)

QA Level 6 - BUV University Council.

Although the University Council has the ultimate responsibility for the quality and standards of the University, it delegates the governance role to Senate, and the executive role for the management of this function to the Vice Chancellors Office, for development, operations and reporting purposes.

These QA levels refer to specific QA responsibilities held by positions and do not imply an organisational or line management structure.

QUALITY ASSURANCE AND ENHANCEMENT RESPONSIBILITIES

The responsibility for the academic quality and standards of the University's awards rests with the University through the Senate. The Senate delegates a number of these responsibilities to committees within the University within a clear structure (codified in the terms of reference of the Senate and its sub-committees, policies and procedures) that ensures that it is aware of how these delegated authorities are used.

The University also recognises that the responsibility for academic quality and standards is a shared one, between those University bodies with formal accountability for academic quality and standards, and all staff engaged in the delivery and support of learning and teaching and research degree supervision. The quality assurance structure is therefore based on the following shared understanding of the roles and responsibilities of each level within the University.

QA Level 1: Faculty, students, and staff

Faculty

All staff involved in the delivery and support of learning and teaching contribute to the assurance of quality within BUV in the following ways:

1. By reflecting on the effectiveness of their practice and how this might be enhanced (for example, on the basis of the day-to-day observation of the impact of teaching). This will include consideration of their practice in relation to their designated role in learning, teaching and research degree supervision as part of their formal performance reviews.
2. Where appropriate, consulting with students prior to or following a change introduction. This may be carried out informally within the operations of a module to address student concerns, or more formally through discussions held at Student and Staff Liaison Committee (SSLC) meetings or through meetings with the Student Association Committee.
3. Evaluating the effectiveness of any change made within a module (for example by checking in a subsequent teaching session, via the mechanisms discussed in the Teaching

and Learning Performance Evaluation Policy and Procedure or the Academic Monitoring Policy and Process.

Students

Students provide feedback on the perceived quality of the education they are receiving, the University, and they contribute to the QA process through a variety of quantitative and qualitative processes, for example:

1. Student representation at the Senate.
2. Student and alumni representation within School Practitioner Advisory Groups (SPAGs) and on special projects where student representation is deemed by the project group to impact student learning experience.
3. Feedback provided through the semesterly meeting between the Student Association Committee (SAC) and the University.
4. Students on programmes taught at BUV complete surveys at module, programme, and institutional levels, and provide feedback via the Student-Staff Liaison Committee (SSLC) held every semester, and via Net Promoter Score surveys carried out every semester.
5. Data from student surveys and discussions are considered by the Dean and Discipline Leads for any staff quality concerns, and by the Academic and Student Operations team for any timetabling or logistics concerns.
6. Students are involved in periodic programme reviews through consultation during the development of the self-evaluation document and at the periodic programme review event.
7. Students are involved in the programme revalidation process and are included as panel members at validation/periodic programme review events, subject to the policies of external partners.
8. Feedback can also be provided through other channels, such as parent meetings, emails to feedback@buv.edu.vn, and cao@buv.edu.vn.
9. Formal feedback from research students is obtained via all mechanisms discussed above except for feedback mechanisms linked directly to taught programmes.

Staff

BUV recognizes that staff, who are not directly responsible for teaching and learning, also contribute to the overall quality of BUV in their daily activities. Specifically, this can be seen in the following ways:

1. Contributing to tasks which enhance various elements of the student experience.
2. Work carried out on strategic projects which contribute to the Mission and strategic priorities of the University.
3. Supporting teaching, learning and assessment activities.
4. Provision of non-academic support to students.
5. Contributing to the Senate and its committees where specified within the Senate or
6. Committee Terms of Reference.

QA Level 2: Programme Leaders, Discipline Leads, Heads of Department

Programme Leader

At the second level of Quality Assurance, in addition to the contributions made by all teaching faculty, Programme Leaders contribute to effective QA in the following ways:

1. Reviewing and approving assessments.
2. Providing guidance to Module Leaders (MLs) on teaching content and modes of delivery.
3. Assessing the quality of delivered teaching through formal teaching evaluations.
4. Contributing to SSLC meetings and leading other meetings as required.
5. Providing recommendations on changes to modules and programmes via Programme Monitoring Reports.
6. Performing quality checks of assessments marking within their program.

Discipline Leads

All Discipline leads reflect on and review activities within their discipline to ensure standards are achieved. Working with the Head of Quality and Academic Development and the Dean, they contribute directly to Quality Assurance in the following key areas:

1. Operationalizing and ensuring compliance with any necessary evaluation, quality assurance, and monitoring procedures, both internal and external. These may relate to teaching, research, and management of resources.

2. Ensuring high-quality teaching takes place by identifying examples both of good practice, and areas for potential improvement, and managing this through appropriate staffing and reporting mechanisms.
3. Performing quality checks of assessments marking within their program as and when required.
4. Reporting to the Dean as required on issues related to quality.
5. Contributing to the Senate and its committees.

Heads of Departments (Operations)

Heads of Departments in non-academic areas are vital to maintaining a quality culture across the entire University. Working cross-functionally where appropriate, they contribute to Quality Assurance in the following ways:

1. Developing and approving policy related to non-academic areas within BUV to ensure that the quality of services and experiences by all stakeholders is maintained.
2. Supporting and monitoring staff within departments to ensure that processes and procedures are followed accurately.
3. Leading on non-academic projects contributing to the Strategic Priorities and Mission of the University.

QA Level 3: Dean and Head Academic Quality

The Dean and Head Academic Quality will reflect on and review activities across the university to ensure academic standards are achieved. They will work in coordination and maintaining and enhancing academic quality within the University.

Dean

The Dean is responsible for the operationalization of quality activities within BUV academic programmes. These activities may be deputized to the Discipline leads as required. They contribute to Quality Assurance activities in the following way:

1. Providing direct line management to faculty members and Discipline Leads.
2. Acting on guidance provided by Senate committees to request draft policies related to quality activities to be developed.
3. Approving the implementation of policy which directly affects teaching and learning activities.

4. Directing faculty to contribute to quality-related activities and motivating them for the training sessions as required.
5. Identifying overall trends from Discipline action plans, and reporting on these via the LTC to Senate.

Head Academic Quality

The Head Academic Quality and Academic Development works closely with the academic leadership team to lead and contribute to projects related to maintaining and enhancing quality within the University. Specifically, they may contribute to Quality Assurance in the following ways:

1. Responsible for ensuring that quality assurance policies and procedures are understood and followed by all members of the University.
2. Leading the development and implementation of quality-related projects, initiatives, policies, and processes.
3. Supporting faculty and academic support staff in matters relating to assessment creation and marking.
4. Providing advice and support to Discipline Leads, Dean, Registrar, CAO, or the Senior Leadership Team in matters relating to Quality Assurance.
5. Chairing the Quality Assurance Committee and reporting on its activities to Senate.

QA Level 4: Senate Committees

On Quality assurance level 4 Senate committees will ensure all the quality guidelines and policies are in line with the QAA standard. Senate committee will ensure that all the proposed policies or change in the policy has passed through due processes.

Senate Committees and Sub-committees

Senate committees (in particular, the Quality Assurance Committee and the Learning and Teaching Committee) contribute to Quality Assurance activities as specified in their respective Terms of Reference. The Board of Examiner Committee will pay due regard to the maintenance of academic standards, fairness, and consistency in the Assessment process. It will report to the Senate for improvement in the quality standards across the university. Please refer to the Terms

of Reference for specific details of these committees. these activities. All changes to Senate committee and sub-committee terms of reference must be approved by the full Senate.

QA Level 5: Senate, Vice Chancellor's Office, Deputy Vice Chancellor Chief Academic Officer, Chief Operating Officer.

Vice Chancellor's Office

The Vice Chancellor's Office is a governance group of senior University officers who are responsible for the overall management of quality and standards within the university. Following directions from the University Council, they develop overall plans and projects and develop specific performance targets to ensure that the strategic priorities of the University are met.

Within this group, there are two following positions with specific roles related to the development and management of Quality within the University.

Deputy Vice-Chancellor

The Deputy Vice-Chancellor is responsible for the overall management of quality and standards within the university. Following directions from the University Council and Vice-Chancellor, he designs overall plans and projects and develops specific performance targets to ensure that the strategic priorities of the University are met. He receives reports from the Chief Academic Officer(CAO) and Chief Operating Officer (COO) and supports the development and management of Quality within the University.

Senate

The Senate is the governing body responsible for the overall assurance of quality within BUV. It contributes to this in the following ways:

1. Ensuring that appropriate structures, policies, and procedures are in place to both assure and enhance the quality of learning opportunities within the University degree programmes.
2. Providing oversight of the activities of committees with responsibilities for Quality Assurance.

3. Delegating responsibilities for the implementation of policies to the Quality Assurance Committee, the Academic Compliance Office, the Chief Academic Officer or the Chief Operations Officer as appropriate.

Chief Academic Officer (CAO) and Chief Operating Officer (COO)

The CAO and COO have responsibility for all the activities carried out within the Academic (CAO) and Operations (COO) areas of the University. Within their respective fields, they have the following QA responsibilities:

1. Provide overall guidance and supervision of all projects related to assuring or enhancing quality.
2. Delegating quality-related responsibilities and tasks to appropriate departments or individuals.
3. Coordinating with external bodies or agencies as required to assure or enhance quality.
4. Contributing to the overall strategic direction of BUV through membership of Senate and input at the BUV University Council

QA Level 6: University Council

The University Council has the ultimate responsibility for the quality and standards of the University. At this highest level of responsibility, the University Council is responsible for setting and agreeing the quality related strategic priorities and projects of the university. These priorities are operationalized by University members and bodies via the Vice Chancellor's Office.

Key Supporting Roles

Registry Services

Registry services within BUV plays a key role in coordinating and supporting quality assurance and enhancement activities across all QA levels within the university. Within Registry Services are the following groups who have specific QA-related roles and responsibilities.

Academic compliance

1. Acting as Senate, Senate Committee, and sub-committee Secretary
2. Responsible for the writing and review of policy, processes, and regulations

3. Updating and ensuring compliance with regulations of partner universities and national authorities.
4. Leading on new programme licenses and license renewals as well as reviews of existing programme.
5. Supporting on quality accreditations at the University and Programme level.
6. Managing the Exceptional Circumstances and Academic Conduct panels.
7. Providing training and support to faculty and students as required.

Exams Office

1. Acting as the primary point of contact between faculty and partners for issues related to the management of assessments and approval of module marking.
2. Managing processes for assessment approval, planning, set up & preparation.
3. Managing process of approvals of marking completed by faculty.
4. Providing training and support to faculty and students as required.
5. Preparation and uploading of Examination Board Grids to partners and External Examiners.
6. Preparation & uploading of documents for Examination Boards
7. Coordinating re-sit/rework processes.

Academic Quality Officer

The Academic Quality Officer plays an important role in controlling and assuring academic quality across all activities of Registry Services and the Academic and Student Operations department. Reporting to the University Registrar and the Chief Academic Officer, they carry out the following specific responsibilities related to Quality Assurance:

1. Analyzing academic data at a Programme, School, and University level and providing analysis of this to relevant officers of the University.
2. Working closely with the Head Academic Quality (HOQ), and Discipline Leads to support the development, implementation, and monitoring of QA-related projects, policies, and processes.

SECTION 7: PREVENTIVE AND CORRECTIVE PLANS REGARDING THE RISKS IN OPENING THE DISCIPLINE

7.1. RISKS ANALYSIS IN OPENING THE DISCIPLINE

Risk of labour market demand.

For any organization, business administration is an essential component of the overall business operation. These days, every company, whether it is in the service industry or the manufacturing of goods, needs to have an excellent management team in order to promote their brand extensively and, as a result, reach a significant number of customers. In light of the ever-increasing level of competition, the function of this sector is assuming an increasingly essential position. As a result, there are a multitude of work prospects open to these pupils. This is a sector with a significant demand for recruiting, and the demand of businesses is always more than the supply of the human market, according to a number of publications that have been compiled by professional organizations. The size of the firm and the position you hold both have an impact on the amount of money you make as a marketer. On the other hand, considering the demand of the labor market, The following potential dangers are associated with marketing:

The first challenge is the intense competition that exists at all levels, from middle school to college to university to master's. Training for the marketing business is being provided by institutions across the country, particularly the best ones.

The second significant event is the fourth industrial revolution, which caused a shift in the demand for workers. A majority of businesses and professions in the domains of agriculture, industry, and services will see significant shifts as a result of advances in mechanization, robotics, and artificial intelligence. Without timely training and good training, many people will be unemployed because these types of training typically come with job introductions and new employment contacts.

Third, because the labor market in this industry is still in its infancy, it is difficult for both students and their parents to differentiate between the many educational facilities in terms of the quality of the instruction they get.

Danger of changes in market demand.

The fourth-generation technological wave has moved quickly around the globe and has had an impact on all regions.

The economy and way of life in numerous locations. People's ways of communicating, shopping, working, and entertaining themselves are largely dependent on the foundation of the internet and new applications, which have drastically changed the way companies conduct business in the modern era. This is because people's behaviors and psychological states are changing at an increasingly rapid rate. The truth of the matter is that marketing is currently through a process of gradual innovation in order to adapt to the digital era; industrialisation - modernization of today, but before the transformation as a storm of today, this was one of the challenges that marketing activities faced.

7.2. PREVENTIVE AND CORRECTIVE PLANS

Threats to the level of demand in the labor market:

University level:

Improve the quality of the output and the modern facility system to make the institution more competitive with other educational institutions that specialize in business administration.

Discipline level:

Communication and introduction to the industry so that students and their parents can have a better understanding of the profession and appreciate the quality difference compared to other educational institutions that offer marketing training.

Cooperate with them in the training process and help graduates find employment.

Alterations in market demand can be met with the following solution:

The Answer to the Shifting Demand in the Market:

University level:

Improving the conditions under which students complete their internships by enhancing the available equipment and facilities, particularly by ensuring that regular software updates and demand analysis applications are installed.

Help students participate in hands-on learning experiences that aren't related to a specific industry.

Discipline level:

Develop and modify the training program so that it corresponds with the real-world circumstances. Annual review of output standards based on changes in actual fluctuations of the situation outside the market, adjusting the supplementation of components in accordance with the needs and changes in the needs of the market.

Consistent monitoring and analysis, with the goal of capturing the shifting tendencies in the market. Create a strategy and a path to train students not only well in theory but also well in practice by working together with industrial partners.

SECTION 8: EVIDENCE ATTACHED TO THE SCHEME

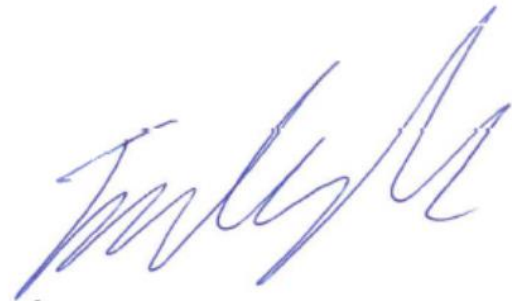
LIST OF DOCUMENTS

1	Minutes of the Senate meeting about Frame Principles Evaluation
2	Decision of the University Council on approving the frame principles for opening the discipline
3	Meeting minutes of Senate for appraisal of Detailed Scheme
4	Decision of the Vice Chancellor to establish the Programme drafting Committee
5	Decision of the Vice Chancellor to set up the External Programme Appraisal Committee
6	Programme Appraisal Documents (Appraisal Minutes, Appraisal of the Training Programme)
7	Minutes of the Senate meeting about Programme Content Endorsement
8	Decision of the Vice Chancellor on approval of the new programme
9	Full-Time Lecturers and Scientists (As per Form No.1, Appendix 3, Circular 02/2022/TT-BGDĐT)
10	List Of Lecturers to Operate and Implement the Training Programme (As per Form No.2, Appendix 3, Circular 02/2022/TT-BGDĐT)
11	List Of Managers (Form No.3, Appendix 3, Circular 02/2022/TT-BGDĐT)
12	Scientific Research Topics of The Institute, Lecturers and Scientists Related to The Discipline (As per Form No.4, Appendix 3, Circular 02/2022/TT-BGDĐT)
13	Published Scientific Works of Lecturers and Scientists Related to The Discipline (As per Form No.5, Appendix 3, Circular 02/2022/TT-BGDĐT)
14	Facilities And Equipment for The Training Programme at Undergraduate Level (As per Form No.6, Appendix 3, Circular 02/2022/TT-BGDĐT)
15	Course books, books, reference materials (Form 7, Appendix 3, Circular 02/2022/TT-BGDĐT)
16	Research Centres, Laboratories, And Practice Facilities For The Discipline (As per Form No.8, Appendix 3, Circular 02/2022/TT-BGDĐT)
17	Application form
18	Module descriptors
19	Training programme content
20	Benchmarking with other universities' training curriculum
21	Academic Curriculum Vitae
22	Copies of recruitment decisions or labour contracts
23	Certified copies of diplomas issued by Vietnamese training institutions or diplomas granted by foreign training institutions and certificates of diplomas issued by competent authorities
24	Self-Assessment of The Fulfilment Of Eligibility Requirements For Opening Disciplines
25	Survey form on the need of opening the discipline
26	Survey result on the need of opening the discipline

RECIPIENTS

- Senior Leadership Team
- Learning and Teaching Committee
- Vice Chancellor Executive
- Senate
- Archived

SENDER



Asso. Prof. Dr. Jason MacVaugh
Chair of Learning & Teaching Committee

APPENDICES

Appendix I: Frame Principles

Appendix II: Resolution of University Council approve the Frame Principles

Appendix III: Capabilities of the Institution

Appendix IV: Decision on issuing programme content

Appendix V: Module Description

Appendix VI: Academic CVs & research

Appendix VII: Document self-assessing the fulfilment of eligibility requirements for opening disciplines.

Appendix VIII: Appraisal minutes and form

Appendix IX:

- Decision on Setting up the Programme drafting Committee.
- Decision on Setting up the External Programme Appraisal Committee.
- Decision on approving and issuing the programme curriculum

APPENDIX I

FRAME PRINCIPLES FOR OPENING A DISCIPLINE

- Discipline Title: Economics
- Academic Level: Bachelor
- Mode of Study: Full-time
- Code: 7310101

1. THE NECESSITY TO OPEN THE DISCIPLINE

1.1. Suitability for local, regional and national development of the human resources

In the era of global integration, the economy plays an important role for every nation. A developed economy is considered as a solid foundation for a country's integration into the international economy. As a trend of globalization, international business is constantly developing and has become an attractive field, bringing enormous income for all participants. Integration brings lots of chances for developing countries; however, it also poses huge challenges for those who have inadequate internal strength. In order to strengthen the economy, we need to enhance our competitiveness not only in agriculture or industry but also in commerce and services, as these sectors directly impact the Vietnamese economy when joining organizations and agreements in the region and around the world, such as the WTO (World Trade Organization), ASEAN (Association of South-East Asian Nations), WB (World Bank), IMF (International Monetary Fund). Globalization is an irreversible trend and is the goal of the Vietnamese government; therefore, international business management is becoming a potentially interesting field.

According to the World Labor Organization (ILO) forecast, Vietnam will be able to create 6 million more jobs, equivalent to one tenth of the total number of jobs increased by 2025 in the entire ASEAN region due to the impact of the formation of the AEC. When joining the AEC, the number of jobs in Vietnam will increase by 14.5% by 2025.

From 2020 to 2025, Hanoi and nearby provinces like Hung Yen needs around 270,000 employees for jobs related to business management. With more than 700,000 existing businesses, which are expected to grow to 1 million enterprises by 2025, the demand for high-quality workers with bachelor's degrees and vocational education with practical skills in the labor market in big cities and industrialized urban areas is relatively low. At the same time, under the pressure of the 4.0 technology revolution, businesses worry about falling behind. Report by Statista in 2023 indicated that by December 2021, there were about 11.2 thousand new business registrations in Vietnam.

In total, approximately 111.8 thousand new businesses were registered in that year, which showed a strong trend of recovery after COVID pandemic.

1.2 Suitability for the human resource needs in the discipline-related industry

The Covid-19 pandemic has and is posing many challenges and difficulties in ensuring the maintenance of the supply chain of goods and services, in particular essential goods, and ensuring economic growth in general. On the overall level of Vietnam's economy, economic growth fell from 7% in 2019 to 2.9% in 2020. (GSO, 2021). It also means that the output of goods and services and the actual income decreased at such levels. In terms of the number of jobs lost due to the influence of Covid-19, by the end of 2020, an estimated 32 million people will be affected by the pandemic. Of these, 69% had lost their income, 40% had to cut their working hours, and 14% had to resign or be fired. The most affected sectors are services with 72% of workers affected, followed by industry and construction (65%), and agriculture (26%) (GSO, 2021). With the role of regulating the economy, the government has also implemented a series of measures aimed at two main objectives, both controlling the flow and ensuring sustained economic growth. But ensuring these two goals at the same time (also called dual goals) is extremely difficult. Faced with such difficulties and challenges, the supply of human resources in the economic sector continues to play an important role in promoting Vietnam's economic recovery and development in the coming period. The sections below will provide some basic information on the issues posed, the knowledge and skills that the discipline of economics equips students, job positions and prestigious academic training facilities.

The economics sector provides a broad knowledge capital and is the fundamental foundation of deep specialisations. Because of this, students in this discipline are able to quickly adapt to career changes in today's times. In addition to basic economic knowledge, students are equipped with essential skills such as problem detection, application of technology 4.0 in the search and synthesis of information, data processing, presentation, and decision making based on the amount of information obtained. These knowledge and skills play an essential role in promoting self-learning and self-finishing knowledge for each specific job position that the student pursues. It is also one of the most suitable learning methods to help learners develop their future careers after graduation in the face of today's rapid economic structural shift.

In a more understandable way, many questions from different perspectives can be answered as students pursue Economics as some of the suggestions below:

From the perspective of the buyer of goods and services: after completion of the study, the student can explain the price of services and goods is determined by what factors, the behavior of the manufacturing enterprises in the competitive or exclusive market, how to optimize the spending budget while ensuring satisfaction of demand, etc.

From the perspective of manufacturing enterprises: learners can understand the factors affecting consumer behavior in order to come up with effective marketing and business strategies, decide on strategies to reduce or raise prices to increase sales and profits, etc.

From the perspective of job seekers: learners are able to identify and evaluate structural changes in the economic sector, leading to changes on the labour market (demand, salary, job position and skills needed). This helps to select the economies that fit the future coin with the desired income level.

With the government in the role of regulating the economy: learners can understand why the government has to intervene in the economy, how intervention through specific tools and policies will affect the income, employment of subjects (business, workers, consumers) in the economics...

An additional advantage of students enrolling in Economics is that there are many opportunities to find diverse job positions that are highly adaptable to career changes or career structural shifts, as well as the strong development of today's information technology.

The economic sector is considered to be the "cradle" that produces fundamental economic theoretical systems, contributing to a powerful impact and transforming the way people make decisions in the more efficient use of resources. The prestigious Nobel Prize in Economics is a recognition of the great contribution in the theoretical field of the industry.

Students pursuing economics can adapt to a variety of job positions as follows:

(i) Researchers, teaching in educational institutions in the field of economics

With the basic knowledge capital, along with the essential skills in data analysis and processing equipped as above, the learner has a passion for research, updating data, discovering economic relationships that can continue in higher education to later become faculty, economic researchers. These up-to-date knowledge and good data analysis skills can provide many benefits for students and learners in universities or research institutes.

(ii) Economic analyst, market research in private companies

In today's digital age, the trend of building and mining big data (Big Data) plays an essential role in decision-making. After graduation, students can find suitable positions in market research companies, or large companies/concerns where behavioral studies (such as consumer, manufacturer) or market trends analysis are essential in building and adjusting manufacturing/business strategies. Of course, in order to do well this job placement, the learner needs to continue to learn practical and be involved and specific projects to perfect skills

iii) The business expert

Economics learners also easily find a job directly related to the goods and services business. Skills in presentation, teamwork, and negotiation with economically sensitive thinking are key factors that enable learners to succeed in the position of a business employee. If learners equip themselves with in-depth knowledge of a specific product/service of the workplace, combined with accumulated experience, they will later become excellent entrepreneurs.

Investor and Financial Analyst/Securities

The development of the financial/banking sector also opens up many opportunities for students to study economics. Based on the basic knowledge and skills equipped, students can take additional short-term courses on banking or finance, or can study on their own by accessing huge databases on the Internet. This will enable students to succeed in conquering employers or engaging in financial investments on their own.

(v) The business manager

The start-up trend is very developing and is an encouraged direction for educational institutions in the economic sector. Thanks to the formation of entrepreneurial ideas, enterprise passion and especially knowledge capital as well as the basic skills equipped by studying economics, students can build their own business. In addition, learners can become good business managers after a period of work in enterprises, business manufacturing departments.

(vi) Economic managers in state management bodies

Management and economic operation of a country or territory (province, district, municipality) requires basic economic knowledge and essential skills such as problem detection, planning, organization, coordination of work, and decision-making. Economics is considered to be the key to equipping those essential knowledge and skills.

1.3 Suitability for the University's missions & development strategy

British University Vietnam is a foreign-invested university established under Decision No. 1428 / QD-TTg of the Prime Minister dated September 9, 2009 to provide undergraduate and postgraduate degrees. BUV has a range of different responsibilities for its higher education provision which differ depending on the programme of study and partner. At all levels, BUV is responsible for the provision of learning opportunities to students, ensuring the quality of teaching provided, managing student registrations and behaviour within BUV, and ensuring the needs of students from a non-academic perspective are met.

With its ongoing development of programmes and growth in student numbers, BUV moved to a state-of-the-art campus in Ecopark township, Hung Yen province, on the edge of Hanoi in 2018, which has a planned capacity for over 5000 students in the first two phases of its development.

Following the move to the new EcoPark campus in 2018, and the subsequent growth in staff and student numbers, BUV have experienced a series of significant changes related to this growth. The governance system has become increasingly formalised, including the creation of a University Senate and associated committees. The goal of this change was to allow for a system of governance that recognises BUV's unique position as a university licenced and operating within Vietnam but operating on the principles of providing significant learning autonomy from students and allowing a student-centred approach enabling them to develop their own learning journey.

Faced with the above changes and challenges and BUV's stated strategic priorities, there are two key implications related to the safeguarding of academic standards and ensuring the quality of students' learning experiences. The first of these is the move to a new system of School level management. This move will allow BUV to scale-up the opportunities it provides to students and means that processes and policies can be adapted where needed based on the need of individual Schools.

The second implication of the changes is the progression to the next phase of the growth of the campus. Building for the second phase has now commenced, and this means that our planned increased growth in the period post 2025 will not be limited by classroom, student support, or facilities constraints, and that student's learning opportunities will not be negatively impacted as we increase our student numbers. Phase two of the campus also includes further specialised facilities, plans of which are being developed with input from faculty from the relevant Schools. Along with the physical growth in facilities, the operation of academic centres will bring benefits to student learning, faculty research and opportunities for further international study options.

Professor Dr Raymond Gordon, Vice-Chancellor, and President stated: "2023 marks the 50th anniversary of bilateral relations between Vietnam and the United Kingdom. Since its inception, BUV has contributed to the strength of the relationship between the two nations, and it will continue to do so. BUV will continue to contribute resources to the Vietnamese Government's education priorities. Receiving the highest level of accreditation from both QS and QAA is a result of the University's goal to invest in a world-class higher education learning environment in Vietnam."

In the immediate future BUV will focus on activities ranging from: continuing to align its academic curriculum to the practical needs of the Vietnam labour market; continuing to provide students with internship opportunities in a wide range of industries and positions; striving to maintain its record 100% of students attaining employment or moving on to higher studies within 3 months of graduation; completing the third phase of its campus construction by 2028 with a planned total investment of more than USD 165 million; expanding its market reach and services throughout

Vietnam; attracting international students and academics to Vietnam; facilitating high-quality research on Vietnam's economic and social priorities; and, increasing access to British degree programmes through a Scholarship and Financial Aid Fund worth billions of VND.

BUV's mission is to develop highly employable graduates who are first and foremost good human beings with an ethic of kindness and caring. Graduates will also be cross-disciplinary in skills and language; innovative, imaginative, respectfully confident; and committed to continuous learning and development. BUV expects all its staff, students, and stakeholders to be courteous and care about the wellbeing of other people; to respect their environment; and be socially and culturally inclusive.

In short, BUV is committed to the bilateral relations between Vietnam and the UK and will continue to turn young Vietnamese students into talented and respectful adults that are confident and caring, but most importantly they are prepared to lead the way and thrive in a challenging and exciting future in which the jobs and roles they will play are yet to be invented.

2. FULFILLMENT OF CONDITIONS FOR OPENING THE DISCIPLINE

Regarding the capacity of the training institution, the below report analyse and explain about how BUV meet requirements as specified in Circular 02/2022/TT-BGDĐT for the proposed discipline and training level, including academic staff, facilities, technology and learning resources, training program, scientific research, business cooperation and international cooperation

2.1. Conditions on lecturing staff

BUV offers 100% international faculty. We will arrange 5 full-time lecturers with Doctor of Philosophy (PhD) degree to be in charge of the Economics discipline. All lecturers will have to be in the same or close to the registered course, and who must go through a careful interview and selection based on their qualifications and relevant teaching experience. One Doctor of Philosophy (PhD) will take charge and administer the training curriculum and is held accountable for training quality.

No.	Full name	Position	Degree
1	Raymond Gordon	Discipline Lead Full-time Lecturer 1	Professor. Dr., Business Management
2	Joao Manuel Ferrao Fialho	Full-time Lecturer 2	Dr., Application Math
2	Michael George Perkins	Full-time Lecturer 3	Dr., Management

3	Shashi Kant Prasad Chaudhary	Full-time Lecturer 4	Dr., International Economics
4	Adrian Wee Tiong Weng	Full-time Lecturer 5	Dr., Business Administration
5	Jyotsna Ghildiyal Bijalwan	Lecturer	Dr., Management
6	John Mark Patrick Harris	Lecturer	Master, Economics
7	Konstantinos Tsontos	Lecturer	Master, Operational Research
8	Ajaykumar Pillai	Lecturer	Master, Business Administration
9	Francesco Meca	Lecturer	Master, Business Administration

2.2. Conditions on facilities

The area of Campus in Ecopark is 6,5ha. The timeline for construction of new Campus consists of 3 phases: Phase 1- 2,84ha and Phase 2 and 3 - 3,66ha. Phase 1 and 2A was completed and the current facilities in Ecopark Campus includes:

Order	Category	Number	Total area (m2)
1	Library	01	1.230,1
2	Classrooms	23	1.947,5
3	Lecture hall	02	851,4
4	Teacher office	02	258,5
5	Research area	06	490,4
6	Sport area	03	654,7
7	Canteen	02	4,096
8	Others		4.887,8
Total			14.416,4

The library building is designed in a contemporary style, which includes Library area, 24-hour study area, specialised discussion rooms for students and computer access.

Classrooms: 23 classrooms with open design and flexible to serve various needs. These rooms can accommodate 30-45 students and are fully equipped modern teaching auxiliaries, projectors, LCD screens, high-quality audio system, air conditionings, standard light system.

02 large lecture halls: with an average area of 425 m² accommodating 250 students per lecture hall, 6m high, equipped with smart board, projector, LCD screen, high quality sound system, air conditioning, system Standard lighting system. In addition, large lecture halls also have an online system that allows students to sit anywhere in or outside the Ecopark Campus to participate in interactive lectures through online tools.

The construction of the BUV campus Phase 2 at Ecopark started in August 2022, with an investment of 33 million USD, and is expected to be completed in early 2025.

Specifically, BUV invested in building a new canteen with a total floor area of 4,096m², a sports complex including basketball and badminton courts, and a new academic building. The indoor and outdoor spaces are arranged in harmony in an open, green landscape. The iconic minimalist and liberal architectural style indicative of 4IR reflects the educational approach at BUV.

2.3. Conditions on the technology of learning resources

2.3.1 Libraries

BUV recognises the important role of literacy in all walks of modern professional life, including technical, creative and critical thinking. Therefore, alongside providing adequate access to technology to complete assignments, BUV works closely with industry partners to ensure that students have valuable experience in the hardware and software typically used in their industries, and to anticipate future needs. BUV understands the value of rich content in student engagement and the value of on demand learning that gives student access to specialised information beyond the core deliverables of a semester.

BUV understands that technology is not just defined by digital, or even electronic technology. BUV will invest in specialised spaces and teaching facilities geared to its portfolio of courses and activities.

Alongside a well-resourced physical library and breakout workspace (designated in the Learning Resource Centre), BUV provides students and lecturers access to Kortext, a specialist digital platform delivering over 2 million digital textbooks and other learning content to universities. Additionally, a tablet is provided to each student upon entry to the University allowing them to access digital textbooks with ease anywhere, at any time.

BUV provides open access of 24 PCs and 13 iMacs for students in the LRC's Lab & shared space. To ensure that students could easily access all digital learning resources, all students entering degree programmes from April 2019 were issued Apple iPads.

Students can loan 1,494 titles of print books from LRC with a maximum of 5 books each time for 14 days in total. LRC users have access to a range of digital databases and online resources including e-books, journals, articles, case studies, and reports, which are available 24 hours, 7 days/a week on and off campus.

During operation hours between 8.30 am and 6.30 pm from Monday to Friday, there are 13 discussion rooms with a capacity of 4-6 people/room & 26 classrooms with a capacity of 30 people/rooms available for students to book. Students can book rooms with Student Information Office 1 day in advance at the earliest. Each student can use rooms for at most 1 hour per booking & at most 2 hours per week.

The LRC opens from 8.00 to 18:30 from Monday to Friday; and from 9.00 to 16.00 on Saturday during the teaching & non-teaching period. The LRC also includes a 24-Hour Study Room. This facility is open 24 hours per day, 7 days per week.

Outside operation hours of between 8.30 am and 6.30 pm from Monday to Friday, BUV provides a range of Out-of-hours campus access facilities including the 24/7 Study Area, 6 normal classrooms & 8 functional classrooms for students to book. Students can request Out-of-hours

campus access to 24/7 Study Area and classrooms with Student Information Office by 4 pm from Monday to Friday.

2.3.2 Online libraries

Title	Type	Quantity
ACM Digital Library	Article	117500
Arts & Humanities Database	Journal	7818
	eBooks	21515
	Newspaper	2176
BMJ Journals Online	Journal	70
Ebook Central (formerly known as ebrary)	eBooks	100000
eBooks on EBSCOhost	eBooks	2400000
Emerald Management ejournal collection	Journal	100
Internurse.com (off-campus access)	Article	700
JSTOR	Article	1150
Newspapers - Global Newsstream	Newspaper	2800
Performing Arts Database	Journal	100
RCN Journals (Royal College of Nursing)	Journal	11
ScienceDirect - Elsevier	Journal	4603
	eBooks	32662
Scopus	Journal	2960
	eBooks	48300
VLeBooks	eBooks	7667
Wiley Online Library	eBooks	20000
	Journal	1600
TOTAL	eBooks	2630144
	Journal	141588

2.3.3 Academic databases in use

No.	Titles	Publisher	Description
1	Academic Search Ultimate	EBSCO	Academic Search Ultimate offers students an unprecedented collection of peer-reviewed, full-text journals, including many journals indexed in leading citation indexes indexed in leading citation indexes to meet the increasing demands of scholarly research.
2	ProQuest ABI/Inform Global	ProQuest	The database features thousands of full-text journals, dissertations, working papers, key business, and economics periodicals such as the Economist, country-and industry-focused reports, and downloadable data. Its international coverage gives researchers a complete picture of companies and business trends around the world.
3	Euromonitor	Euromonitor	This online market research tool monitors industry trends and gives you strategic analysis and market

			size and market share database for all your products across all key countries.
4	Emerald Market Case Studies Collection 2022	Emerald	Emerald Market Case Studies Front List Collection 2022 offers over 600 cases is the product to encourage entrepreneurial thinking and critical exploration. Each case is accompanied by complimentary teaching notes that have been compiled by teaching faculty at some of the world's best business schools.
5	Emerald eBooks Business, Management & Economics & Social Sciences collection	Emerald	Emerald eBooks Business, Management & Economics Collection offers over 1,600 eBook titles (1991-2022) broken into 7 subject collections, highlighted below. As well as via the individual collections content from the portfolio can be accessed in full on a rental basis: Accounting, Finance & Economics; Business, Management & Strategy; Marketing; HR & Organization Studies; Public Policy & Environmental Management; Library & Information Sciences; Tourism & Hospitality Management.
Emerald eBooks Social Sciences collection offers over 1,000 eBook titles (1999-2022) broken into two subject collections, Education & Sociology.			
6	PressReader Annual Subscription	Emerald	Multidisciplinary e-Journal suite , including more than 7,000 articles from magazines such as The Washington Post, The Guardian, and The Globe and Mail, to Forbes, Vogue, Bloomberg Businessweek, Elle, and GQ.

2.3.4 Technologies

Room		Details of ICT infrastructure					
Floor 1	Computer Lab 1-4	33 PCs	66 Monitors	1 Projector 1 Projection screen	Audio system	Cisco Lab Kit	1 wireless display system
Floor 2	Computer Games Design & Programming	28 PCs	57 Monitors	2 Projector	Audio system		
	Digital Lab 2-4	16 iMacs	1 Epson Printer	1 Projector	Audio system	10 Wacom Tablets	10 Scanners
	Cyber Security 2-7	15 PC's	35 Monitors	1 Projector	Audio system	Cisco Lab Kit	
Floor 3	LRC Computer Lab	31 PC's	31 Monitors	1 Projector	Audio system		

2.4. Conditions on the training programme

2.4.1. General Objectives

The programme was developed follow Circular 17/2021/TT_BGDDT with reference to advanced programmes of partner universities, including Staffordshire University and University of London. The programme aims to provide students with a strong basis for a future career in finance and economics related fields of work, where skills in both the areas are required. students are engaged in analysing and evaluating the economic and financial aspects in management decision making. The programme also equips students to be effective decision makers in business, commerce and public policy as well as competent in professional knowledge and skills in the Economics disciplines in preparation for entry into careers that involve the extensive study of these 2 areas.

This programme aims to provide students with a strong basis for a future career in finance and economics related fields of work, where skills in both the areas are required. students are engaged in analysing and evaluating the economic and financial aspects in management decision making. The programme also equips students to be effective decision makers in business, commerce and public policy as well as competent in professional knowledge and skills in the Business Administration and Economics disciplines in preparation for entry into careers that involve the extensive study of these 2 areas.

Upon successful completion, students will graduate with an award from British University Vietnam. At the end of the programme, students will have met the learning outcomes from both awards and have achieved two sets of credit. The learning outcomes and credits are detailed below.

- Encourage the development of a range of skills, both subject specific and more general employability skills, which will enhance career opportunities.
- Provide a stimulating and accessible course of study that gives students a sound grasp of contemporary accounting and finance issues which the students can develop and apply in their future employment.
- Develop students who have an awareness of finance and economics, and are willing and able to embrace change and are focused on achievement.
- Provide students with an opportunity to undertake a year of work experience through the placement, with support from the Students Experience Office.

2.4.2. Specific Objectives

The programme will have at its core the notion of Economics as well as Business Administration being about transformation, of individuals and their lives and of organizations and communities, and the role that our graduates will have in those communities as business transformers. There will be engagement with employers, a focus on real-life scenarios and activities to foster understanding of the integrated nature of business functional areas. The focus and development of employability skills is a cornerstone of the award. This means acquiring and understanding academic knowledge and being able to confidently apply this knowledge in practice through being adept communicators, good team workers, having good interpersonal skills, being critical (and able to accept and build on criticism), having the ability to solve problems, make decisions and being able to manage their own time.

students will develop these skills as a distinctive part of their learning journey, being able to demonstrate impact, excellence and distinctiveness in their chosen field of work.

As students progress through their academic and personal development journey Finance and Economics students will develop:

Awareness - understanding and appreciation of the community in which business is conducted and their role in reflecting and shaping the future agenda of business in practice.

Altruism - become purposeful and focused on achievement and empathetic of the impact of their decisions, agendas and action on the experiences of others.

Articulation - confidence in their ability to communicate their ideas and requirements using a range of media and tools of analysis.

Adaptability - ability to be flexible and willing to address and embrace change in the pursuit of better solutions and environments.

Authenticity - a genuine, respectful and sincere approach to their dealings with others and able to lead and engage with others to share with and learn from diverse communities of practice.

These attributes will be embedded in the learning outcomes of the total learning experience requiring an innovative and evolving approach to learning and development of business knowledge and skills, which encourages partnership in design and delivery and engagement in assessment and progression. They support development of the Graduate qualities as indicated below.

2.5. Conditions on Scientific research

Whilst BUV is still primarily a teaching university, we encourage all faculty members to continuously develop and update their research and professional practice. This can be done both formally and informally through scholarly research, practice-based research, and engagement with scholarly and professional networks.

The introduction of the BUV Academic and Teaching Classifications and Standards of faculty and promotion policies being developed will also serve to encourage and drive research activities and outputs within BUV. The Faculty Research Activity shows some of the recent research activities that BUV faculty have engaged in, ranging from local conference presentations, through to publications in top-tier international journals. We recognise that not all faculty are engaged on contracts which involve research expectations, and therefore encourage scholarly activity across the entire range of activities discussed in the Scholarly Activity Encouragement Policy.

To enhance BUV's ability to produce high-quality research, BUV provides the following support to faculty:

- Condensed teaching periods to allow for block research time.
- Funding opportunities to present at conferences.
- Workload allowances for faculty actively engaged in research.
- Encouraging faculty members to be fully engaged in professional and academic networks.
- Developmental opportunities for faculty members to present at BUV internal conferences.
- Ad-hoc funding support for research projects.
- Student Research Assistants (SRAs) to support faculty with research activities. The introduction of SRAs has been agreed (see 243 Teaching and Research Assistantship Policy) and recruitment of these positions has begun and will be scaled up from the beginning of the 2023 academic year.

Beyond traditional scholarly activity outputs, BUV recognises the value of faculty maintaining broad external networks to help support both research and teaching practices. The list of Faculty Engagement with Professional and Academic Networks below shows how faculty members are involved with, and engaging actively with other institutions, and both academic and professional networks. This engagement allows faculty members to remain current in their professional and academic practices, provides scope for collaboration on a range of professional or research projects, and enables them to continue to develop and improve their teaching practices.

No.	Faculty	Network / body	Role	Description/Note if not clear
1.	Kostas Tsonetos	Advance HE (https://www.advance-he.ac.uk/)	Fellow (FHEA)	British Higher Education professional membership scheme promoting excellence in higher education.
2.	Kostas Tsonetos	International Board of Certified Trainers Rotterdam - THE NETHERLANDS (https://www.ibct-global.com/)	Member	IBCT is the world's first not-for-profit certification body in the field of corporate training and workplace learning industry. Promoting excellence and sustainability in training and HRD.
3.	Kostas Tsonetos	Greek Economic Chamber (https://oe-e.gr/en/the-economic-chamber/)		Holds the role of the scientific advisor for the state and the society. Responsible for institutionalizing the profession of the economist.
4.	Kostas Tsonetos	Harvard Business Review Advisory Council	Member	
5.	Shashi Chaudhary	Advance HE	Senior Fellow (SFHEA)	Advance HE is a member-led, sector-owned charity that works with institutions and higher education across the world to improve higher education for staff, students and society.
6.	Shashi Chaudhary	Nepal Policy Institute (NPI)	Member	NPI is a think-tank and a knowledge-platform dedicated to the people-centred and sustainable development of Nepal and Nepali people, including diaspora Nepali.
7.	Adrian Weng	Malaysian business chamber	Member	It's a body to facilitate Malaysian businesses in Vietnam
8.	Mike Perkins	Vietnam National Academy of Education Management	Member of the editorial board of the Journal of Education	National body in Vietnam for enhancing and promoting educational management and training

No.	Faculty	Network / body	Role	Description/Note if not clear
			Management	
9.	Mike Perkins	Vietnam Business Forum Education and Training Working group	Member	A sub-group of the Vietnam Business Forum working to further the interests of organisations involved in the fields of education and training in Vietnam.
10.	Mike Perkins	Vietnam Business Forum Governance and Integrity working group	Member	A sub-group of the Vietnam Business Forum working to promote integrity and governance issues within Vietnam.
11.	Mike Perkins	Advance HE	Senior Fellow (SFHEA)	British Higher Education professional membership scheme promoting excellence in higher education.
12.	Joao Fialho	CIMA UE - Research Center in Mathematics and Applications - University of Evora	Research member of the Differential Equations research group	Research Center in Applications and Mathematics. Counts with over 40 researchers from different countries and affiliation.
13.	Joao Fialho	Forum Oceano	Member - research consultant (Ignosi/Dat auris)	Portuguese government sponsored institution that manages the Portuguese Sea cluster and Sea Economy
14.	Joao Fialho	Portuguese Mathematics Society (SPM)	Member	Main Portuguese Mathematics society. It includes faculty and researchers connected to field of Mathematics.
15.	Joao Fialho	Axioms - Special Issue "Advances in Nonlinear Boundary Value Problems: Theory and Applications"	Editor-in-chief (joint with Prof Feliz Minhos)	Special issue of the indexed journal - Axioms (Q3 journal)
16.	Joao Fialho	- Boundary Value Problems (Springer) - Journal of Function Spaces and	Editorial Board	Member of editorial boards

No.	Faculty	Network / body	Role	Description/Note if not clear
		Applications (Hindawi) - Mathematical Reviews (AIMS) - Journal of Mathematics Research (Canadian Center of Science and Education) - Abstract and Applied Analysis (Hindawi) - Advances in Difference Equations - International Journal of Differential Equations - Biology And more		
17.	Joao Fialho	INFORMS - Certified Analytics Professional	Member - certification in progress	Institution certifying in the field of data analytics, linked to Institute for Operations Research and the management sciences, USA
18.	Joao Fialho	Advance HE	Senior Fellow (SFHEA)	British Higher Education professional membership scheme promoting excellence in higher education.
19.	Joao Fialho	CIMA - UE (Research center in Mathematics - Universty Evora - Portugal)	Research member	
20.	Sandra Natalie Schneiderman	Victorian Institute of Teaching	Member	The Victorian Institute of Teaching (VIT) is an independent statutory authority for the teaching profession, whose primary function is to regulate members of the teaching profession
21.	Sandra Natalie Schneiderman	ACARA Australian Curriculum and Reporting Authority	Member	ACARA is an independent statutory authority with a key focus on raising the teaching and reporting standards and curriculum in Australia.
22.	Ajay Pillai	Journal of Financial Reporting and Accounting (EMERALD)	Reviewer for the Journal	Reviewing articles for Journal of Financial Reporting and

No.	Faculty	Network / body	Role	Description/Note if not clear
				Accounting (Emerald Insight) since 2015
23.	Ajay Pillai	Advance HE	Joined for Fellowship in November 2021	British Higher Education professional membership scheme promoting excellence in higher education.
24.	Ray Gordon	Australian Chamber of Commerce Vietnam	Former Director of Board	This role involved meeting Australian and international Government and business delegates to establish networks and mutually beneficial business and trade opportunities.
25.	Ray Gordon	Australian Academy of Business Management (AABM)	President and Chair of Board	AABM is an academy made up of a network of academics and practitioners from Asia Pacific and South East Asia region. It offers Australian nationally recognised vocational education and training programs at Diploma and Certificate levels. These programs provide pathways for international student into Australian, British and US Universities. AABM offers a range of executive education programs primarily in the field of leadership and management, more recently - innovation processes (leading ideation processes). AABM also run international conferences and seminars.
26.	Ray Gordon	International Counsel of Business and Management (ICBM)	Vice President and member of the board	ICBM is a network of academics from countries throughout Asia, Australia, America, Canada and Europe. The network facilitates research collaboration that addresses the Asian Region's Business and Management challenges. ICBM produces

No.	Faculty	Network / body	Role	Description/Note if not clear
				two peer reviewed journals and I am the chief editor of one of these journals
27.	Ray Gordon	Association to Advance Collegiate Schools of Business (AACSB) International	Mentor	<p>AACSB Mentors serve as a key resource in advising AACSB eligible business schools on the association's self-assessment process and the development of the school's initial self-assessment report (iSER). A Mentor guides and stimulates the school to define its processes, activities and outcomes, as well as present various options to help develop a better understanding of the AACSB standards and what they mean. Mentors are required to visit the schools they assigned and report on the progress the school is making toward the development of its Initial Self Evaluation report. This report is essentially a gap analysis between the school's existing strategic management, financial management, operating, staff sufficiency and assurance of learning procedures and the requirements of the AACSB standards. These standards represent a blue print of best practice leadership and management systems for high quality business schools and Universities</p>
28.	Ray Gordon	Queensland Chamber of Commerce	Member	This involved meeting State and international Government and business delegates to establish

No.	Faculty	Network / body	Role	Description/Note if not clear
				networks and mutually beneficial business and trade opportunities.
29.	Ray Gordon	QTS Education Solutions, Australia, Vietnam	President and Chair of Board	QTS is an Australian Registered Training Organisation (RTO) offering Australian nationally recognised business programs to Australian, Vietnamese and other international students.
30.	Ray Gordon	Australian Institute of Management	Fellow	Australian education provider offering courses include business, management and leadership.
31.	Ray Gordon	CPA Australia	Chartered Accountant	Australian professional accounting body
32.	Ray Gordon	Australian Business Deans Council	Former member	Body fostering the global impact of Australian business education and research.
33.	Ray Gordon	Business Academics Research Directors' Network	Former member	Joint body of ABDC and ANZAM providing a learning platform for the people who have line responsibility for administering research in business faculties and schools.
34.	Ray Gordon	International Political Science Association	Member	International scholarly association founded under UNESCO devoted to the advancement of political science in all parts of the world.
35.	Ray Gordon	Australian and New Zealand Academy of Management.	Member	Professional body representing management educators, practitioners, and researchers in Australia and New Zealand
36.	Ray Gordon	Academy of Management. (American Academy of Management)	Member	Professional association for scholars of management and organizations
37.	Ray Gordon	European Group of Organizational Studies	Member	Scholarly association which aims to further the theoretical

No.	Faculty	Network / body	Role	Description/Note if not clear
				and/or empirical advancement of knowledge about organizations, organizing and the contexts in which organizations operate.
38.	Ray Gordon	International Sociological Association	Member	Non-profit organization dedicated to scientific purposes in the field of sociology and social sciences.
39.	Chris Jeffery	British Chamber of Commerce Vietnam (BritCham Vietnam)	Chair	Played an active leadership role in the development of BritCham, both locally in Hanoi and at the national level as well as the name change and rebranding, development of business centre, fundraising and sponsorship
40.	Chris Jeffery	British Corporate Advocacy Council (BCAC)	Board Member	High Level UK Corporate and Government body discussing policy and corporate developments in the relationship between the two countries
41.	Chris Jeffery	Vietnam Business Forum	Board Member	The national consultative body of Vietnamese and International Business in Vietnam, lobbying for policy changes and supporting the Vietnamese drive to become a 4IR Economy, liaising with Prime Minister, Ministers and Heads of Civil Service Departments
42.	Chris Jeffery	UNIS Hanoi	Advisory Board Member	Advising the trustees and Principal on the development operation and strategy of the School
43.	Chris Jeffery	BEBG British Education Business Group	Founding Chair	A group of British Educational and education service providers representing the interests of the group, the largest

No.	Faculty	Network / body	Role	Description/Note if not clear
				country group within the education sector
44.	Chris Jeffery	Operation Smile	Advisory Board Member	Involved in the Operation and Fundraising for Operation Smile Vietnam, the international medical charity that has provided hundreds of thousands of free surgeries for children and young adults in developing countries who are born with cleft lip, cleft palate, or other facial deformities. It is one of the oldest and largest volunteer-based organizations dedicated to improving the health and lives of children worldwide through access to surgical care.
45.	Chris Jeffery	Bett Asia	Advisory Board Member	Act as a sounding board member for the plans and ideas for Bett Asia, as well as helping Bett Asia shape the programmes to ensure they are meeting the needs of their visitors and exhibitors.
46.	Chris Jeffery	EMASI	Advisory Board Member	Involved in EMASI which is a group of international bilingual schools with American standard facilities that delivers Vietnamese national curriculum adopting modern teaching methods from developed countries.
47.	Stewart Utley	CARDE (Critical Applied Research in Digital Education)	Member of research group	https://research.tuni.fi/carde/affiliated-wildcards/ A research group based at Tampere University (Finland) looking into critical application of digital education and its impact on education.

No.	Faculty	Network / body	Role	Description/Note if not clear
48.	Stewart Utley	HANDLE (Humour Affordances in Digital Learning Environments)	Member of research group	https://www.tuni.fi/en/research/humour-affordances-digital-learning-environments-handle A research group based at Tampere University focused on utilisation of humour in various forms and its impact and application in digital learning environments.
49.	Don Hickerson	The Qualitatives	Member	A qualitative research-based think-tank.
50.	Don Hickerson	Advance HE	Participant/Candidate	British Higher Education professional membership scheme promoting excellence in higher education.

2.6. Conditions on Industrial partnership

The Careers, Industrial Relations, and Alumni Office (CIRAO) works between students, faculty, alumni, and external partners to enhance the opportunities for external involvement with learning in BUV. This team provides support to students in obtaining internships and organising a wide range of employability events and activities throughout each semester. They also support faculty in obtaining guest speakers and arranging guest lectures, and alumni by providing continued support.

Items	Figures
Working and Own a business/ Family Business	325
Higher education (abroad) + Planning to study abroad	19
NA (not able to contact or share information)	47
Grand Total	391
% of BUV students employed or in full-time education after graduation (Graduate 2018-2021)	100%

We believe that the support provided by the CIRAO enables our students to maximise the opportunities provided to them at BUV, and this is demonstrated by the fact that 100% of our graduates from 2018-2021 were employed or in full-time education within three months following graduation. BUV is extremely proud of this figure which we have maintained since our first graduating cohort in 2013, and this is a testament to the ongoing support that we provide to our students.

The CIRAO can use their close relationship with employers to support students in obtaining internships in the semester breaks. Internships are not only available to all students who want one (see 253 Internship Summary), but students are required to complete at least one internship to obtain the Career Readiness Certificate. The CIRAO work with a diverse range of industries, and both local and international firms, so that students can explore the widest range of potential careers opportunities. The updated list of over 400 industrial partners is as below:

No.	Partner	Status
1	2 Idea	Active
2	40HRS Hr Consultant Service	Active
3	A Ra là Thế!	Active
4	AASC	Active
5	AB InBev	Active
6	Abbott	Active
7	Absolute Internship	Active
8	ACCA	Active
9	Accenture Malaysia	Active
10	ActionAid	Active
11	Adecco Vietnam	Active
12	Admicro	Active
13	Advantage Real Estate Service	Active
14	Advesa Digital Solutions Inc	Active
15	AHT TECH JSC	Active
16	AIESEC in Vietnam	Active
17	AIM Academy	Active
18	akaBOT	Active
19	Allied Pickfords Vietnam	Active

No.	Partner	Status
20	Alma Resort	Active
21	Aloha Consulting Group	Active
22	Alpha Books	Active
23	American Edu-Sports Academy (ASA)	Active
24	American Stem	Active
25	American Study	Active
26	Amica Travel	Active
27	ANIMVERSE	Active
28	ANT Housing Design	Active
29	Anymind Group	Active
30	APEC Group	Active
31	Apollo English	Active
32	Appota	Active
33	Ascott International Management (Vietnam)	Active
34	ASEAN Foundation	Active
35	Asia DMC	Active
36	Asian Tigers Transpo International (Vietnam)	Active
37	Aspire Vietnam	Active
38	Australian Embassy	Active
39	Avana Retreat Resort	Active
40	AVG Technologies (AVG)	Active
41	Avior Airlines	Active
42	Aviva Vietnam Life Insurance Company Limited	Active
43	AZA Travel	Active
44	Back Stage Event	Active
45	Backpack Hostel	Active
46	Bamboo Airways	Active
47	Bao Kim	Active
48	BareFoot Ventures	Active
49	Bay Global Strategies	Active
50	Betanam	Active

No.	Partner	Status
51	Better Work Vietnam	Active
52	Bhaya Cruises	Active
53	BIDV Securities Company (BSC)	Active
54	BIDV-SuMi TRUST LEASING	Active
55	BIM Group	Active
56	BVIS- British Vietnamese International School Hanoi	Active
57	Blue Dragon Children's Foundation	Active
58	BMBSoft VietNam Company Limited	Active
59	BOO	Active
60	BOSCH	Active
61	BR24 Vietnam	Active
62	Bravestars Games	Active
63	BRG Chairwoman	Active
64	BritCham	Active
65	British Council	Active
66	British Embassy Hanoi	Active
67	British International School Hanoi	Active
68	British Vietnamese International School Hanoi (BVIS Hanoi)	Active
69	ByteDance	Active
70	CAAY Creative Agency	Active
71	Cafebiz	Active
72	California Fitness & Yoga	Active
73	Cam Anh Ng Illustration	Active
74	Canifa	Active
75	Capella Hanoi Hotel	Active
76	CareerBuilder	Active
77	Carlsberg Vietnam	Active
78	Castrol BP Petco Ltd.	Active
79	CBRE	Active
80	CBRE Vietnam	Active
81	CCI France Vietnam (CCIFV)	Active

No.	Partner	Status
82	CCTT Global	Active
83	CCTT Global Company Limited	Active
84	Central and Eastern European Chamber of Commerce in Vietnam (CEEC) - Hanoi Office	Active
85	Central Retail Group	Active
86	CFA Community (Chartered Financial Analyst)	Active
87	Chau Bach Group	Active
88	Childfund Vietnam	Active
89	Chinh Dai	Active
90	Christina Noble Children's Foundation	Active
91	Chubb Vietnam	Active
92	Chula Fashion	Active
93	CIBER-CMC Joint Venture Corporation	Active
94	CIMB BANK	Active
95	CircleK Vietnam	Active
96	Circletime Studio	Active
97	CJ CGV	Active
98	CleverGroup	Active
99	Clickable Vietnam	Active
100	CMC Technology & Solution	Active
101	Coats Phong Phu	Active
102	Coc Coc	Active
103	Cocacola Vietnam	Active
104	Complex 01	Active
105	Concordia International School Hanoi	Active
106	Cộng đồng Hộ Chiếu Xanh Đi Quanh Thế giới (HCX)	Active
107	CPA Australia	Active
108	Crown Worldwire Ltd	Active
109	Crowne Plaza Vinh Yen City Centre	Active
110	Crunchy Frog	Active
111	CSKM GLOBAL INSTITUTE	Active

No.	Partner	Status
112	CTCP Ứng dụng Khoa học Tâm lý Hồn Việt (Vietnam Insight)	Active
113	Cty TNHH Sản Xuất và Thương mại KJ VINA (Paperlab)	Active
114	Cyfeer	Active
115	D4E Media	Active
116	Dai Viet Group	Active
117	Davines Vietnam	Active
118	DCs Pizza	Active
119	Decathlon	Active
120	Dee Dee Animation Studio	Active
121	Deloitte Vietnam	Active
122	DETECHbio	Active
123	DHC	Active
124	Diageo Vietnam	Active
125	Digiworld	Active
126	Discova	Active
127	Dolce by Wyndham Hanoi Golden Lake	Active
128	Dragon Capital Group Limited	Active
129	Dreamplex1	Active
130	Easia Travel	Active
131	Ecomobi	Active
132	Ecopark Vihajico	Active
133	Ecotek	Active
134	Edso Labs	Active
135	Eduviet	Active
136	Edspace	Active
137	Edward Vu Business Consulting & Training	Active
138	Elite Fitness	Active
139	ELS Performance Golf Academy	Active
140	EMASI International Bilingual Schools	Active
141	Embassy of Australia	Active
142	Employment Vietnam	Active

No.	Partner	Status
143	EONMIX	Active
144	Ernst & Young	Active
145	Esoft	Active
146	eSpace	Active
147	EuroCham	Active
148	Evergreen	Active
149	EY Parthenon	Active
150	F.Learning Studio	Active
151	F88	Active
152	FarEast Vacation	Active
153	Fika	Active
154	First Alliances	Active
155	First Recruitment Asia	Active
156	First Trust ACPA Vietnam	Active
157	FLC Group	Active
158	Foody	Active
159	Forhe Vietnam	Active
160	FOREO	Active
161	FPT Securities	Active
162	FPT Software	Active
163	FPT Telecom	Active
164	FrieslandCampina Vietnam	Active
165	FUNIX (FPT)	Active
166	Fusion Original Saigon Centre	Active
167	Galaxy Mipec Long Bien	Active
168	Gameloft	Active
169	Garena	Active
170	G-College	Active
171	GIA Restaurant	Active
172	Gimasys	Active
173	Gimo	Active

No.	Partner	Status
174	Global Study Partners	Active
175	Globalways Global Consulting	Active
176	GM Vietnam	Active
177	Golden Gate	Active
178	Golden Path Academics Vietnam	Active
179	GPA Camps	Active
180	GPA Vietnam	Active
181	Grant Thornton Vietnam	Active
182	Green House Cooperatives	Active
183	Growth Catalyst Vietnam	Active
184	Gruppo Trentino Di Volontariato	Active
185	GTE Localize	Active
186	H2 Global Travel	Active
187	Hanoi International School	Active
188	Happynest	Active
189	Hawee Group	Active
190	HCC	Active
191	Heineken Hanoi Brewery Company	Active
192	HILTON HANOI OPERA	Active
193	Hilton Hotels & Resorts	Active
194	HILTON WORDWIDE	Active
195	Hitachi Vanta	Active
196	Hong Ngoc Hospital	Active
197	Hongkong Land	Active
198	Hotel Nikko Hanoi	Active
199	HR1 Vietnam	Active
200	HSBC	Active
201	Hướng Nghiệp Sông An	Active
202	Hyatt Regency West Hanoi	Active
203	ICAD Vietnam	Active
204	ICAEW	Active

No.	Partner	Status
205	ICL72	Active
206	IDG Vietnam	Active
207	IDP Education	Active
208	IEC Group	Active
209	Impactus	Active
210	In Camedia	Active
211	Indochina Land	Active
212	InterContinental Hanoi Landmark 72	Active
213	InterContinental Hanoi Westlake	Active
214	InterContinental Saigon	Active
215	International College of Arts (ICA)	Active
216	International Finance Corporation (IFC)	Active
217	Interspace Vietnam	Active
218	Intrinsic Garden	Active
219	IPH- Indochina Plaza Hanoi	Active
220	IPP Education	Active
221	iPrice Group	Active
222	Japan Business Association in Vietnam (JBAV)	Active
223	Jardine Matheson Group	Active
224	Jessica Minh Anh (JMA)	Active
225	JLL Vietnam	Active
226	JMM - J Model Management	Active
227	Job Hoppin	Active
228	JW Marriott Hanoi	Active
229	Katalon	Active
230	Kinder World	Active
231	KKDay	Active
232	KMM Film Studio	Active
233	KMS Solution	Active
234	Knowmads	Active
235	KORCHAM HANOI	Active

No.	Partner	Status
236	KPMG	Active
237	KTO Logistics	Active
238	LadiPage Vietnam	Active
239	Lalamove	Active
240	Le Bros	Active
241	Lead The Change	Active
242	Lian Lian Global	Active
243	Linagora	Active
244	LittleLives Vietnam	Active
245	L'OREAL	Active
246	LOTTE Hotels Vietnam	Active
247	LOTTE Shopping Plaza Vietnam	Active
248	Lotus Quality Assurance	Active
249	Malta Land	Active
250	Management Consulting Prep (MCP)	Active
251	ManpowerGroup Vietnam	Active
252	MarCom Mate	Active
253	Maritime Bank	Active
254	Markus	Active
255	Martin Mulligan Marketing Ltd.	Active
256	Marubeni	Active
257	Masan Group	Active
258	Marvelous Hotel	Active
259	Mazars Vietnam	Active
260	McKinsey & Company	Active
261	MDF Training & Consultancy	Active
262	MEC (Modern Education Community)	Active
263	Mekong Capital Hanoi	Active
264	MELIÁ HANOI	Active
265	Migo Travel	Active
266	Minh Anh Trading and Consultancy (MATC)	Active

No.	Partner	Status
267	Ministry of Construction Academy of Managers for Construction and Cities	Active
268	Mirae Asset Securities	Active
269	Misa JSC	Active
270	MOMO	Active
271	Movenpick Hotel Hanoi	Active
272	Ms Hannah GrapeSEED	Active
273	Nakagawa	Active
274	Navigos Group Vietnam JSC	Active
275	Navii Dental Care	Active
276	Nest	Active
277	Nest by AIA Hanoi - AIA Life Insurance (Vietnam)	Active
278	Nestle	Active
279	Next Solution	Active
280	Nexus FrontierTech	Active
281	Nexus Group	Active
282	Ngân hàng TMCP Sài Gòn - Hà Nội (SHB)	Active
283	NGO Recruitment	Active
284	NhaF	Active
285	Nielsen Vietnam	Active
286	Novotel Hanoi Thai Ha	Active
287	Novotel Suites Hanoi	Active
288	Nshape Fitness	Active
289	NTQ Solution JSC	Active
290	Oakwood Group	Active
291	One Arrow Consulting (OAC) - Vietnam	Active
292	ONE DENTAL CLINIC VIETNAM	Active
293	One Mount Group	Active
294	Openasia Group	Active
295	Operation Smile Vietnam	Active
296	OPES	Active

No.	Partner	Status
297	ORACLE	Active
298	Oriental Hospitality Group- OHG	Active
299	Outward Bound Vietnam	Active
300	Oxalis Adventure	Active
301	Oxfam	Active
302	OYO Rooms	Active
303	PACE Institution of Management	Active
304	Pacific Land Vietnam	Active
305	Pan Pacific Hanoi	Active
306	Panasonic Vietnam	Active
307	Paradise Hotels & Cruises	Active
308	Park Hyatt Saigon	Active
309	Pasona Tech Vietnam	Active
310	PATH	Active
311	Pegasus International College	Active
312	PersolKelly	Active
313	PG Bank	Active
314	PHAM DTRAN BRAND CONSULTANCY	Active
315	PHH Group	Active
316	Phoenix Holding	Active
317	Piaggio Vietnam	Active
318	Pioneer International Consulting	Active
319	Pizza 4Ps	Active
320	Pizza Vietnam Limited	Active
321	PizzaHut	Active
322	Play All Day	Active
323	Point Avenue	Active
324	PowerGate Software	Active
325	Premier Village Phu Quoc Resort	Active
326	Prime Group	Active
327	Prime Quality Training Limited (Singapore Office)	Active

No.	Partner	Status
328	Pullman Hanoi Hotel	Active
329	PWC (PricewaterhouseCoopers Vietnam Limited)	Active
330	PYS Travel	Active
331	Raconteur Vietnam	Active
332	RAFFLES MEDICAL VIETNAM	Active
333	Rakuna	Active
334	Reactor School	Active
335	Ready to Lead	Active
336	Rice Creative	Active
337	RMIT University	Active
338	Rouse Legal Vietnam	Active
339	Royal Lotus Halong Resort & Villas	Active
340	RSM VIETNAM	Active
341	Salt'n'Lime Restaurant	Active
342	Sang Software JSC	Active
343	SAOKHUE CONSULTING	Active
344	SAPP Academy	Active
345	Savills Vietnam	Active
346	SEA Group	Active
347	Senix Health Group	Active
348	SGC in Thailand	Active
349	Sheraton Hanoi Hotel	Active
350	Shopee	Active
351	Silk Path Hotel Hanoi	Active
352	Skilio	Active
353	Skilledup	Active
354	Sofitel Legend Metropole Hanoi	Active
355	Sol by Meliá Phu Quoc	Active
356	Sotane1t	Active
357	Spore Labs	Active
358	SSI Securities Corporation	Active

No.	Partner	Status
359	Standard Chartered Bank	Active
360	Startuppreneur	Active
361	Stavian Group	Active
362	STEAM for Vietnam	Active
363	Student Life Care	Active
364	Sun Group	Active
365	Sun Symphony Orchestra	Active
366	Sunhouse Group	Active
367	Sunset Beach Resort & Spa	Active
368	Sunshine Holding	Active
369	Sutunam	Active
370	Systems Little House International Kindergarten	Active
371	Systems Little House International Kindergarten	Active
372	T&A Ogilvy	Active
373	T&C Vietnam	Active
374	Talent Basket	Active
375	Talentnet	Active
376	TalentPool Vietnam	Active
377	Talentvis Vietnam	Active
378	TAYLOR'S UNIVERSITY	Active
379	Team Chouchou - Châu Bùi	Active
380	Techcom Securities	Active
381	Techcombank	Active
382	Television Advertising and Services Center (TVAD)	Active
383	Telio	Active
384	TH SCHOOLS	Active
385	Thang Long Acedemy Kindergarten	Active
386	THANG LONG WARRIORS (Tram Anh Sport Co., Ltd.) (TLWA)	Active
387	The American Chamber of Commerce in Hanoi (AmCham)	Active
388	The Five Hospitality	Active
389	The Global Citizen Education	Active

No.	Partner	Status
390	The Hanoi Bicycle Collective	Active
391	The Hongkong and Shanghai Bank (HSBC)	Active
392	THE LONDON COLLEGE FOR DESIGN & FASHION	Active
393	The Solidarity Centre	Active
394	Thien Minh Group - TMG	Active
395	Threeland Travel	Active
396	Thu Cuc Hospital	Active
397	Tibco	Active
398	TikTok	Active
399	Timo Bank	Active
400	TinhVan Group	Active
401	TMF Group	Active
402	TMS Group	Active
403	TNT Express Worldwide (Vietnam)	Active
404	Tổng Công ty Bảo Hiểm Bảo Việt	Active
405	Tonkin Media	Active
406	Toong Coworking Space	Active
407	TopCV	Active
408	TPBank	Active
409	Tram Anh Sport	Active
410	TransPerfect DataForce	Active
411	Travel Hub	Active
412	Travellive	Active
413	Travellive Magazine - Hoa & Le Communications	Active
414	TRG International	Active
415	True North School	Active
416	Tư vấn Giáo dục ASCI - ASCI Group	Active
417	Ubisoft	Active
418	UHY Auditing and Consulting	Active
419	UNIQLO	Active
420	UNIS HANOI (United Nations International School of Hanoi)	Active

No.	Partner	Status
421	United Nations Development Programme-UNDP	Active
422	Urban Youth Academy	Active
423	US Embassy	Active
424	VCCI	Active
425	VCCorp	Active
426	VCS Express	Active
427	Vietcetera	Active
428	Vietnam Airlines	Active
429	Vietnam Backpacker Hostels	Active
430	Vietnam Business Forum (VBF)	Active
431	Vietnam Climate Innovation Center	Active
432	Vietnam Education Consultant - VEC	Active
433	Vietnam Education Consultant (VEC)	Active
434	Vietnam Hotel Association	Active
435	Vietnam International Commercial Joint Stock Bank (VIB)	Active
436	Vietnam Maritime Commercial Joint Stock Bank (MSB)	Active
437	Vietnam Startup Insider	Active
438	Vietnamobile	Active
439	Viettonkin	Active
440	VIGroup	Active
441	Vimepharco	Active
442	Vinhomes	Active
443	Vinmec	Active
444	Vinpearl Luxury	Active
445	VIRAC	Active
446	Virtual Internship	Active
447	Vivaland	Active
448	VNAT	Active
449	VNDirect	Active
450	VNG CORPORATION	Active
451	VNGGroup	Active

No.	Partner	Status
452	VNP Group	Active
453	VOCO Center	Active
454	VPBank	Active
455	VPBank Finance	Active
456	VPBank Securities	Active
457	VPS	Active
458	VSHR Pro Academy	Active
459	Wanderlust Tips Magazine	Active
460	WeCreate	Active
461	WeTransform	Active
462	WINDSOFT	Active
463	Wine Agency	Active
464	World Vision	Active
465	Yeah1TV	Active
466	YEN OF LONDON COMPANY LIMITED (NEW WORLD FASHION)	Active
467	ZIM School of English and Test Preparation	Active
468	Zitga Studio	Active
469	CMSO	Active
470	Kowil Fashion - Phu Thai Holdings	Active
471	VOCO	Active
472	AZA Travel,	Active
473	Backstage Event, Turner	Active
474	Cooked	Active
475	Wetransformed.vn	Active
476	Transperfect	Active
477	Oxalis	Active
478	Hai Vuong Group	Active
479	FlowerStore Group; BRG;	Active

2.7. Conditions on International partnership

BUV's active engagement in establishing these external domestic and international relationships affords students and staff with many potential benefits. Some of these benefits include demonstrating BUV's commitment to the Bologna expectations for students, focused on international mobility, by granting them the opportunities to pursue further studies (e.g., Bond, Oxford, and Essex), or to take overseas classes for one semester which are then recognised for credit bearing purposes (e.g. Taylor's University). In addition, these agreements facilitate students and faculty members' participation in student and staff exchanges, research collaboration opportunities, and jointly offered training programmes. These partnerships assist BUV in achieving several of BUVs strategic objectives and allow for external input to be considered in our academic programmes. This demonstrates BUV's ability and willingness to provide mutual recognition of qualifications and learning periods that can be completed abroad at other universities.

#	Name of organisation	Type of agreement	Date signed	Scope of engagement
1	University of London (UoL), United Kingdom	Validating higher education institution: Recognised Teaching Centre Agreement	October 2019	Key BUV responsibilities: <ul style="list-style-type: none"> • Marketing and recruitment of students • Providing teaching and academic support to students • Employment, development, and deployment of academic staff. • Partial production of learning materials • Ensuring the learning environment is of a satisfactory quality.
2	Staffordshire University, United Kingdom	Validating higher education institution: Collaborative Academic Partnership Agreement	January 2018	Key BUV responsibilities: <ul style="list-style-type: none"> • Marketing and recruitment of students • Providing teaching and academic support to students • Employment, development, and deployment of academic staff. • Full production of learning materials • Assessment creation and management • Marking of assessments in line with Staffordshire University's regulations and standards. • Ensuring the learning environment is of a satisfactory quality.

3	Heilbronn University of Applied Sciences, Germany	Exchange agreement	2019	<p>*The agreement provides the framework for areas of potential cooperation, especially the exchange of students, teaching staff and researchers in order to increase the quality of teaching process and research activities.</p> <p>*The agreeent also provides framework for areas of other potential cooperation of mutual interest by both Institutions.</p>
4	University of Essex, United Kingdom	Minute of Understanding (MOU)	2020	<p>The admission of suitably qualified studies from BUV to relevant degree courses at Essex;</p> <p>* Collaboration on research projects of mutual interest;</p> <p>* The mobility of students and/or members of academic staff as agreed between the Parties and as appropriate to the circumstances of each Party, and;</p> <p>* Such additional activities as may be identified and agreed in writing by the Parties</p>
5	University of Huddersfield, United Kingdom	Minute of Understanding (MOU)	2021	<p>This agreement confirms mutual interests of both Institutions to cooperate in the below areas:</p> <p>* Articulation;</p> <p>* Exchange of teaching staff and researchers;</p> <p>* Joint development of research projects;</p> <p>* Joint organisation of scientific and cultural events;</p> <p>* Exchange of students;</p> <p>* Shared courses and subjects;</p> <p>* Dual degrees...</p>
6	Oxford Brookes University, United Kingdom	Progression agreement	2021	<p>* Progression agreement to offer progression routes for BUV students from : Bachelor in International Hospitality Management and Bachelor in Tourism Management to transfer to OBU's degrees and post-graduate programmes</p>
7	Taylor's University, Malaysia	Exchange agreement	2021	<p>*The agreement confirms mutual interest of both Institutions to cooperate in student mobility in annual basis</p>

8	Australian Catholic University, Australia	Minute of Understanding (MOU)	2021	<p>Scope of cooperation between both Institutions cover but not limited to below areas:</p> <ul style="list-style-type: none"> * Affiliation for the purpose of unilateral or bilateral Study Abroad programmes; * Student/ Staff exchange * Collaborative curriculum development to facilitate the implementation of Student Mobility programmes; * Other forms of academic collaboration including research, development and delivery of joint courses; * Non-academic collaboration activities
9	Bond University, Australia	Articulation Agreement, MOU	2021	<p>This agreement confirms mutual interests of both Institutions to cooperate in the below areas:</p> <ul style="list-style-type: none"> * Articulation; * Exchange of teaching staff and researchers; * Joint development of research projects; * Joint organisation of scientific and cultural events; * Exchange of students; * Shared courses and subjects; * Dual degrees...
10	Victoria University of Wellington, New Zealand	Minute of Understanding (MOU)	2021	<p>Both Institutions seek to work together in areas of mutual interest and to identify opportunities:</p> <ul style="list-style-type: none"> (a) for student and staff exchanges; (b) to establish joint programmes; (c) to provide for visits by officials from each party to further collaborative relations; (d) for collaborative teaching; (e) to offer professional advice and support; (f) to identify other areas of potential collaboration; <p>and to work collaboratively and collegially with each other.</p>
11	Birmingham City University, United Kingdom	Minute of Understanding (MOU)	2021	<p>In furtherance of this purpose the Parties agree to develop the following activities in below collaboration areas :</p> <ul style="list-style-type: none"> * Exchanges of academic and administrative staff and mutual visits to pursue research and to lecture * Exchanges of students and/or study abroad programmes and other enhancements to the student experience

				<ul style="list-style-type: none"> * Identifying opportunities for conducting collaborative research and development * Identifying opportunities for conducting lectures and seminars and organising symposia and conferences * Exchanges of academic information and materials 2.6 Promoting collaboration in fields of mutual interest * Promoting other academic co-operation and collaboration as mutually agreed.
12	Rukmini Devi Institute of Advanced Studies, India	Minute of Understanding (MOU)	2021	<ul style="list-style-type: none"> * Student/Staff mobility * Student-added value activities such as seminars, lectures, conferences, competitions...ect.. * Research collaboration at mutual interest * Faculty-added value activities such as joint seminars, joint international conferences, joint FDPs, ect.. * Other forms of cooperation (of mutual interest)
13	University of Sussex, United Kingdom	Minute of Understanding (MOU)	2022	<p>Collaboration between both Institutions cover the below areas:</p> <ul style="list-style-type: none"> *Academic cooperation; *The facilitation of staff exchanges; *The exchange of information between both teaching faculty; * other activities viewed to be mutually beneficial
14	University of Stirling, United Kingdom	Minute of Understanding (MOU)	2022	<p>The scope of collaborations included in this Agreement encompasses the following categories:</p> <ul style="list-style-type: none"> * Development of reciprocal international mobility programmes; * Development of articulation arrangements; * Development of transnational education programmes for delivery at BUV; * Joint development of other projects of shared interests.

15	De Montfort University, United Kingdom	Progression agreement	2022	*The agreement is to confirm progression options for BUV students from Bachelor of International Hospitality Management and Bachelor of Finance and Economics programmes can be transferred to DMU's degrees both at undergraduate and post-graduate levels
16	University of Bristol, United Kingdom	Minute of Understanding (MOU)	2022	<p>BUV and UoB have identified and will further explore the following areas for potential bilateral collaboration and cooperation:</p> <ul style="list-style-type: none"> * Academic collaborations such as articulation, progression in both undergraduate and post-graduate level; * Student mobility: including student exchange (credit-bearing or non-credit bearing), study tours/ International internships in Vietnam; * Promotion of short course offerings at mutual benefit and interest for both Parties; * Student-added value activities such as seminars, lectures, conferences, competitions. * Scholarship offerings on exchange for BUV or UoB students if applying to the other Institutions; <p>3.6 Research collaboration of mutual interest</p>
17	Bournemouth University, United Kingdom	Letter of Intent	2022	<p>The letter provides a basis on which the Parties may explore potential future collaboration in:</p> <ul style="list-style-type: none"> - Progression programmes; - Joint research projects; - Student mobility; - Non-academic collaboration activities - Shared courses and subjects
18	Ecole De Savignac, France	Minute of Understanding (MOU)	2022	<ul style="list-style-type: none"> * Academic collaborations such as articulation, dual-degrees in both undergraduate and post-graduate levels; * Student/Staff mobility * Joint design of short-course offerings at mutual benefit and interest for both Parties; * Student-added value activities such as seminars, lecturers, conferences, competitions...ect..

19	Lyon International Business School, France	Minute of Understanding (MOU)	2022	The exchange agreement confirms mutual interest of both Institutions to collaborate in the area of student & staff exchange on annual basis.
20	Brenda University of Applied Sciences	Minute of Understanding (MOU)	2022	<p>BUV and BUAS have identified and will further explore the following areas for potential bilateral collaboration and cooperation:</p> <ul style="list-style-type: none"> * Academic collaborations such as articulation, dual degrees in both undergraduate and post-graduate level. * Student/Staff mobility: including student exchange (credit-bearing), staff exchange / study tours/ International internships in Vietnam. * Joint research projects at mutual benefit and interest for both Parties. * Student-added value activities such as seminars, lectures, conferences, competitions, etcetera.
21	Woxsen University, India	Minute of Understanding (MOU)	2022	<p>BUV and WU have identified and will further explore the following areas for potential bilateral collaboration and cooperation:</p> <ul style="list-style-type: none"> * Student/Faculty mobility: including student/faculty exchange, study tours; * Student-added value activities such as seminars, lectures, conferences, etc * Research collaboration projects; * Short-course programme offerings;
22	Nottingham Trent University, United Kingdom	Minute of Understanding (MOU)	2022	<p>The MOU explores potential collaboration in the following areas:</p> <ul style="list-style-type: none"> * Development of progression routes from courses of BUV to courses leading to awards of NTU; * Exchange of staff and students; * Development of joint research projects; conferences and seminars; * Any other areas which may promote the academic interests of the Parties in research and/or teaching

3. DEVELOPMENT GOALS FOR THE DISCIPLINE

- Pursuant to Circular No. 02/2022/TT-BGDĐT dated 18 January 2022 on conditions for opening training disciplines at bachelor's degree;
- Pursuant to BUV's Policy on discipline opening and programme issuance which was enclosed with the Decision No. 0304/2023/BUV-QD;

The New Programme Committee at the British University Vietnam herewith proposes the Frame Principles to open the Economics discipline at the master's level for the 2023/2024 academic year. The details are as follows:

- Expected date to open the discipline: April 2023
- Expected date to start the training programme: September 2023

This programme aims to provide students with a strong basis for a future career in finance and economics related fields of work, where skills in both the areas are required. Students are engaged in analysing and evaluating the economic and financial aspects in management decision making. The program also equips students to be effective decision makers in business, commerce and public policy as well as competent in professional knowledge and skills in the Economics disciplines in preparation for entry into careers that involve the extensive study of these 2 areas.

- *Entry requirements:*

Academic Requirements:

Aged 17 or over

One of the following qualifications:

- Vietnamese High School Diploma and Pathway to Staffordshire University Programme
- Pass 2 subjects at Advanced GCE (A-Level)
- An access programme passed at the required QAA-recognised standard for entry to Higher Education
- An award of the European Baccalaureate Diploma, with at least 60 percent overall; English at 60 percent
- An award of the International Baccalaureate Diploma with a minimum of 24 points; English at 4 points

English Language Requirements:

One of the following:

A proficiency test within the last 2 years:

- IELTS (non UKVI): 6.0 overall with a minimum of 5.5 in each component; or
- TOEFL IBT: Listening: 17; Speaking: 20; Reading: 18; Writing: 17
- A proficiency test within the last 5 years:
- International Baccalaureate (taught in English) Pass in English B at Standard Level grade 5 or High Level grade 4; or
- IGCSE English: IGCSE English as a first or second language: Grade C; or
- Cambridge International English GCE O-Level/GCSE: English Language grade A - C

- Students recruitment plan:

We plan to start recruiting students for the Economics discipline from the 2023/2024 academic year with a recruitment target of 80 students.

Within the first 03 years, we plan to enroll students through entrance evaluation.

The recruitment targets are as follows:

- o 2023/2024 academic year: 80 students
- o 2024/2025 academic year: 90 students
- o 2025/2026 academic year: 100 students

The training scale in the next 05 to 10 years is expected to reach:

- o By 2028: 150 students
 - o By 2033: 200 students
- Training scale for the discipline in the next 5-10 years: 200 students

4. SOLUTIONS AND IMPLEMENTATION ROADMAP

4.1. Roadmap for the development of the detailed scheme and the training programmes for the discipline

No.	Tasks	PIC	Timeline
1	Step 1: Vice Chancellor establishes the New Programmes Committee. New Programmes Committee prioritise programme expansion plan.	Legal	
2	Step 2: Vice Chancellor requests Market Research for a designated new programme.	ACA	
3	Step 3: New Programmes Committee assesses research and makes a recommendation.	ACA	
4	Step 4: Vice Chancellor requests all relevant department to form Frame Principal document	Legal	
5	Step 4a: VC directs and organizes the formulation the Frame Principle of opening a program.	Legal	
6	Step 4b: Senate appraises and draw conclusion on the Frame Principle. Senate issues the Minutes of evaluation of the Frame Principle.	ACA	5 April 2023
7	Step 5: Final Frame Principle is sent to Vice-Chancellor's Executive for approval	ACA	6 April 2023
8	Step 6: Final Frame Principle is sent to University Council for approval	Legal	6 April 2023
9	Step 7: Vice Chancellor decides to form Programme Drafting Committee to form academic plan of programme.	Legal	7 April 2023
10	Step 7a: VC issues the decision to set up the Programme Drafting Committee	Legal	7 April 2023
11	Step 7b: Program drafting Committee builds up the new programme	ACA	7 April 2023
12	Step 8: Vice Chancellor decides to form External Programme Appraisal Committee to assess the plan and write minutes.	Legal	8 April 2023

No.	Tasks	PIC	Timeline
13	Step 8a: VC issues the decision to set up the External Programme Appraisal Committee. Member of External Program Appraisal Committee must not be members of Program drafting Committee, follow conditions as stated in article 18 of circular 17/2021/TT-BGDĐT.	Legal	8 April 2023
14	Step 8b: External Program Appraisal Committee appraises the new programme	ACA	13 April 2023
15	Step 8c: Senate endorses the new programme	ACA	20 April 2023
16	Step 9: Based on minute of the External Programme Appraisal Committee and endorsement Senate, Vice Chancellor makes final decision to open new programme.	Legal	20 April 2023
17	Step 9a: VC issues the decision to approve the new programme	Legal	20 April 2023
18	Step 9b: VC directs and organizes the formulation of the Detailed Scheme	Legal	20 April 2023
19	Step 10: Academic School forms Curriculum Design Group to work on Detailed Scheme	ACA	21 April 2023
20	Step 11: Final Detail Scheme is sent to Learning & Teaching Committee for approval	ACA	21 April 2023
21	Step 12: Learning and Teaching Committee submits the final Detail Scheme to Senate for appraisal	ACA	21 April 2023
22	Step 13a: Senate approves the discipline opening detail scheme.	ACA	28 April 2023
23	Step 13b: Based on Senate appraisal, Vice Chancellor signs final approval and announces decision to open new programme/discipline.	Legal	28 April 2023
24	Step 14: Legal department forms statement and documents to submit to MOET for reporting.	Legal	5 May 2023

4.2 Needs and investment plan for facilities, technology, and learning resources

Facilities are frequently reviewed by the Asset Management department to determine whether they meet the needs of all users. The Facilities Maintenance Policy and Procedure Manual summarises the proactive approach taken by the Asset Management department in reviewing and maintaining BUV facilities to ensure that the BUV community can learn, work, or teach in a safe and healthy environment that is fully operational. This approach allows for the development of action plans to address any facility-related concerns appropriately, and within identified timelines. An example of this is shown in Facilities Action Plan Example.

The Asset Management team work together with the Course Office to carry out space utilisation audits and monitor the conditions of the teaching facilities. These audits are presented to the University Council to ensure that effective use is being made of the resources that are available at BUV.

#	Action/Targets	How to measure/ Strategies	Status	% Completed
1	Regular update, amend and develop all operational activities procedures and policies to ensure program delivery quality standard; matching all academic requirements and operating regulations.	Build up the policies and procedures to show up proactive management	On-going	70
2	System for planning, maintenance, evaluation, and upgrading facilities and infrastructure such as teaching and learning facilities, laboratories, equipment and tools to meet training needs.	- Daily check list - Proactive maintenance - Periodic maintenance	On-going	-
3	Bookstore renovation	Working with contractor for the renovation of bookstore area as approved design	Completed	100
4	Protect and enhance BUV's key USP that is the Campus - it must continue to demonstrate the highest quality and professionalism that BUV stands for - 1. Landscape	Weekly review and report to be logged for compliance on quality of campus landscape maintenance	Completed weekly; On-going	100
5	Protect and enhance BUV's key USP that is the Campus - it must continue to demonstrate the highest quality and professionalism that BUV stands for - 2. Customer services	Training on customer service conducted yearly and ideation sessions on how to enhance customer service to be conducted on a monthly basis (report needs to be tabled on the outcome of ideation sessions)	Completed weekly; On-going	100

6	Protect and enhance BUV's key USP that is the Campus - it must continue to demonstrate the highest quality and professionalism that BUV stands for - 3. Cleaning services	Weekly inspection and report to be logged for compliance purpose on cleaning quality including the litter on campus grounds	Completed weekly; On-going	100
7	Protect and enhance BUV's key USP that is the Campus - it must continue to demonstrate the highest quality and professionalism that BUV stands for - 4. Security services	Weekly review and report to be logged for compliance purpose on security for full 6.5 Hectors of campus (no misuse of campus by outside parties e.g. dumping of rubbish, trucks speeding etc.)	Completed weekly; On-going	100
8	Protect and enhance BUV's key USP that is the Campus - it must continue to demonstrate the highest quality and professionalism that BUV stands for - 5. Technical services	Weekly review and report on performance and maintenance for compliance purposes on technical services	Completed weekly; On-going	100
9	Protect and enhance BUV's key USP that is the Campus - it must continue to demonstrate the highest quality and professionalism that BUV stands for - 6. Catering services	Weekly review and report on performance and maintenance for compliance purposes on Catering services	Completed weekly; On-going	100
10	Protect and enhance BUV's key USP that is the Campus - it must continue to demonstrate the highest quality and professionalism that BUV stands for - 7. Internal services	Weekly review and report on performance and maintenance for compliance purposes on internal services	Completed weekly; On-going	100

11	Complete detailed preparation planning across all AM management portfolios to ensure the smooth operation of student cohorts return to campus each semester - "Back to campus" activities.	<ul style="list-style-type: none"> - Securities team check in for student with all requirement as validation list, temperature, commitment... at all gates. - Cleaning clean all classrooms, set up the disinfectant bottle... - Technical team check all M&E system, fix all defect in classroom. - Campus service team supervise ADEN team to make sure every equipment run smoothly, support Medical staff to do the testing for staff and student... 	Completed weekly; On-going	100
12	Working with Evergreen to explore supervised accommodation service for students and develop written report to Vice-Chancellor's Office (VCO)	Working to develop more extra service for accommodation as laundry, cleaning, F&B delivery...	Completed weekly; On-going	100
13	Complete canteen expansion	Complete canteen expansion	In progress	40
14	Ensure preparation for phase 2 construction is completed on time as per Chief Operating Officer (COO)'s instructions	Ensure preparation for phase 2 construction is completed on time as per COO's instructions	In progress	20
15	Repaint facade - indoor	Ensure at all times there is consistency in the color and texture of surface, especially during maintenance. Ideal timing to start will be during Christmas	Not yet started	0

		Holiday, as there will be no classes.		
16	Office expansion: develop strategy and written report for the immediate and ongoing office expansion needs	Working with suppliers to expand workspace for Marketing & Communication's Team.	Completed	100

4.3 Needs and plan for the lecturing staff recruitment and training to meet the conditions for opening the training

BUV offers 100% international faculty. We will arrange 5 full-time lecturers with Doctor of Philosophy (PhD) degree. All lecturers will have to be in the same or close to the Computer Science field, and who must go through a careful interview and selection basing on their qualifications and relevant teaching experience. One Doctor of Philosophy (PhD) will take charge and administer the training curriculum and is held accountable for training quality.

BUV aims to recruit faculty with cross-cultural experiences from a diverse range of countries that have recognised educational systems, and who are able to provide students with a quality of education that meets or exceeds the standards set for teaching staff within BUV. To enable this, we have clear recruitment policies and processes, which are regularly reviewed considering evolving organisational and industry situations and are managed by the Human Resources Department.

The BUV academic leadership team is responsible for ensuring compliance with all teaching standards, as well as assessment modes and techniques. As BUV grows as an institution, the brand and reputational elements are a key driver for the next stage, so research as well as teaching will be prioritised in recruitment.

BUV observes the laws of the Vietnamese government and complies with all applicable laws and regulations of MOET and other Ministries. However, recruiting international teaching faculty within these constraints can be a challenge, especially regarding laws related to the number of years of experience that are legally required before a work permit for a foreign employee can be issued. The BUV Recruitment Policy is used to support BUV's recruitment and appointment of faculty members and support staff.

To enhance the attractiveness of academic and teaching staff positions for candidates both in the region, and internationally BUV have adjusted and formalised the range of positions available within the university to match the commonwealth system of A-E bands for academic levels as shown in BUV Academic & Teaching Classifications and Standards of faculty. These have been developed alongside reconfigured salary bands which were benchmarked across a range of commonwealth institutions to ensure competitiveness on a regional and international scale.

Once faculty are selected, and begin employment at BUV, they have an onboarding process led by HR, are given key training by the Dean and Head Academic Quality, and then begin their teaching role. Following feedback received during the survey of assessment policies and processes, several of the issues raised by faculty seemed to have their basis in the time between employment and the commencement of teaching activities.

To ensure the quality of the delivery of our programmes by faculty, BUV has a system in place to monitor and assess the quality of teaching, and therefore support the overall student experience. This system integrates student feedback on taught modules, peer observation groups, and formal teaching evaluations.

BUV supports all faculty to engage in Continuous Professional Development (CPD), whether through formal education, development and accreditation of their teaching practices, or skills development. All faculty are provided with an annual hour's allocation for CPD in their overall workload calculations and this can be used in a variety of ways based on identified training needs by either faculty or line managers.

Faculty members are encouraged and supported to gain accreditation for their teaching practices through obtaining Fellowships and Senior Fellowships with Advance HE. This is carried out in conjunction with SU. For example, five BUV faculty members have recently gained accreditation through Advance HE as either Fellows or Senior Fellows through our collaborative partnership with SU. A senior faculty member is an SU trained mentor for this scheme and is currently guiding several other faculty members through this process.

The above elements demonstrate BUV's commitment to supporting teaching staff in their professional development, but we also wish to be able to support faculty to continue to grow in their academic careers. Although several members of faculty have been promoted within BUV, the system for how this is carried out was previously not formalised

4.4 Plan for the assessment and appraisal of the training programme



Following our success in securing the internationally recognised QS 5-star quality rating in 2022, BUV has been quality reviewed during 17- 19 October 2022 before being granted with university-wide accreditation from the Higher Education Quality Assurance Agency (QAA) for period 12/12/2022 - 11/12/2017.

The British University Vietnam (BUV) has become the first university in Vietnam to be awarded global quality accreditation by QAA after successfully completing its International Quality Review (IQR). IQR is a rigorous process which benchmarks global higher education institutions against international quality assurance standards set out in Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

The review was performed between 17 and 19 October 2022 by three independent reviewers appointed by QAA who found that BUV had met all of the 10 ESG Standards and Guidelines. As part of the review, QAA identified the following areas of good practice at BUV:

- Significant employer engagement and connections with civic society is actively facilitated by all internal stakeholders, including students. It is fundamental to enabling BUV to deliver its mission.
- Opportunities and support for students in preparing for, identifying, and participating in work placements and internships, as formal components of programmes and as extracurricular activities, greatly enhances job readiness and employability.
- Certified and comprehensive Personal Development Programme of activities and modules that enhance students' broader knowledge and personal development, help to define graduate attributes.

BUV has now set new records in Vietnam and the international education sector including:

- The first and only university in Vietnam awarded QAA university-wide accreditation.
- Being one of only 22 universities outside the UK to achieve QAA university-wide accreditation.
- The first university the in ASEAN region to be granted QAA university-wide accreditation.

Sharing his appraisal and congratulations with BUV, Mr. Chris Bland, QAA's Head of Accreditation and Consultancy, said: 'It is with great pleasure we announce that the British University Vietnam has successfully completed our International Quality Review. It is to their credit that they become the first university in Vietnam to achieve this recognition. I hope this is the beginning of a deep relationship with BUV and that we can work together on other activities.'

BUV's IQR accreditation will be valid for five years and subject to a satisfactory mid-cycle review in 2025.

In addition, training programs will be reviewed, assessed, and revised regularly to make timely amendments and improvements. We will ensure that the assessment and appraisal of the training programme align with both the regulations of the Ministry of Education (as per Circular 17/2021/TT-BGDĐT) and the BUV Academic Monitoring Policy and Procedure (accredited by QAA on 08 February 2023). The academic monitoring process used in BUV includes Module Monitoring Reports (MMRs), Programme Monitoring Reports (PMRs), and Annual Monitoring Reports (AMRs), linked together with School level Academic Action Plans (AAPs). This process

operates in addition to the usual practices regarding the rapid resolution of any identified operational teaching matters so that the student experience is not impacted.

5. PLANS FOR PREVENTION AND HANDLING OF RISKS

5.1 Analysis, explanations, and forecasts of potential risks and preventive and remedial measures

- Potential Risk 1: There may be some elements of the program (regarding the structure and/ or content) that are not suitable with the needs of society because this is the first time we implement and recruit students for the training programme.
 - Preventive measures: before developing the training programme, we must consider the results of surveys of enterprises or organisations that employ labour, and conduct investigations into trends in the industry and job opportunities to know the demands for labor. From there, we must prepare facilities and teaching staff, and develop training programmes to ensure the quality of appropriate human resources. We must also update and modify the training program periodically to perfect the training program over time.

- Potential Risk 2: Information about the new discipline may not be widely disseminated to parents and students, so the target students do not consider registering, hence falling short of the recruitment target.
 - Preventive measures: actively promote the discipline and the recruitment scheme, and invest in human resources and finance to ensure information about the discipline reach the target audience. Examples of the information channels include the press, BUV's Fan Page, printed brochures, and direct consultation. It is necessary to carefully invest in the content of lectures, facilities, and human resources to inspire and interest current students so that they will convey information about the discipline to prospective students and others.

- Potential Risk 3: Possible challenges in secure jobs for students upon graduation.
 - Preventive measures: we develop high-quality training programmes and invest in qualified lecturers and appropriate modern facilities to ensure that our graduates meet the demands of prospective employers.

5.2 Analysis report on the risk handling solutions in case the training institution is suspended from running the training discipline

- Potential risks: BUV will be suspended from running the discipline if one of the conditions for opening the discipline is not satisfied as prescribed in Circular 02/2022/TT-BGDĐT, or failing to meet the recruitment target due to the challenges as described above.
- Preventive measures: the faculty and relevant departments must ensure the fulfillment of all provisions for opening a discipline and the compliance with the procedures as per Circular 02/2022/TT-BGDĐT.
- Corrective measures: The faculty in charge and relevant departments within BUV must discuss to identify the possible misalignments or challenges in recruiting students. Next, the faculty and relevant department must improve all aspects and thoroughly solve the causes of the suspension and report to the Ministry of Education and Training to ask for permission to continue enrolling students in accordance with current regulations.

RECIPIENTS

- Senior Leadership Team
- Learning and Teaching Committee
- Vice Chancellor Executive
- Senate
- Archived

SENDER



PROF. DR. RAYMOND DANIEL GORDON
VICE CHANCELLOR & PRESIDENT

APPENDIX II

BRITISH UNIVERSITY VIETNAM

SOCIALIST REPUBLIC OF VIETNAM

Independence - Freedom - Happiness

No: 1004D/2023/NQ-BUV

Hung Yen, 10 April 2023

RESOLUTION

**On Implementation of the Frame Principles of
Economics Discipline at Bachelor Level**

UNIVERSITY COUNCIL OF BRITISH UNIVERSITY VIETNAM

Pursuant to:

- *Law on Higher Education No. 08/2012/QH13 dated 18 June 2012 and amendments to the Law on Higher Education No. 34/2018/QH14 dated 19 November 2018;*
- *Circular 17/2021/TT-BGDDT of the Ministry of Education and Training dated 22 June 2021 providing for standards and formulation, appraisal and promulgation of training programmes of higher education;*
- *Circular 02/2022/TT-BGDDT of the Ministry of Education and Training dated 18 January 2022 regulating conditions and procedures for opening disciplines, as well as suspending operations of disciplines at the bachelor's, master's, and doctoral levels;*
- *Circular 09/2022/TT-BGDDDT of the Ministry of Education and Training dated 06 June 2022 on the statistical list of educational disciplines in higher education;*
- *Policy on Discipline Opening and Programme Issuance attached to the Decision of 0304/2023/QD-BUV of the Vice Chancellor & President of British University Vietnam dated 03 April 2023;*
- *Meeting Minutes of the University Council of British University Vietnam No. 002/2023/BB-HDT dated 10 April 2023.*

DECIDES

Article 1. Approving the Implementation of the Frame Principles of Economics Discipline at Bachelor Level having its discipline code of 7310101.

Article 2. This Resolution takes effect from its signing date.

Article 3. Vice Chancellor & President, the Senate and other relevant departments and individuals are responsible for implementing this Resolution.

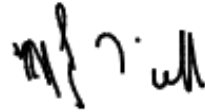
Recipients:

-Per Article 3;

-Uni Council (for reporting purposes);

-Archived.

ON BEHALF OF THE UNIVERSITY COUNCIL OF
BRITISH UNIVERSITY VIETNAM



PROF. MICHAEL DRISCOLL

CHAIRMAN

APPENDIX III

Form No.1, Appendix 3, Circular 02/2022/TT-BGDĐT

No. (1)	Full name, DOB (2)	Passport number/ID Card (3)	Academic title, Awarding year (4)	Academic qualifications, Awarding country, Awarding year (5)	Major (Highest qualification) (6)	(Full time contract with BUV) Recruitment		Insurance number (9)	Academic experiences (10)	Public research		Signature (13)
						Recruitment date (7)	Labour contract (8)			MOET (11)	Institution (12)	
1	Shashi Kant Prasad Chaudhary	11756286	Dr., 2017	Dr., Vietnam, 2017	International Trade	01/09/2014	x	0128175497	12	0	11	
2	Jason Alexander MacVaugh	563376605	Assoc. Professor, 2014	Assoc. Professor, 2014; Dr., UK, 2009	Knowledge Management	30/01/2023	x	0132338097	19	0	13	
3	Maren Viol	C4KPGPL3L	Dr., 2016	Dr., UK, 2016	Tourism and Events	30/01/2023	x	0128175579	12	0	3	
4	Christopher David Jeffery	508469336	Master, 2017	Master, Vietnam, 2017	Business Administration	24/09/2010	x	0128175537	25	0	0	
5	Edward Anthony Summers	128776843	Master, 2016	Master, UK, 2016	Business Administration	19/12/2011	x	0128175458	14	0	0	
6	Joao Manuel Ferrao Fialho	CC762287	Dr, 2012	Dr., Portugal, 2012	Mathematics; Differential Equations, Functional Analysis	01/09/2017	x	0128977592	11	0	14	
7	Michael George Perkins	536578269	Dr, 2013	Dr., UK, 2013	Management	03/09/2013	x	0128175566	10	0	10	
8	Michael Alan Lomax	547709829	Master, 2013	Master, UK, 2013	Mass Communications Management	13/04/2020	x	0131763415	4	0	0	
9	Jonathan Alexander Neale, 12/07/1960	AG621356	Master, 1996	Master, Scotland, 1996	Business Administration	01/09/2013	x	0128175526	21	0	0	
10	Lai Chong Yee, 25/07/1976	A40214104	Master, 2002	Master, Malaysia, 2002	Financial Economics	01/03/2016	x	0128175567	11	0	1	
11	Jed Clarke, 08/06/1993	518117629	Master, 2021	Master, UK, 2021	Business Administration	01/03/2022	x	0131927236	1	0	0	
12	Lamet Treasure Mahlatsi Maredi, 19/03/1986	M00229076	Master, 2015	Master, South Africa, 2015	Financial Management	30/01/2023	x	7940087095	13	0	0	
13	Adrian Wee Tiong Weng, 27/04/1968	A54886757	Dr, 2016	Dr., Australia, 2016	Business Management	01/04/2020	x	7937473045	24	0	5	

14	Jyotsna Ghildiyal Bijalwan, 18/11/1983	Z3636990	Dr, 2013	Dr., India, 2013	Management/ Business Management	13/05/2022	x	0132059096	15	0	8	
15	Aiman Ameen Abousher, 20/02/1975	N6442431	Master, 1999	Master, Australia, 1999	Finance	14/09/2015	x	0128175563	18	0	4	
16	Sandra Natalie Schneiderman, 30/05/1959	PA8957790	Master, 2013	Master, Australia, 2013	Education	28/11/2020	x	0131844881	18	0	0	
17	Jamie Lee McGaughran, 28/02/1973	567877876	Master, 2015	Master, Columbia, Missouri, 2015	Strategic Leadership & Communication	01/11/2022	x	0132036478	7	0	0	
18	Don Hickerson, 17/08/1968	AC785827	Master, 2013	Master, Canada, 2013	Sociology	01/09/2020	x	#N/A	10	0	0	
19	Ajaykumar Pillai, 22/12/1968	Z2168910	Master, 2005	Master, UK, 2005	Business Administration	07/09/2020	x	0131817573	17	0	7	
20	Francesco Meca, 22/03/1980	YB9159516	Master, 2015	Master, Italy, 2015	Business Administration/ Project and Information Management	03/06/2019	x	0131608004	6	0	0	
21	Hamza Mutaher Abdu Al-Shameri, 18/07/1991	08404124	Dr, 2022	Dr., India, 2022	Computer Science (Computer Network)	11/04/2022	x	0132048533	6	0	4	
22	Jose Luis Rojas Roman, 19/10/1973	G41912981	Dr, 2011	Dr., UK, 2011	Computer Science	27/07/2022	x	0132231996	17	0	0	
23	Sven Pfrommer, 11/10/1965	CK4KC8V6 VX	Master, 1994	Master, German, 1994	Graphic Design	17/10/2022	x	0132279110	11	0	25	
24	Richard Paul Child, 14/08/1973	548040555	Master, 1999	Master, UK, 1999	Visual Communication	04/09/2018	x	0131284791	20	0	3	
25	Pham Thuy Duong, 06/05/1996	001196011846	Master, 2019	Master, UK, 2019	Visual Communication Design	03/01/2023	x	0123782942	0	0	0	
26	Olivier Georges Yves Marie de Chauillac, 10/08/1986	17FV08202	Master, 2020	Master, USA, 2020	Hospitality and Tourism Management	01/03/2023	x	0132353858	8	0	0	
27	Konstantinos Tsontos, 08/04/1964	AT5697698	Master, 1989	Master, UK, 1989	Operational Research	01/09/2017	x	0128977835	8	0	0	
28	Joseph Anthony Schurley, 24/07/1950	548616411	Master, 1983	Master, USA, 1983	Hotel Administration	09/09/2015	x	0128175546	22	0	0	

29	David René Joffre Vanhove, 11/10/1976	13AB79405	Master, 2020	Master, Australia, 2020	Business Administration	03/01/2022	x	0128168859	1	0	0	
30	Darius Postma, 11/10/1974	510623204	Master, 2014	Master, UK, 2014	Business Administration/ Strategic Management and Leadership	11/04/2020	x	0131763413	5	0	0	
31	Patricia Lee Glancy, 24/08/1977	556795701	Master, 2000	Master, UK, 2000	Historical Studies	01/09/2020	x	0131817595	4	0	0	
32	Prabu Mohan, 04/05/1981	Z3084544	Dr, 2019	Dr., Spain, 2019	Mathematics	19/01/2012	x	0128175465	19	0	0	
33	John Mark Patrick Harris, 17/03/1962	554135487	Master, 1990	Master, UK, 1990	Economics	01/11/2015	x	0128175479	24	0	0	
34	Mohamed Reda Harchaoui, 16/06/1992	VI7514536	Master, 2016	Master, Marocco, 2016	Finance and Economics	20/12/2021	x	131863835	2	0	0	

Form No.2, Appendix 3, Circular 02/2022/TT-BGDĐT

No (1)	Full Name (2)	Modules (3)	Semester and Year (4)	Number of credits				Leading lecturer, tenure lecturer, etc. (9)
				Compulsory		Optional		
				On Camp us (5)	Onli ne (6)	On Camp us (5)	Onlin e (6)	
1	Shashi Kant Prasad Chaudhary	International Trade and Multinational Business	Year 2 Semester 2	3				Leading lecturer
		Introduction to Business	Year 1 Semester 1	3				
2	Jason Alexander MacVaugh	Work experience	Year 3 Semester 1&2	3				
3	Maren Viol	Work experience	Year 3 Semester 1&2	3				
4	Christopher David Jeffery	Work experience	Year 3 Semester 1&2	3				
5	Edward Anthony Summers	International Marketing	Year 3 Semester 2	3				
6	Edward Anthony Summers	Introduction to Business	Year 1 Semester 1	3				
7	Joao Manuel Ferrao Fialho	Quantitative Analysis	Year 1 Semester 1	3				
		Research Methods	Year 2 Semester 2	3				
8	Michael George Perkins	Investment Management	Year 2 Semester 2	3				
		International Finance	Year 3 Semester 1	3				
9	Michael Alan Lomax	Project	Year 3 Semester 2	3				

		Business Communication	Year 1 Semester 1	3				
10	Michael George Perkins	Credit management	Year 2 Semester 2	3				
		Advanced Corporate Finance	Year 2 Semester 2	3				
		International Finance	Year 3 Semester 1	3				
11	Lai Chong Yee	Modelling and Estimation	Year 2 Semester 2	3				
		Applied Econometrics	Year 3 Semester 1	3				
		Quantitative methods for Business	Year 1 Semester 2	3				
12	Lai Chong Yee	Introduction to Accounting	Year 1 Semester 2	3				
		Financials Markets	Year 2 Semester 1	3				
13	Jonathan Alexander Neale	Modelling and Estimation	Year 2 Semester 2	3				
		Applied Econometrics	Year 3 Semester 1	3				
14	Lai Chong Yee	Futures and Options	Year 3 Semester 2	3				
		Corporate Finance	Year 2 Semester 1	3				
15	Jed Clarke	International Trade and Multinational Business	Year 2 Semester 2	3				
		Introduction to Accounting	Year 1 Semester 1	3				
16	Lamet Treasure Mahlatsi Maredi	Corporate Finance	Year 2 Semester 1	3				
		Futures and Options	Year 3 Semester 2	3				
17	Adrian Wee Tiong Weng	Introduction to Management	Year 1 Semester 2	3				
18	Adrian Wee Tiong Weng	Credit management	Year 2 Semester 2	3				

		Risk management	Year 3 Semester 1	3				
19	Michael Alan Lomax	International Marketing	Year 3 Semester 2	3				
20	Jyotsna Ghildiyal Bijalwan	Risk management	Year 3 Semester 1	3				
		Introduction to Management	Year 1 Semester 2	3				
21	Aiman Ameen Abousher	Financials Markets	Year 2 Semester 1	3				
		Advanced Corporate Finance	Year 2 Semester 2	3				
22	Sandra Natalie Schneiderman	Professional Development (Enterprise, Entrepreneurship & Citizenship)	Year 2 Semester 1	3				
23	Jamie Lee McGaughran	Work experience	Year 3 Semester 1&2	3				
24	Don Hickerson	Research Methods	Year 2 Semester 2	3				
25	Ajaykumar Pillai	Investment Management	Year 2 Semester 2	3				
		Business Skills	Year 1 Semester 1	3				
26	Francesco Meca	Business Skills	Year 1 Semester 1	3				
		Introduction to Finance	Year 1 Semester 2	3				
27	Jamie Lee McGaughran	Work experience	Year 3 Semester 1&2	3				
28	Hamza Mutaher Abdu Al_Shameri	IT for Global Business	Year 1 Semester 1	3				
29	Jose Luis Rojas Roman	IT for Global Business	Year 1 Semester 1	3				
30	Sandra Natalie Schneiderman	Professional Development (Enterprise,	Year 2 Semester 1	3				

		Entrepreneurship & Citizenship)						
31	Don Hickerson	Work experience	Year 3 Semester 1&2	3				
32	Don Hickerson	Project	Year 3 Semester 2	3				
33	Hamza Mutaher Abdu Al_Shameri	Management Information Systems	Year 2 Semester 1	3				
34	Aiman Ameen Abousher	International Trade and Multinational Business	Year 2 Semester 2	3				
35	Olivier Georges Yves Marie de Chauliac	Strategic Human Resource Management	Year 3 Semester 2	3				
36	Hamza Mutaher Abdu Al_Shameri	Management Information Systems	Year 2 Semester 1	3				
37	Konstantinos Tsontos	Quantitative methods for Business	Year 1 Semester 2	3				
38	Joseph Anthony Schurley	Strategic Human Resource Management	Year 3 Semester 2	3				
39	David René Joffre Vanhove	Organisational Behavior	Year 2 Semester 1	3				
40	Darius Postma	Organisational Behavior	Year 2 Semester 1	3				
		International Economic Theory and Policy	Year 3 Semester 2	3				
41	Patricia Lee Glancy	Professional Development (Enterprise, Entrepreneurship & Citizenship)	Year 2 Semester 1	3				
42	Prabu Mohan	Quantitative Analysis	Year 1 Semester 1	3				
43	John Mark Patrick Harris	Economics	Year 1 Semester 1	3				

		Microeconomics	Year 1 Semester 2	3				
		Macroeconomics	Year 2 Semester 1	3				
44	Patricia Lee Glancy	English for Higher Education	Year 1 Semester 1	3				
		English for Academic Purpose	Year 1 Semester 1	3				
45	Sandra Natalie Schneiderman	English for Higher Education	Year 1 Semester 1	3				
		English for Academic Purpose	Year 1 Semester 1	3				
46	John Mark Patrick Harris	Macroeconomics	Year 2 Semester 1	3				
		Microeconomics	Year 1 Semester 2	3				
		Introduction to Finance	Year 1 Semester 2	3				
47	Mohamed Reda Harchaoui	Economics	Year 1 Semester 1	3				
		International Economic Theory and Policy	Year 3 Semester 2	3				
48	Hamza Mutaher Abdu Al_Shameri	Employability, IT and Reasoning techniques	Year 1 Semester 2	3				
49	Francesco Meca	Employability, IT and Reasoning techniques	Year 1 Semester 2	3				

Form No.3, Appendix 3, Circular 02/2022/TT-BGDĐT

No.	Full name, DOB, position	Education, year	Discipline	Note
1	Jason MacVaugh, 16 February 1978	PhD University of Gloucestershire, 2009	Knowledge Management	Dean
2	Jonathan Alexander Neale	Master, Heriot-Watt University, Scotland, 1996	MBA	Discipline Lead
3	Tony Summers, 14 July 1954, University Registrar	Master, Kingston University - London, 2005	MBA	University Registrar
4	Tran Duc Trung, 25 February 1989, Deputy University Registrar	Master, Royal Melbourne Institute of Technology, 2019	MBA	Deputy University Registrar
5	Hoang Phuong Yen, 12 September, 1988	Master, University of Adelaide, 2018	International Trade & Development	Course Office Manager

No.	Code	Research Topic Level	Research Topic	Lead Author	Reviewed by	Received Date	Review Results, Date	Names of contributing authors	Remarks
1	HECA-01/2021-AJAY	Institutional	An Empirical Study on Teacher's Attitudes towards Curriculum Innovation in Vietnam	Ajay Kumar Pillai	BUV Human Ethics Subcommittee	4/1/2021	Satisfactory, 10/1/2021	N/a	
2	HECA-08/2021-SHASHI	Institutional	Utilisation of remittance income in Nepal	Dr. Shashi Kant Prasad Chaudhary	BUV Human Ethics Subcommittee	2/8/2021	Satisfactory, 8/8/2021	N/a	
3	HECA-03/2021-MIKE	Institutional	The impact of training on the identification of the use of Online Paraphrasing Tools	Dr Mike Perkins	BUV Human Ethics Subcommittee	24/08/2021	Satisfactory, 1/9/2021	N/a	
4	HECA-01/2022-MAREN	Institutional	Ethical consumers post-COVID-19: Sustainable travel behaviours of young	Dr. Maren Viol	BUV Human Ethics Subcommittee	12/10/2022	Satisfactory, 2/11/2021	N/a	

			Vietnamese tourists						
5	HECA-02/2022-MAREN	Institutional	Decolonising the tourism curriculum - experiences of faculty in Asian transnational education contexts	Dr. Maren Viol	<i>BUV Human Ethics Subcommittee</i>	12/10/2022	Satisfactory, 2/11/2021	N/a	
6	HECA-04/2023-MIKE	Institutional	Robustness testing of assessments to GPT4	Dr Mike Perkins	<i>BUV Human Ethics Subcommittee</i>	28/03/2023	Satisfactory, 5/4/2023	N/a	

No.	Publications	Remarks
1	Chaudhary, S. K., and Nguyen, K.V. (2018), ' <i>An Empirical Analysis of Export-led Growth of Vietnam: Trade in Value Added (TiVA) Approach</i> ', <i>The Journal of Business and Management</i> , 5(1), p.1-15.	
2	J. Fialho (2018), ' <i>A biomechanical model for the idiopathic scoliosis using spinal traction devices</i> ', <i>Journal of Physics: Conference Series</i> , 1141, p.012022.	
3	Kais Mejri, Jason Alexander MacVaugh, Dimitrios Tsagdis (2018), ' <i>Knowledge configurations of small and medium-sized knowledge-intensive firms in a developing economy: A knowledge-based view of business-to-business internationalization</i> ', <i>Industrial Marketing Management</i> , 71, p.160-170.	
4	Perkins, M., Gezgin, U. B., & Roe, J. (2018), ' <i>Understanding the Relationship between Language Ability and Plagiarism in Non-native English Speaking Business Students</i> ', <i>Journal of Academic Ethics</i> , 16(4), p.317-328.	
5	Viol, M., Todd, L., Theodoraki, E. & Anastasiadou, C. (2018), ' <i>The role of iconic-historic commemorative events in event tourism: Insights from the 20th and 25th anniversaries of the fall of the Berlin Wall</i> ', <i>Tourism Management</i> , 69, p.246-262.	
6	Yam, L., Raybold, M, Gordon, R.D. (2018), ' <i>What Makes People Stay? An investigation of job embeddedness construct, and the exploration of the effects of on-the-job and off-the-job embeddedness on voluntary turnover in the hospitality industry</i> ', <i>Journal of Human Resources in Hospitality and Tourism</i> , 17(4).	
7	Chaudhary, S. K., and Nguyen, K.V. (2019), ' <i>Assessing Position of Vietnam in Global Value Chain (Vietnamese)</i> ', <i>VNU Journal of Humanities and Social Sciences</i> , 5(3), p.292-313.	
8	Chaudhary, S. K., and Nguyen, K.V. (2019), ' <i>Re-assessing the export competitiveness of Vietnam</i> ', <i>VNU Journal of Social Sciences and Humanities</i> , 5(5), p.539-549.	
9	Chaudhary, S. K., and Pandit, K. R. (2019), ' <i>Price Elasticity of Sectoral Lending in Nepal</i> ', <i>NRB Economic Review</i> , 31(2), p.1-24.	
10	F. Minhós, J. Fialho (Eds.), (2019), <i>New Trends in Differential and Difference Equations and Applications</i> , MDPI, Switzerland.	
11	Fialho, J and Minhós, F. (2019), ' <i>Existence results for functional first order coupled systems and applications</i> ', <i>Mathematical Methods in the Applied Sciences</i> , 42(7), p.2398-2403.	
12	Fialho, J and Minhós, F. (2019), ' <i>First order coupled systems with functional and periodic boundary conditions: existence results and application to SIRS models</i> ', <i>Axioms</i> , 8(1), p.23.	
13	J. Fialho, F. Minhós (2019), ' <i>Existence results for functional first-order coupled systems and applications</i> ', <i>Mathematical Methods in the Applied Sciences</i> , 42(7), p.2398-2403.	
14	Jyotsna Bijalwan (2019), ' <i>Corporate Governance System in India</i> ', <i>International Journal of Management</i> , 3(2), p.260-269.	

15	Jyotsna Ghildiyal, RC Joshi (2019), <i>Business Ethics and Corporate Governance</i> , McGraw Hill, US.	
16	Nguyen, K. V., and Chaudhary, S. K. (2019), [in] Nguyen, T., and Nguyen. N. (Eds.), <i>Vietnam National Economic Report 2019: On the Doorstep to the Digital Economy</i> (Chapter 4), Vietnam Institute for Economic and Policy Research, Hanoi.	
17	Nguyen, K.V., Phan, H.T.T., and Chaudhary, S. K. (2019), 'Small and Medium Enterprises' Participations in Global Value Chains (Vietnamese)', <i>Review of the World Economic and Political Issues</i> , 4(276), p.23-35.	
18	Perkins, Gezgin & Gordon (2019), 'Plagiarism in higher education: classification, causes and controls', <i>Pan-Pacific Management Science</i> , 2, p.3-21.	
19	Pillai, A.K (2019), 'Modelling Cost Allocation Adoption as an Endogenous Consequences of Senior Executives' Characteristics', <i>Journal of Business, Sciences and Technology</i> , 2(1), p.1-47.	
20	Roe, J., Perkins, M. (2019), 'Learner Autonomy and English Learning in the Vietnamese HE Context: A Literature Review', <i>Asian Journal of University Education</i> , 16(1), p.13-21.	
21	F. Minhos, J. Fialho, R. Souza, (2020), 'Periodic n dimensional first order coupled systems and periodic schizophrenia phenomena', <i>Journal of Mathematical Analysis and Applications</i> , 492(2), p.124482.	
22	Malhotra R.K., Jyotsna Bijalwan, Thapliyal B.L. (2020), 'Corporate governance in emerging economies : An Indian Insight', <i>International Journal of Management</i> , 11(9), p.663-670.	
23	Pang, J.M. and Wee, A.T.W. (2020), 'Corporate Social Responsibility Reporting in Locally Owned Hotel Chains in Singapore', <i>ASEAN Journal on Hospitality and Tourism</i> , 18(1), p.43-57.	
24	Perkins, M., Gezgin, U., & Roe, J. (2020), 'Reducing plagiarism through academic misconduct education', <i>International Journal For Educational Integrity</i> , 16(3).	
25	Perkins, M., Gezgin, U.B, Gordon, R. (2020), 'Plagiarism in higher education: classification, causes and controls', <i>PanPacific Management Science</i> , 2.	
26	Perkins, M., Roe, J., Gordon, R (2020), 'Management Versus Measurement: A Renewed Categorization of Performance Terminology', <i>Pan Pacific Management Science</i> , 3, p.3-16.	
27	Pillai, A.K., Tan, K.C., and Teo, Z.X.H (2020), 'Key Influences of Cost Allocation Adoption: The Role of Managerial Characteristics, Personality Traits, Behavioural Intention and Decision Styles', <i>Journal of Business, Sciences and Technology</i> , 2(1), p.10-47.	
28	Benjamin Chiao, Jason MacVaugh (2021), 'Open innovation and organizational features: An experimental investigation', <i>European Management Journal</i> , 39(3), p.376-389.	
29	Chaudhary, S. K. (2021), 'Assessing Participation and Position of Vietnam in Global Value Chains', <i>Journal of Nepalese Business Studies</i> , 14(1), p.29-39.	
30	Dana Alshwayat, Jason Alexander MacVaugh, Hammad Akbar (2021), 'A multi-level perspective on trust, collaboration and knowledge sharing	

	<i>cultures in a highly formalized organization'</i> , <i>Journal of Knowledge Management</i> , 25(9), p.2220-2244.	
31	F. Minhós, J. Fialho (Eds.), (2021), <i>Nonlinear Differential Equations and Dynamical Systems: Theory and Applications</i> , MDPI, Switzerland.	
32	F. Minhos, J. Fialho, R. Souza (2021), 'On coupled systems of Lidstone-type boundary value problems', <i>Mathematical Modelling and Analysis</i> , 26(3), p.358-371.	
33	J Fialho (2021), 'Key performance indicators and individual prediction models for penalty kicks', [in] <i>Recent Developments in Mathematical, Statistical and Computational Sciences</i> , 18-23 August, 2019, 137-146.	
34	Viol, M. & Southall, C. (2021), 'A conceptual framework for understanding Western-centrism in transnational education in tourism', <i>Current Issues in Tourism</i> , 26(1), p.1-5.	
35	Chaudhary, S. K. (2022), [in] Dharmi, N., Shrestha, D., Chhetry, T., Gurung, S., Thapa, A.(Eds.), <i>Transformation of Higher Education in Nepal: Dimensions, Dynamics and Determinants</i> (p.119-124), Pokhara University, Nepal.	
36	Chaudhary, S. K. (2022), 'Remittances, Economic Growth and Investment Nexus: Evidence from Nepal', <i>NRB Economic Review</i> , 34(1), p.1-23.	
37	J. Fialho, F. Minhos (Eds.), (2022), <i>Advances in Nonlinear Boundary Value Problems: Theory and Applications</i> , MDPI, Switzerland.	
38	Jasper Roe & Mike Perkins (2022), 'What are Automated Paraphrasing Tools and how do we address them? A review of a growing threat to academic integrity', <i>International Journal for Educational Integrity</i> , 18(1).	
39	Jyotsna G Bijalwan, Anchit Bijalwan (2022), 'Multivariate Analysis for Overcoming Complexities of Corporate Governance and Managerial Dilemma using Data Mining Technique', <i>Discrete Dynamics in Nature and Society</i> , 2022, p.1-12.	
40	Nguyen, B. L. and Viol, M. (2022), [in] Stylidis, D., Kim, S., & Kim, J., (editors), <i>Tourism Marketing in Southeast and East Asia</i> (p.22-38), CABI.	
41	Nguyen, K. V., and Chaudhary, S. K. (2022), 'Position of Vietnam in global value chains: an empirical approach', <i>International Journal of Value Chain Management</i> , 13(4), p.383-394.	
42	Pillai, A.K. (2022), 'Using Decomposed Theory of Planned Behavior (DTPB) to examine educators' behvioual intention towards TPACK', [in] <i>Redesigning Pedagogy International Conference 2022: Transforming education & strengthening society: Conference proceedings</i> , Singapore, 30 May - 1 June, 2022, National Institute of Education, Nanyang Technological University (NIE NTU), Singapore.	
43	Pillai, A.K., Pereira, M., Luong K.H., & Roe J. (2022) (2022), 'Curriculum Innovation in Vietnam: A Study on Teachers' Attitudes Using the Dimensions of ACB (Affective, Cognitive and Behavioral) Model', <i>Vietnam Journal of Education</i> , 6(1), p.20-30.	
44	Pillai, A.K., Pereira, M., Luong K.H., & Roe J. (2022) (2022), 'Implementing Curriculum Innovation in Vietnam: Exploring Four Teachers Narrative Experiences', <i>Journal of Business, Sciences and Technology</i> , 4(1), p.7-21.	

45	Fialho, J. and Diep, N. (2023), 'Brand equity and purchase intention for ecommerce platforms in Vietnam', [in] <i>Proceedings of the International Conference on Application of AI and Statistical Decision Making for the Business World, ICASDMBW 2022</i> , Rukmini Devi Institute of Advanced Studies, 16-17 December 2022, EAI, Delhi.	
46	Mike Perkins (2023), 'Academic Integrity considerations of AI Large Language Models in the post-pandemic era: ChatGPT and beyond', <i>Journal of University Teaching & Learning Practice</i> , 20(2).	
47	Jyotsna G. Bijalwan, Malhotra R.K (), 'Corporate Governance Policies and Practices: With Special Reference to Private Sector Firms in Ethiopia', Shodh Sarita.	

Order	Category	Number	Total Area (m²)	Module	Usage Schedule (Semester, Academic year)	Remarks
1	Lecture Halls, classrooms, discussion rooms multimedia rooms, multi-purposes rooms, faculty rooms	45	2651	All modules	All semesters	
1.1	Learning Theatres, Halls, Classrooms with over 200 pax	1	464			
1.2	Classrooms with 100-200 pax	1	370			
1.3	Classrooms with 50-100 pax	1	84			
1.4	Classroom with less than 50 pax	19	966			
1.5	Multipurpose Rooms	6	608			
1.6	Discussion Rooms	15	159			
1.7	Faculty Rooms	2	258,5			
2	Libraries/Learning Resources Centres	1	1230,1			
3	Research centre, laboratories, practical rooms	12	1121			

No	Name of books or journals (published in the last 5 years)	Name of author	Publishing House, Year, Country	Number of publications	Module that uses the books or journal	Module Code	Time of use (semester, year)
1	Pathways: Reading, Writing, and Critical Thinking	Laurie Blass (Author), Mari Vargo (Author)	Heinle ELT, 2018	53	English for Higher Education	BUVBS101	Y1S1
2	Business Communication Essentials: Fundamental Skills for the Mobile-Digital-Social Workplace (What's New in Business Communication), 8E	Bovee, C & Thill, J	Pearson, 2018	53	Business Communication	BUVBS227	Y1S1A
3	Economics, Global Edition 8E	Hubbard, Glenn/O'Brien, Anthony Patrick	Pearson, 2022	67	Economics	BUVBS161	Y1S1B
4	Statistical Techniques in Business & Economics 18E	Douglas Lind and William Marchal and Samuel Wathen	McGraw-Hill, 2020	67	Quantitative Analysis	BUVBS162	Y1S1B
5	Business Essentials, Global edition 13E	Ebert & Griffin	Pearson - US, 2017	67	Introduction to Business	BUVBS122	Y1S1B

	Digital Planet: Tomorrow's	George			IT for		
6	Technology and You 10e - Complete PNIE	Beekman, Ben Beekman	Pearson, 2013	67	Global Business	BUVBS123	Y1S1B
7	The Study Skills Handbook (Macmillan Study Skills) 5th ed	Stella Cottrell	Bloomsbury Publishing, 2019	67	Business Skills	BUVBS121A	Y1S1B
8	Academic Writing: A Handbook for International Students 5E	Stephen, B	Taylor and Francis, 2017	67	English for Academic Purpose	BUVEAP101	Y1S1B
9	Frank Woods's Business Accounting, 15E	Frank Woods	Pearson, 2021	32	Introduction to Accounting	ACCT40288	Y1S2A
10	Contemporary Management, 12E	Gareth R Jones, Jennifer M George	McGraw-Hill Education, 2021	32	Introduction to Management	ACCT40290	Y1S2A
11	Economics 13E global	MICHAEL PARKIN	Pearson, 2019	32	Microeconomics	ACCT40292	Y1S2A
12	Statistics for Business and Economics, 9E	Paul Newbold	Pearson, 2012	32	Quantitative methods for Business	ACCT40294	Y1S2A
13	Business Finance: Theory & Practice, 11E	Eddie McLaney	Pearson, 2017	32	Introduction to Finance	ACCT40289	Y1S2A

					Employability,		
14	Critical Thinking Skills Developing Effective Analysis and Argument 3E	Stella Cottrell	Macmillan, 2017	30	IT and Reasoning techniques	ENTP4003 4	Y1S2B
15	Work in the 21st Century: An Introduction to Industrial and Organizational Psychology 6E	Conte, Jeffrey M./Landy, Frank J.	Wiley, 2018	27	Organizational Behavior	ACCT402 93	Y2S1A
16	Economics	Michael Parkin	Pearson, 2020	27	Macroeconomics	ECON402 22	Y2S1A
17	Information Technology For Management NJ: John Wiley & Sons 10th International student edition	Efraim Turban, Dorothy E. Leidner, Ephraim R. McLean, James C. Wetherbe	Wiley, 2015	27	Management Information Systems	ACCT402 91	Y2S1A
18	Principles of Corporate Finance, 14E	Richard A. Brealey	McGraw- Hill International Edition, 2022	27	Corporate Finance	ACCT505 36	Y2S1A
19	Finance and Financial Markets, 4E	Keith Pilbeam	Bloomsbury Publishing, 2018	27	Financials Markets	ACCT505 23	Y2S1A
20	Skills for success: Personal development and employability, 4E	Stella Cottrell	Macmillan, 2021	11	Professional Development	ENTP5007 5	Y2S1B

					ment (Enterpr ise, Entrepr neursh ip & Citizens hip)		
21	International Economics, 7th Edition	James Gerber	San Diego State University, 2017	11	Internati onal Trade and Multinat ional Busines s	ACCT505 24	Y2S2A
22	Mathematics for Economics and Business (9th Edition)	Ian Jacques	Pearson, 2018	11	Modelli ng and Estimati on	ACCT505 26	Y2S2A
23	"Credit Management", 6th edition	Glen Bullivant (FICM)	Gower (Routledge), 2010	10	Credit manage ment	ACCT505 22	Y2S2A
24	Investment Analysis and Portfolio Management 11th Edition	Frank K. Reilly (Author), Keith C. Brown (Author), Sanford J. Leeds (Author)	Cengage Learning, 2018	10	Investm ent Manage ment	ACCT505 25	Y2S2A
25	Corporate Financial Management 6th Edition	Glen Arnold / Deborah Lewis (Author)	Pearson, 2019	10	Advanc ed Corpora te Finance	ACCT505 37	Y2S2A

		Adrian Thornhill /			Research		
26	Research Methods for Business Students, 8th Edition	Philip Lewis / Mark N. K. Saunders (Author)	Pearson, 2019	10	h Method s	ACCT505 27	Y2S2B
27	CTE International Financial Management Mindtap+ Supplement 13E	Jeff Madura (Author)	Thompson, 0	8	Internati onal Finance	ACCT603 04	Y3S1
28	Research Methods for Business Students, 8th Edition	Adrian Thornhill / Philip Lewis / Mark N. K. Saunders (Author)	Pearson, 2019	8	Project	XXSE6010 8	Y3S1
29	CTE Introductory Econometrics with Mindtap+ Supplement 6E	Jeffrey M. Wooldridge	Cengage Learning; 2015	8	Applied Econom etrics	ACCT603 01	Y3S1
30	Corporate Finance, 7th edition	Denzil Watson (Author)	FT Prentice Hall, 2016	8	Risk manage ment	ECON600 82	Y3S1
31	Research Methods for Business Students, 8th Edition	Adrian Thornhill / Philip Lewis / Mark N. K. Saunders (Author)	Pearson, 2019	6	Work experie nce 1	ORGB602 92	Y3S1
32	Options, Futures, and Other Derivatives, Global Edition 9th edition	HULL (Author)	Pearson, 2014	6	Futures and Options	ACCT603 02	Y3S2
33	International Economics: Theory and Policy 11th edition	Paul R. Krugman; Maurice	Pearson, 2018	6	Internati onal Econom ic	ACCT603 03	Y3S2

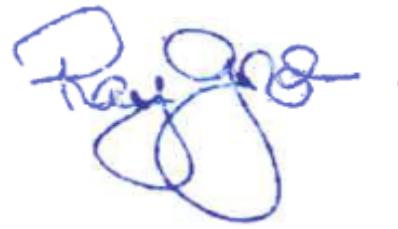
		Obstfeld; Marc Melitz			Theory and Policy		
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List of Equipment					Module	Time of use	No. of user/unit
Order	Name of Equipment, Product Code, Usage Purposes	Country of Origin, Model Year	Number	Unit			
Computer Lab 1-4					All modules	All academic year	
1	PC Computer (Gigabyte Workstation W281-G40)	China / 2021	31	pcs			1
2	Monitor Gigabyte 27 inch Gaming monitor	China / 2021	62	pcs			1
3	Wacom tablet						1
Digital Lab 2-4							
4	Apple iMac 27 inch	2019	16	pcs			1
5	Color printer Epson SC-P807	2019	1	pcs			1
6	Scanner Epson Perfection V600	2019	6	pcs			1
LRC Computer Lab							
7	PC Computer (HP Elitedesk 800 G3)	2018	24	pcs	1		
8	Monitor HP Z24i G2	2018	24	pcs	1		

RECIPIENTS

- Senior Leadership Team
- Learning and Teaching Committee
- Vice Chancellor Executive
- Senate
- Archived

SENDER



PROF. DR. RAYMOND DANIEL GORDON
VICE CHANCELLOR & PRESIDENT

APPENDIX IV

April 5, 2023

FINANCE AND ECONOMICS PROGRAMME CONTENT

Discipline Title: Business Administration & Economics

Level: Bachelor

Code: 7340101 & 7310101

Type: Full time

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1. OBJECTIVES OF TRAINING PROGRAMME

1.1. OVERALL OBJECTIVES

This programme aims to provide students with a strong basis for a future career in finance and economics related fields of work, where skills in both the areas are required. Students are engaged in analysing and evaluating the economic and financial aspect in management decision making. The programme also equips students to be effective decision makers in business, commerce and public policy as well as competent in professional knowledge and skills in the finance and economics disciplines in preparation for entry into careers that involve the extensive study of these 2 areas.

Upon successful completion, students will graduate with an award from British University Vietnam. At the end of the programme, students will have met the learning outcomes from both awards and have achieved two sets of credit. The learning outcomes and credits are detailed below.

- Encourage the development of a range of skills, both subject specific and more general employability skills, which will enhance career opportunities.
- Provide a stimulating and accessible course of study that gives students a sound grasp of contemporary accounting and finance issues which the student can develop and apply in their future employment.
- Develop students who have an awareness of finance and economics, and are willing and able to embrace change and are focused on achievement.
- Provide students with an opportunity to undertake a year of work experience through the placement, with support from the Student Experience Office.

1.2. SPECIFIC OBJECTIVES

The programme will have at its core the notion of Finance and Economics being about transformation, of individuals and their lives and of organizations and communities, and the role that our graduates will have in those communities as business transformers. There will be engagement with employers, a focus on real-life scenarios and activities to foster understanding of the integrated nature of business functional areas. The focus and development of employability skills is a cornerstone of the award. This means acquiring and understanding academic knowledge, and being able to confidently apply this knowledge in practice through being adept communicators, good team workers, having good interpersonal skills, being critical (and able to accept and build on criticism), having the ability to solve problems, make decisions and being able to manage their own time.

Students will develop these skills as a distinctive part of their learning journey, being able to demonstrate impact, excellence and distinctiveness in their chosen field of work.

As students progress through their academic and personal development journey Finance and Economics students will develop:

Awareness - understanding and appreciation of the community in which business is conducted and their role in reflecting and shaping the future agenda of business in practice.

Altruism - become purposeful and focused on achievement and empathetic of the impact of their decisions, agendas and action on the experiences of others.

Articulation - confidence in their ability to communicate their ideas and requirements using a range of media and tools of analysis.

Adaptability - ability to be flexible and willing to address and embrace change in the pursuit of better solutions and environments.

Authenticity - a genuine, respectful and sincere approach to their dealings with others and able to lead and engage with others to share with and learn from diverse communities of practice.

These attributes will be embedded in the learning outcomes of the total learning experience requiring an innovative and evolving approach to learning and development of business knowledge and skills, which encourages partnership in design and delivery and engagement in assessment and progression. They support development of the Graduate qualities as indicated below.

2. EXPECTED LEARNING OUTCOMES OF THE PROGRAMME

2.1. KNOWLEDGE

Knowledge of global economic environment and financial environment and practice; independent learning skills and a critical approach and application of microeconomic theories in real world economic activities; understand the function of different micro-economic theories. An in-depth knowledge of corporate finance, risk management and related areas

Values, attitudes, and professionalism Professional outlook / approach to work; awareness of the work environment and its organization; respectful of personal and cultural differences in the work environment

2.2. SKILLS

Problem solving and scientific skills

Students must demonstrate the ability to solve problems via logical thinking and critical analysis. Effective use of ICT and related technologies for learning and also to present knowledge.

Managerial and entrepreneurial skills

Students will develop sense of independence when they participate in activities which require them to generate and provide information.

Communication. Leadership and team skills

Students will be able to demonstrate communication and interpersonal skills via their class discussions.

Information management and lifelong learning skills

Students will develop sense of independence when they participate in activities which require them to generate and provide information.

2.3. AUTONOMY AND RESPONSIBILITIES

Values, attitudes, and professionalism

Professional outlook / approach to work; awareness of the work environment and its organization; respectful of personal and cultural differences in the work environment

Social skills and Responsibilities

Ability to manage self and time effectively in achieving deadline.

2.4. LEARNERS' CAREER PROSPECTS AFTER GRADUATION

The Finance and Economics programme aims to produce graduates who are reflective and critical learners, with a global perspective, and who are prepared for the world of work. As essential learning outcomes, our graduates will be provided discipline expertise, professionalism, entrepreneurship, effective communication and teamwork, independence of thought, creative ability and problem-solving skills.

Upon completion of the courses, our students are well-equipped to be effective decision makers in business, commerce and public policy as well as competent in professional knowledge and skills in the finance and economics disciplines in preparation for entry into careers that involve the extensive study of these two areas.

Internship Support from A-Z since Year 1

BUV's Internship Programme is open to all BUV students from Year 1 all the way to alumni. Internships can be paid or unpaid. While SE-Careers Team assists all students from the application round to interview and placement, the company will conduct their own recruitment assessment and decide who is the best fit for a spot. Our range of support includes, but is not limited to:

- Opportunities: Internship Opportunities from BUV Industrial Partners are posted on Facebook Fanpage BUV Career Services, Instagram @buvcareerservices, and the internal BUV Job Portal.
- Personal Preparation for the Internship
- Career consultation regarding the Internship Choices

- CV review & advice
- Mock interview & advice on interview tips
- Sending your applications to potential employers.
- During & After the Internship: Ensuring the quality of your learning experience and BUV students' image by providing advice on any difficulty or concern during and after the internship and any other form of involvement where necessary.
- Internship Completion Certificate: An Internship Completion Certificate from BUV will be awarded for each intern after completion of each internship to recognise your hard work in an official manner.

Please note that we provide the above support for all internship opportunities, applied via SE or on your own. You can take the initiative in reaching out to us via SE-careers@buv.edu.vn. Your work experience record will count as credits towards your Personal Development Programme Transcript.

One to One Career Consultation with SE Careers Team

The 1:1 Career Consultation can be about your internship choices, career options, alongside any other concerns or questions related to your career and employability. Each session is expected to last 45 minutes to 60 minutes. The 1:1 discussion is confidential and only communicated internally within the Student Experience team, so we can support you most effectively.

To book an appointment, please book via the portal: <https://buv.simplybook.asia/v2/>.

Careers & Employability Activities

At BUV, we believe that studying with lectures, textbooks, and the internet in a four-walled classroom is not enough. We offer BUV students a wide range of activities to interact with professionals and experience real-world working environments. This includes:

- Skills Workshops
- Seminars
- Career Talks
- Company Visits/ Fieldtrips

Information about those activities is communicated on our Facebook fanpage, Instagram, BUV internal email, as well as notice screens on the BUV Campus.

Your proper attendance will be counted as credits in your Personal Development Programme Transcript.

BUV Professional Mentorship Programme

The programme is open to all BUV students and alumni. It aims to create a meaningful connection between BUV students and alumni (mentees) and BUV's partners and alumni (mentors) to achieve short-term and long-term goals, overcome difficulties in your personal and professional development.

For further information about the programme and how to apply to become a mentee, please keep an eye out for our official announcement on our Facebook fanpage, Instagram, and emails from SE-careers@buv.edu.vn.

Personal Career Counselling for Final Year - Final Semester students with Professional Employers and a Recruitment Consulting Company

This service is provided only for final year - final semester students to help them get ready to join the labour market after graduation. The 1:1 session allows students to receive detailed information regarding their chosen industry as well as to reflect on their own knowledge, skills, and abilities to map a career path that is aligned with their values.

Further information about the service will be sent to you via email from SE-careers@buv.edu.vn when you reach your final year - final semester and is communicated on our Facebook fanpage and Instagram.

Personal Development Programme and Career Readiness Transcript

Personal Development Programme (PDP) aims to enhance your career readiness and employability during your journey at BUV as a BUV student. Align with BUV's mission to create a new generation of discoverers, explorers and creative thinkers who are educated, trained and prepared to thrive in future (4IR) fields of work and life, through this programme, all your participation in BUV activities related to skill development activities, work experience, extra-curricular courses, community engagements as well as projects and achievements within clubs and societies which add values to your personal development will be recorded and counted as credit points towards your PDP Transcript.

These compulsory elements apply to students from October 2021 intake onwards. Upon graduation, you will receive a Career Readiness Certificate together with the PDP Transcript to prove your employability and give you a great advantage in your future career.

Please carefully refer to the document "Student Guide: Personal Development Programme" on your Canvas account to find more details on this programme.

Global Connections

During your course you will be encouraged to think globally and consider issues from a variety of perspectives, ensuring you have the knowledge and skills necessary to build your future career in an increasingly connected world.

We are committed to supporting students who wish to undertake study, work or volunteering placements abroad. In business programmes, students will conduct research in real-life international case studies to gain global perspective. Students of specialised programmes such as International Hospitality Management and Tourism Management have opportunity to attend international study trips to gain in-depth understanding on the international tourism context. If you would like to explore these opportunities, please contact the University's dedicated

International Office (buv-internationaloffice@buv.edu.vn) to make an enquiry and book a virtual appointment

2.5. LEARNER'S ABILITY TO LEARN AND DEVELOP AFTER GRADUATION

The Graduate represents a set of qualities that the University passionately believes is necessary for success in the 21st century. The Graduate is a reflective and critical learner with a global perspective, prepared to contribute in the world of work.

The bachelor degree in Finance and Economics aims to produce graduates who are reflective and critical learners, with a global perspective, and who are prepared for the world of work.

- Across all levels of the degrees and across all business modules, we aim to provide our graduates with discipline expertise. We instil a critical knowledge of the discipline that is underpinned by the experience, research and scholarship of the academic staff and which strives to reflect the key issues that affect the world in which we live.
- As part of our commitment to ensuring that Finance and Economics graduates demonstrate professionalism, we aim to produce graduates who are equipped to enter the world of work and are enterprising by nature. We use tutorial modules, practical work, work-based activities to develop and refine the transferable skills (and the confidence and proficiencies that such skills endow) that create graduates with the abilities that employers seek. Our graduates will be required to be enterprising, innovative in how they think and conduct their work, and creative in seeking solutions based on the knowledge and skills that the curriculum imparts.
- In order to capitalize on the knowledge and understanding that the degrees aim to develop, effective communication and an ability to work in teams and with diverse stakeholders, are seen as essential attributes of our graduates. The development of communication, presentation and team working skills lie at the heart of the award and are nurtured from first principles to a high level of proficiency in many of the thematic modules and, especially, through tutorial programmes, the work placement and professional practice modules, and the employability modules.
- Employers also value independence of thought and a creative ability to find solutions. The degree award enables students to take ownership of their learning - whether individually or in groups - and encourages independence of thought and problem-solving across a spectrum of activities relating to finance and economics; in critical reading and writing in thematic modules; or in tutorial discussions and presentations.
- These are essential attributes of the critical, reflective and life-long learners that graduates are expected to become. Throughout the three years of the degree, students are encouraged to develop their understanding through critical reflection; to question different views and

perspectives and to use both their generic and specialist skills (including technology supported learning) to recognize and resolve problems.

- Increasingly those problems are set in a global context and globalisation and global citizenship are central to the way that business practitioners look at the world. The majority of the thematic modules explore understandings of how global systems work; how those systems impact upon individuals; and how graduates can work professionally to manage global issues.

3. ENTRY REQUIREMENTS

I. Requirements to the BUV Award:

Academic Requirements: Completed year 12 or equivalent

English Language Requirements:

One of the following:

- IELTS: 4.5 overall with a minimum of 4.0 in each component*
- Complete IELTS Foundation Course at BUV
- BUV Placement Test result at Intermediate Level

*In order to be exempted from the first 12 weeks of English, a student needs to have a 6.0 IELTS certificate, no components less than 5.5.

II. Requirements to the Staffordshire University Award:

17 years old and above

Completed Year 12 (Higher School Certificate) and obtained satisfactory

English language or equivalent IELTS 6 with a minimum score of 5.5 in any element

Successful completion of level 3 of the BUV BA (Hons) Finance and Economics award with passes in all modules OR a level 3 equivalent programme and qualification, including but not limited to A-Level, or Pathway to Staffordshire University

Mature students with eligible degree and qualification and/or professional experience

*In case applicants would like to be considered for recognition of prior learning, interviews might be required (if applicable)

4. ACADEMIC LOAD

The total academic load of the programme is 122 credits in which:

- General knowledge and English skills: 30 credits
- Specialised knowledge and skills: 81 credits
- Mandatory Vietnamese modules: 11 credits

5. STRUCTURE AND CONTENT OF TRAINING PROGRAMMES

Year/ Semester	Details	Module	Module code	Credit
Year 1 - Semester 1	Sem 1A (12 teaching weeks)	English for Higher Education	BUVBS101	9
		Business Communication	BUVBS227	3
	Sem 1B (12 teaching weeks + 2 revision and exam weeks)	Economics	BUVBS161	3
		Quantitative Analysis	BUVBS162	3
		Introduction to Business	BUVBS122	3
		IT for Global Business	BUVBS123	3
		Business Skills	BUVBS121A	3
		English for Academic Purpose	BUVEAP101	3
Semester break				
Year 1 - Semester 2	Sem 2A (12 teaching weeks + 2 revision and exam weeks)	Introduction to Accounting	ACCT40288	3
		Introduction to Management	ACCT40290	3
		Microeconomics	ACCT40292	3
		Quantitative methods for Business	ACCT40294	3
		Introduction to Finance	ACCT40289	3
	Sem 2B (02 intensive weeks)	Employability, IT and Reasoning techniques	ENTP40034	3
Semester break, including <i>National defense</i> course and <i>Physical Education 1</i> course (5 weeks)				
Year 2 - Semester 1	Sem 1A (12 teaching weeks + 2 revision and exam weeks)	Organisational Behavior	ACCT40293	3
		Macroeconomics	ECON40222	3
		Management Information Systems	ACCT40291	3
		Corporate Finance	ACCT50536	3
		Financials Markets	ACCT50523	3
	Sem 1B (02 intensive weeks)	Professional Development (Enterprise, Entrepreneurship & Citizenship)	ENTP50075	3
Semester break				
Year 2 - Semester 2	Sem 2A (12 teaching weeks + 2 revision	International Trade and Multinational Business	ACCT50524	3
		Modelling and Estimation	ACCT50526	3
		Credit management	ACCT50522	3

	and exam weeks)	Investment Management	ACCT50525	3
		Advanced Corporate Finance	ACCT50537	3
	Sem 2B (02 intensive weeks)	Research Methods	ACCT50527	3
Semester break				
Year 3 - Semester 1	Sem 1 (12 teaching weeks + 2 revision and exam weeks)	International Finance	ACCT60304	3
		Project	XXSE60108	3
		Applied Econometrics	ACCT60301	3
		Risk management	ECON60082	3
		Work experience 1	ORGB60292	3
Semester break				
Year 3 - Semester 2	Sem 2 (12 teaching weeks + 2 revision and exam weeks)	Futures and Options	ACCT60302	3
		International Economic Theory and Policy	ACCT60303	3
		Strategic Human Resource Management	HRMG60050	3
		International Marketing	MKTG60318	3
		Work experience 2	ORGB60292	

* The number of weeks between semesters does not include Xmas Holiday and Tet Holiday.

** Students are required to study the following Vietnamese modules as required by MOET:

1. Philosophy of Marxism and Leninism
2. Political Economics of Marxism and Leninism
3. Scientific Socialism
4. History of Vietnamese Communist party
5. Ho Chi Minh Ideology
6. National Defence
7. Physical Education 1&2

6. TEACHING METHODS AND ACADEMIC PERFORMANCE ASSESSMENT

Learning and Teaching

Recognising the diverse skills and styles of our student community places an emphasis on ensuring that a range of learning environments and media are available and enabling students to engage in learning in a variety of ways. The emphasis on practice-based learning in a professional environment creates the need for additional learning environments such as taking responsibility for hosting your own events and learning by doing to supplement the more traditional approaches of lectures, guest speakers, tutorials, workshops, seminars and VLE to complement and enhance traditional, face-to-face learning experience. Knowledge and skills will be developed through case-studies, role-plays,

simulations, presentations, projects (work-based and academic), reflective portfolios and the extended use of technology supported activities.

The curriculum will develop and evolve so that knowledge and skills learned in modules will be transferred, re-applied and developed in related modules at higher levels. You will be guided through your studies through a teaching support network of module leaders, personal tutors, award leaders and supporting academic and managers, and dedicated and involved support and pastoral staff. Learning and teaching will be an enriching experience for you that reflects the value the school places on effective, innovative and research informed teaching. Learning and teaching will foster your critical intellectual development and the business capabilities required to engage in contemporary organisations.

In your learning situations you will be acting in partnership with module deliverers and facilitators who, through a programme of study designed to develop an evolving body of knowledge and portfolio of skills will be:

- Encouraging active learning and a confidence to learn.
- Making explicit the skills to be developed through the curriculum.
- Stimulating intellectual curiosity and excitement in learning through engagement with up-to-date and contemporary, well researched subjects.
- Encouraging critical reasoning about the world of business to achieve well informed judgements and conclusions.
- Challenging and shaping new learning experiences and opportunities through application of research informed pedagogy.

And you will be:

- Engaging with complex, challenging problems and real-world issues.
- Proactively using available resources, technical, digital and paper-based to address problems, construct solutions and identify new topics for research.
- Engaging in constructive reflection on learning and new ideas .
- Communicating and sharing with others in effective teams and collaborative activities, demonstrating a sense of community through active involvement with individuals and groups from differing backgrounds, communities and value systems.

Assessment

We will seek to design an assessment programme that allows students to demonstrate knowledge and skills appropriate to the world of work and which is underpinned by high academic standards and informed by relevant awarding bodies. We will ensure that students are able to engage confidently in the assessment process by developing appropriate skills.

Assessment design will reflect the skills needed to engage in business and finance and will include group presentations, group assignments, reports and personal research, Finance based awards include a much higher percentage of examinations than other more general business awards. This mirrors the internationality of the accounting profession and the strong bias towards exam-based assessments for professional qualifications which students may want to pursue when they have

graduated. The Staffordshire graduate modules have a strong emphasis on the development of employability skills. In addition to acquiring economics and finance knowledge, the award focuses on employability and the Staffordshire Graduate attributes reflecting entrepreneurship, employability and enterprise. examinations (written and computer based), group activities, and technology supported presentations.

In addition, we shall address the assessment requirements to ensure that students, not specialized in the field of Marxism - Leninism and Ho Chi Minh Ideology are prepared for the Program of Political Theory which comprises of 5 subjects:

1. Philosophy of Marxism and Leninism
2. Political Economics of Marxism and Leninism
3. Scientific Socialism
4. History of Vietnamese Communist party
5. Ho Chi Minh Ideology

The assessment programme will also build in a timely feedback programme to enable students to engage with and benefit from meaningful and feedback to help develop confidence in meeting the demands of different approaches to assessment. To achieve this, we design into our programmes opportunities for formative assessment and feedback and encourage students to reflect and evaluate their contribution and development.

In order to provide formative assessment and feedback, award modules will employ one or more of: multiple choice tests, quizzes, class presentations, exercises, case study discussions, workshop activities, self-assessment tests and class tests.

To achieve this, we will:

- Design into our programme's opportunities for formative assessment and feedback and encourage students to reflect and evaluate their contribution and development.
- Design assessment strategies based on an integrative approach which addresses the elements of assessment for learning, accessibility, diversity and efficiency.
- Assessment will enable students to make increasingly effective and confident judgements within their courses of study and within professional and employment contexts.
- Underpinning our strategy will be the 5A* graduate attributes that will enable our students to engage in learning and development and effective employment beyond their ongoing involvement in the school.
- Assessment design will be informed by the 12 principles identified by the REAP (Re-Engineering Assessment Practices) Project:
 - o Engage students actively in identifying or formulating criteria.
 - o Facilitate opportunities for self-assessment and reflection.
 - o Deliver feedback that helps students self-correct.
 - o Provide opportunities for feedback dialogue (peer and tutor-student)
 - o Encourage positive motivational beliefs and self-esteem.

- o Provide opportunities to apply what is learned to new tasks.
- o Yield information that teachers can use to help shape teaching.
- o Capture sufficient study time and effort in and out of class.
- o Distribute students' efforts evenly across topics and weeks.
- o Engage students in deep not just shallow learning effectively.
- o Communicate clear and high expectations to students.
- Assessment design will also be informed by JISC Effective Assessment in a Digital Age and will focus on providing the following benefits:
 - o Greater variety and authenticity in the design of assessments.
 - o Improved learner engagement through interactive formative assessments with adaptive feedback.
 - o Capture of wider skills and attributes, for example through simulations, e-portfolios and interactive games.
- We will ensure that the volume of assessment is not greater than is necessary for the testing of appropriate learning outcomes.
- Assessment design will give students the best opportunity to demonstrate their potential.
- We will provide timely and constructive feedback to enable students to learn and develop through the assessment process.
- We will encourage students to reflect on all forms of feedback to enhance their ongoing learner development. We will encourage students to share their reflections with staff to enable critical review and analysis.

7. LECTURERS AND SUPPORT PERSONNEL

BUV offers 100% international faculty. We will arrange 5 full-time lecturers with Doctor of Philosophy (PhD) degrees to be in charge of Business Administration and other 5 full-time lecturers with Doctor of Philosophy (PhD) degrees to be in charge of Economics discipline. All lecturers will have to be in the same or close to the registered course, and who must go through a careful interview and selection basing on their qualifications and relevant teaching experience. One Doctor of Philosophy (PhD) will take charge and administer the training curriculum and is held accountable for training quality.

Order	Full name	Position	Degree
1	Muhammad Arslan	Lead - Full time 1 Lecturer	PhD., Finance and Accounting
2	Michael George Perkins	Full time 2 Lecturer	Dr., Management
3	Shashi Kant Prasad Chaudhary	Full time 3 Lecturer	Dr., International Economics
4	Adrian Wee Tiong Weng	Full time 4 Lecturer	Dr., Business Administration

5	Jyotsna Ghildiyal Bijalwan	Full time 5 Lecturer	Dr., Management
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8. FACILITIES, TECHNOLOGY AND EDUCATIONAL RESOURCES

Infrastructure and facility: The area of Campus in Ecopark is 6,5ha. The timeline for construction of new Campus consists of 3 phases: Phase 1- 2,84ha and Phase 2 and 3 - 3,66ha. Phase 1 was completed and the current facilities in Ecopark Campus includes:

Order	Category	Number	Total area (m2)
1	Library	01	1.230,1
2	Classrooms	23	1.947,5
3	Lecture hall	02	851,4
4	Teacher office	02	258,5
5	Research area	06	490,4
6	Sport area	03	654,7
7	Canteen	02	4,096
8	Others		4.887,8
Total			14.416,4

The library building is designed in a contemporary style, which includes Library area, 24-hour study area, specialised discussion rooms for students and computer access.

Classrooms: 23 classrooms with open design and flexible to serve the various needs. These room can accommodate 30-45 students and are fully equipped modern teaching auxiliaries, projectors, LCD screens, high-quality audio system, air conditionings, standard light system.

02 large lecture halls: with an average area of 425 m2 accommodating 250 students per lecture hall, 6m high, equipped with smart board, projector, LCD screen, high quality sound system, air conditioning, system Standard lighting system. In addition, large lecture halls also have an online system that allows students to sit anywhere in or outside the Ecopark Campus to participate in interactive lectures through online tools.

The construction of the BUV campus Phase 2 at Ecopark started in August 2022, with an investment of 33 million USD, and is expected to be completed in early 2025.

Specifically, BUV invested in building a new canteen with a total floor area of 4,096m2, a sports complex including basketball and badminton courts, and a new academic building. The indoor and outdoor spaces are arranged in harmony in an open, green landscape. The iconic minimalist and liberal architectural style indicative of 4IR reflects the educational approach at BUV.

9. EVIDENCE ATTACHED TO THE PROGRAMME CONTENT

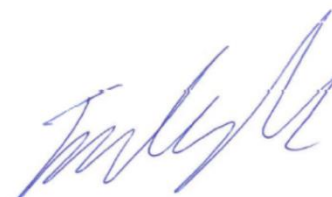
LIST OF DOCUMENTS

No.	Documents
1	Module descriptors
2	Module Handbooks
3	Programme Handbooks

RECIPIENTS

- Programme Appraisal Committee
- Senate
- Senior Leadership Team
- Learning and Teaching Committee
- Vice Chancellor Executive
- Archived

SENDER



Jason MacVaugh

Dean (Higher Education)

UNDERGRADUATE PROGRAMME SPECIFICATION

Programme Title:	BA (Hons) Finance and Economics
Dual Awarding Institutions:	Staffordshire University British University Vietnam
Teaching Institution:	British University Vietnam
Final Awards:	BA (Hons) Finance and Economics
Intermediate Awards:	N/A
Mode of Study:	Full time Accelerated 2.5 Years
UCAS Codes:	N/A
QAA Subject Benchmarks:	General Business and Management (2007)
JACS Code:	N/A
Professional/Statutory Body:	N/A
Date of Production:	March 2013
Date of Revision:	March 2021

EDUCATIONAL AIMS OF THE PROGRAMME

Objectives

This programme aims to provide students with a strong basis for a future career in finance and economics related fields of work, where skills in both the areas are required. Students are engaged in analysing and evaluating the economic and financial aspect in management decision making. The programme also equips students to be effective decision makers in business, commerce and public policy as well as competent in professional knowledge and skills in the finance and economics disciplines in preparation for entry into careers that involve the extensive study of these 2 areas.

Upon successful completion, students will graduate with a dual award from British University Vietnam and Staffordshire University. At the end of the programme, students will have met the learning outcomes from both awards and have achieved two sets of credit. The learning outcomes and credits are detailed below.

Accordingly, the aims are to:

- Encourage the development of a range of skills, both subject specific and more general employability skills, which will enhance career opportunities.
- Provide a stimulating and accessible course of study that gives students a sound grasp of contemporary accounting and finance issues which the student can develop and apply in their future employment.
- Develop students who have an awareness of finance and economics, and are willing and able to embrace change and are focused on achievement.
- Provide students with an opportunity to undertake a year of work experience through the placement,

It should be noted that the dual awards between BUV and Staffordshire University operate under Staffordshire University award regulations.

The Staffordshire Graduate attributes are integrated into the programme of study. See Appendix 1.

What is distinctive about this programme?

Students are offered the opportunity to study for a dual award with Staffordshire University and British University Vietnam (BUV) in accelerated mode. The BUV award begins at level 3 with the students enrolling for the SU award at the start of level 4 if they wish to attain a dual degree. The BUV award (levels 3 – 6) is completed in 3 years and the SU award (levels 4 – 6) in 2.5 years. The BUV award also requires the study and passing of Vietnamese core modules that are not required for the SU award. Students are able to undertake an optional BUV Internship that is not formally recognised within either award.

The programme will have at its core the notion of Finance and Economics being about transformation, of individuals and their lives and of organizations and communities, and the role that our graduates will have in those communities as business transformers. There will be engagement with employers, a focus on real-life scenarios and activities to foster understanding of the integrated nature of business functional areas. The focus and development of employability skills is a cornerstone of the award. This means acquiring and understanding academic knowledge, and being able to confidently apply this knowledge in practice through being adept communicators, good team workers, having good interpersonal skills, being critical (and able to accept and build on criticism), having the ability to solve problems, make decisions and being able to manage their own time.

Students will develop these skills (as a Staffordshire University Business School Graduate) as a distinctive part of their learning journey, being able to demonstrate impact, excellence and distinctiveness in their chosen field of work.

As students progress through their academic and personal development journey Finance and Economics students will develop:

Awareness – understanding and appreciation of the community in which business is conducted and their role in reflecting and shaping the future agenda of business in practice.

Altruism – become purposeful and focused on achievement and empathetic of the impact of their decisions, agendas and action on the experiences of others.

Articulation – confidence in their ability to communicate their ideas and requirements using a range of media and tools of analysis.

Adaptability – ability to be flexible and willing to address and embrace change in the pursuit of better solutions and environments.

Authenticity – a genuine, respectful and sincere approach to their dealings with others and able to lead and engage with others to share with and learn from diverse communities of practice.

These attributes will be embedded in the learning outcomes of the total learning experience requiring an innovative and evolving approach to learning and development of business knowledge and skills, which encourages partnership in design and delivery and engagement in assessment and progression. They support development of the Staffordshire Graduate qualities as indicated below:

The Staffordshire Graduate

The Staffordshire Graduate represents a set of qualities that the University passionately believes is necessary for success in the 21st century. The Staffordshire Graduate is a reflective and critical learner with a global perspective, prepared to contribute in the world of work.

The Dual BA (Hons) degree in Finance and Economics aims to produce graduates who are reflective and critical learners, with a global perspective, and who are prepared for the world of work.

- Across all levels of the degrees and across all business modules, we aim to provide our graduates with **discipline expertise**. We instil a critical knowledge of the discipline that is underpinned by the experience, research and scholarship of the academic staff and which strives to reflect the key issues that affect the world in which we live.

- As part of our commitment to ensuring that Finance and Economics graduates demonstrate **professionalism**, we aim to produce graduates who are equipped to enter the world of work and are **enterprising** by nature. We use tutorial modules, practical work, work-based activities to develop and refine the transferable skills (and the confidence and proficiencies that such skills endow) that create graduates with the abilities that employers seek. Our graduates will be required to be enterprising, innovative in how they think and conduct their work, and creative in seeking solutions based on the knowledge and skills that the curriculum imparts.
- In order to capitalize on the knowledge and understanding that the degrees aim to develop, **effective communication** and an ability to work in teams and with diverse stakeholders, are seen as essential attributes of our graduates. The development of communication, **presentation** and **team working** skills lie at the heart of the award and are nurtured from first principles to a high level of proficiency in many of the thematic modules and, especially, through tutorial programmes, the work placement and professional practice modules, and the employability modules.
- Employers also value **independence of thought** and a **creative** ability to find solutions. The degree award enables students to take ownership of their learning – whether individually or in groups – and encourages independence of thought and **problem-solving** across a spectrum of activities relating to finance and economics; in critical reading and writing in thematic modules; or in tutorial discussions and presentations.
- These are essential attributes of the **critical, reflective** and **life-long learners** that Staffordshire graduates are expected to become. Throughout the three years of the degree, students are encouraged to develop their understanding through critical reflection; to question different views and perspectives and to use both their generic and specialist skills (including technology supported learning) to recognize and resolve problems.
- Increasingly those problems are set in a global context and globalisation and **global citizenship** are central to the way that business practitioners look at the world. The majority of the thematic modules explore understandings of how global systems work; how those systems impact upon individuals; and how graduates can work professionally to manage global issues.

• PROGRAMME OUTCOMES

What will this programme teach me to do? At the end of your studies you should be able to:

SU Award Outcomes	Generic	BUV Award Outcomes	
1. Knowledge and Understanding	Demonstrate a systematic understanding of key aspects, including acquisition of coherent and detailed knowledge, at least some of which is at or informed by, the forefront of defined aspects of a discipline.	1. Knowledge	Knowledge of global economic environment and financial environment and practice; independent learning skills and a critical approach and application of microeconomic theories in real world economic activities; understand the function of different micro-economic theories. An in-depth knowledge of corporate finance, risk management and related areas
2. Learning	Demonstrate an understanding of the uncertainty, ambiguity and limits of knowledge.	4. Values, attitudes and professionalism	Professional outlook / approach to work; awareness of the work environment and its organization; respectful of personal and cultural differences in the work environment
3. Enquiry	Deploy accurately established techniques of analysis and enquiry and initiate and carry out projects within (<i>the field of study</i>). Evaluate use of Information Literacy, including the ethical use of information in (<i>the field of study</i>).	2. Practical Skills	Ability to organise, synthesize and present information effectively.
4. Analysis	Describe and comment upon current research, or equivalent advanced scholarship and critically evaluate arguments, assumptions, abstract concepts and data (that may be	6. Problem solving and scientific skills	Students must demonstrate the ability to solve problems via logical thinking and critical analysis. Effective use of ICT and related technologies for learning and also to present knowledge.
5. Problem Solving	Develop appropriate questions to achieve a solution - or identify a range of solutions – to	8. Managerial and entrepreneurial skills	Students will develop sense of independence when they participate in activities which require

	a problem and use decision-making in complex and unpredictable contexts.		them to generate and provide information.
6. Communication	Communicate and analyse information, ideas, problems, and solutions to both specialist and non-specialist audiences.	5. Communication, leadership and team skills	Students will be able to demonstrate communication and interpersonal skills via their class discussions.
7. Application	Apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding and devise and sustain arguments, using ideas and techniques, some of which are at the forefront of a discipline.	7. Information management and lifelong learning skills	Students will develop sense of independence when they participate in activities which require them to generate and provide information.
8. Reflection	Manage their own learning, exercise initiative, personal responsibility and demonstrate the learning ability, qualities and transferable skills necessary for employment or further training of a professional or equivalent nature	3. Social Skills and Responsibilities	Ability to manage self and time effectively in achieving deadline.

PROGRAMME STRUCTURE, MODULES AND CREDITS

Programme Title BA (Hons) Finance and Economics 2.5-year programme

Each teaching block will run over 18 weeks consisting of 12 weeks of delivery followed by a 2-week assessment period and a further 4 weeks of delivery. In the first 12 weeks modules will be delivered concurrently across the 12-week period, whilst delivery over the last 4 weeks will be intensive.

Year 1

Delivery	12 weeks standard					4 weeks intensive
Teaching Block 1	ACCT40288 Introduction to Accounting 15 credits	ACCT40290 Introduction to Management 15 credits	ACCT40292 Micro-economics 15 credits	ACCT40294 Quantitative Methods for Business 15 credits	ACCT40289 Introduction to Finance 15 credits	ENTP40034 Employability, IT and Reasoning Techniques (Enhancing your Career & Personal Success) 15 credits
Teaching Block 2	ACCT40293 Organisational Behaviour 15 credits	ACCT40291 Management Information Systems 15 credits	ECON40222 Macro-economics 15 credits	ACCT50536 Corporate Finance 15 credits	ACCT50523 Financial Markets 15 credits	ENTP50075 Professional Development (Enterprise, Entrepreneurialism and Citizenship) 15 credits

Year 2

Delivery	12 weeks standard					4 weeks intensive
Teaching Block 1	ACCT50524 International Trade and Multinational Business 15 credits	ACCT50526 Modelling and Estimation 15 credits	ACCT50522 Credit Management 15 credits	ACCT50537 Advanced Corporate Finance 15 credits	ACCT50525 Investment Management 15 credits	ACCT50527 Research Methods 15 credits
Teaching Block 2	ECON60082 Risk Management 15 credits	XXSE60108 Project 15 credits	ACCT60301 Applied Econometrics 15 credits	ACCT60304 International Finance 15 credits	ORGB60292 Work Experience (start study)	

Year 3

Delivery	12 weeks standard				4 weeks intensive
Teaching Block 1	ACCT60302 Futures and Options 15 credits	HRMG60050 Strategic Human Resource Management 15 credits	ACCT60303 International Economic Theory and Policy 15 credits	MKTG60318 International Marketing 15 credits	ORGB60292 Work Experience (complete study) 15 credits

Key:

Level 4

Level 5

Level 6

Vietnamese Core Modules and additional English - required for the BUW award but not the SU award

HOW WILL I BE TAUGHT AND ASSESSED?

Teaching and Learning

Recognising the diverse skills and styles of our student community places an emphasis on ensuring that a range of learning environments and media are available and enabling students to engage in learning in a variety of ways. The emphasis on experiencing finance and economics in a business context creates the need for additional learning environments such as conference, learning in work and more visits to supplement the more traditional approaches of lectures, guest speakers, tutorials, workshops, seminars and VLE to complement and enhance traditional, face-to-face learning experience. Knowledge and skills will be developed through case-studies, role-plays, simulations, presentations, projects (work-based and academic), reflective portfolios and the extended use of technology supported activities.

The curriculum will develop and evolve so that knowledge and skills learned in core modules will be transferred, re-applied and developed at higher levels. Our learners will be guided through their studies through a teaching support network of module tutors, personal tutors, award leaders and supporting academic and business managers, and dedicated and involved support and pastoral staff. Learning and teaching will be an enriching experience for the students that reflects the value the school places on effective, innovative and research informed teaching. Learning and teaching will foster the critical intellectual development of our students and the business capabilities required to engage in contemporary organisations.

In their learning situations our students will be acting in partnership with module deliverers and facilitators who, through a programme of study designed to develop an evolving body of knowledge and portfolio of skills will be:

- Encouraging active learning and a confidence to learn
- Making explicit the skills to be developed through the curriculum
- Stimulating intellectual curiosity and excitement in learning through engagement with up-to-date and contemporary, well researched subjects.
- Encouraging critical reasoning about the world of business to achieve well informed judgements and conclusions
- Challenging and shaping new learning experiences and opportunities through application of research informed androgogy.

And our learners will have the opportunity to:

- Engage with complex, challenging problems and real-world issues
- Proactively use available resources, technical, digital and paper-based to address problems, construct solutions and identify new topics for research
- Engage in constructive reflection on learning and new ideas
- Communicate and share with others in effective teams and collaborative activities.
- Demonstrate a sense of community through active involvement with individuals and groups from differing backgrounds, communities and value systems

Assessment

We will seek to design an assessment programme that allows students to demonstrate knowledge and skills appropriate to the world of work and which is underpinned by high academic standards and informed by relevant awarding bodies. We will ensure that students are able to engage confidently in the assessment process by developing appropriate skills.

Assessment design will reflect the skills needed to engage in business and finance and will include group presentations, group assignments, reports and personal research. Finance based awards include a much higher percentage of examinations than other more general business awards. This mirrors the internationality of the accounting profession and the strong bias towards exam-based assessments for professional qualifications which students may want to pursue when they have graduated. The Staffordshire graduate modules have a strong emphasis on the development of employability skills. In addition to acquiring economics and finance knowledge, the award focuses on employability and the Staffordshire Graduate attributes reflecting entrepreneurship, employability and enterprise. examinations (written and computer based), group activities, and technology supported presentations.

The assessment programme will also build in a timely feedback programme to enable students to engage with and benefit from meaningful and feedback to help develop confidence in meeting the demands of different approaches to assessment. To achieve this we design into our programmes opportunities for formative assessment and feedback and encourage students to reflect and evaluate their contribution and development.

In order to provide formative assessment and feedback, award modules will employ one or more of:-

multiple choice tests, quizzes, class presentations, exercises, case study discussions, work shop activities, self assessment tests and class tests.

Therefore we shall:

- Design into our programmes opportunities for formative assessment and feedback and encourage students to reflect and evaluate their contribution and development.
- Design assessment strategies based on an integrative approach which addresses the elements of assessment for learning, accessibility, diversity and efficiency.
- Assessment will enable students to make increasingly effective and confident judgements within their courses of study and within professional and employment contexts.
- Underpinning our strategy will be the 5A* graduate attributes that will enable our students to engage in learning and development and effective employment beyond their ongoing involvement in the school.
- Assessment design will informed by the 11 principles identified by the REAP Project:
 - Engage students actively in identifying or formulating criteria
 - Facilitate opportunities for self-assessment and reflection
 - Deliver feedback that helps students self-correct

- Provide opportunities for feedback dialogue (peer and tutor-student)
 - Encourage positive motivational beliefs and self-esteem
 - Provide opportunities to apply what is learned to new tasks
 - Yield information that teachers can use to help shape teaching
 - Capture sufficient study time and effort in and out of class
 - Distribute students' efforts evenly across topics and weeks
 - Engage students in deep not just shallow learning effectively
 - Communicate clear and high expectations to students.
-
- We will ensure that the volume of assessment is not greater than is necessary for the testing of appropriate learning outcomes
 - Assessment design will give students the best opportunity to demonstrate their potential.
 - We will provide timely and constructive feedback to enable students to learn and develop through the assessment process.
 - We will encourage students to reflect on all forms of feedback to enhance their ongoing learner development.
 - We will encourage students to share their reflections with staff to enable critical review and analysis.

ADDITIONAL INFORMATION

The entry requirements for the award are normally:

- 17 years old and above and have
- completed Year 12 (Higher School Certificate) and obtained satisfactory
- English language or equivalent IELTS 6 with a minimum score of 5.5 in any element
- Successful completion of level 3 of the BUV BA (Hons) Finance and Economics award with passes in all modules OR a level 3 equivalent programme and qualification, including but not limited to A-Level, or Pathway to Staffordshire University
- Mature students with eligible degree and qualification and/or professional experience

Applications are welcome from students with a wide variety of qualifications, skills and experiences. In addition to the requirements outlined below, the University's minimum entry requirements for undergraduate programmes includes 5 GCSE's including Mathematics and English, or equivalent.

- Applicants with non-standard qualifications are encouraged to apply.
- Students for whom English is not their first language would normally be required to demonstrate achievement of IELTS level 6 or TOEFL score of 550, or equivalent.

Students cannot study the SU award without also studying the BUV award.

Board details

Timing – end of	Mid-level	End of level
Year 1 TB 1	Level 4 modules with failed elements are referred	NA
Year 1 TB 2	Level 5 modules with failed elements are referred	Level 4 overall performance considered
Year 2 TB 1		Level 5 overall performance considered
Year 2 TB 2	Level 6 modules with failed elements are referred	
Year 3 TB 1		Level 6 overall performance considered

Disability Statement

Staffordshire University operates a policy of inclusive teaching and learning to ensure that all students have an equal opportunity to fulfil their educational potential. Details about how to apply to have your needs assessed can be found at:

http://www.staffs.ac.uk/courses_and_study/disabled_students/index.jsp

AWARD SPECIFIC INFORMATION

The following award specific variations apply:

Level 4

105 out of 135 credits must be passed to progress to level 5.

At level 4 30 credits can be condoned providing 105 credits are passed.

Level 5

105 out of 135 level 5 credits and all level 4 credits must be passed to progress to level 6.

At level 5 30 credits can be condoned providing 105 credits are passed.

Level 6

The University will raise the classification if your overall average score is within 2% of the higher classification. For undergraduate courses this is 48%, 58% or 68%.

And

You have achieved 75 credits at the higher classification in your final stage.

A student excluded from either institution for academic misconduct with also be excluded from the partner institution.

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THE STAFFORDSHIRE GRADUATE

The Staffordshire Graduate represents a set of qualities that the University passionately believes is necessary for success in the 21st century. The Staffordshire Graduate is a reflective and critical learner with a global perspective, prepared to contribute in the world of work.

The table below indicates where, within your award, these characteristics are addressed:

AWARD TITLE:	Finance and Economics Dual Award (Staffordshire University Modules only)		
Characteristic	Award Module(s) including level and number of credits	Method of Assessment	
A Work-ready and employable	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan	
	Professional Development (Enterprise, Entrepreneurialism and Citizenship) (15 credits) L5	Brand Me presentation and a work experience based reflective journal.	
B Understanding of enterprise and entrepreneurship	Work Experience (15 credits)L6	Portfolio (5000 Words) based on work experience placement	
	Professional Development (Enterprise, Entrepreneurialism and Citizenship) (15 credits) L5	Brand Me presentation and a work experience based reflective journal.	
C Understanding of global issues and their place in the global economy	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan	
D Communication skills	Professional Development (Enterprise, Entrepreneurialism and Citizenship) (15credits) L5	Brand Me presentation and a work experience based reflective journal.	
	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan	
	Work Experience (15 credits)L6	Portfolio (5000 Words) based on work experience placement	

E Presentation skills	Professional Development (Enterprise, Entrepreneurialism and Citizenship) (15 credits) L5	Brand Me presentation and a work experience based reflective journal.
	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan
F The ability to interact confidently with colleagues	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan
	Work Experience (15 credits)L6	Portfolio (5000 Words) based on work experience placement
G Independence of thought	Work Experience (15 credits)L6	Portfolio (5000 Words) based on work experience placement
	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan
H Skills of teamworking	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan
	Work Experience (15 credits) L6	Portfolio (5000 Words) based on work experience placement

I Ability to carry out inquiry-based learning and critical analysis	Professional Development (Enterprise, Entrepreneurialism and Citizenship) (15 credits) L5	Brand Me presentation and a work experience based reflective journal.
	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan
J Skills of problem solving and creation of opportunities	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan
K Technologically, digitally and information literate	Employability, IT & Reasoning Techniques (Enhancing your Career & Personal Success) (15 credits) L4	PDP portfolio of: video, IT documents, assignment & action plan
L Able to apply Staffordshire Graduate attributes to a range of life experiences to facilitate life-long learning	Professional Development (Enterprise, Entrepreneurialism and Citizenship) (30 credits) L5	Brand Me presentation and a work experience based reflective journal.

Appendix 2

Award Learning Outcomes Levels 4 & 5

LEVEL 5

SU Award Outcomes	Generic	Mapping : BUV to SU 8	
1. Knowledge and Understanding	Demonstrate knowledge and critical understanding of the well-established concepts, principles and their development.	1. Knowledge	Working knowledge of theories in subject area of finance and economics; independent research and learning skills as well as critical approach to the application of academic knowledge.
2. Learning	Understand the limits of their knowledge, and how this influences analyses and interpretations based on that knowledge.	4. Values, attitudes and professionalism	Awareness of the working environment and the application of theories in the organization relevant to finance and economics.
3. Enquiry	Demonstrate knowledge of the main methods of enquiry in (<i>the field of study</i>) and demonstrate application of the key principles of Information Literacy.	2. Practical Skills	Ability to organize, synthesize and present information effectively. Effective use of ICT and related technologies for learning and also to present
4. Analysis	Use a range of established techniques to initiate and undertake critical analysis of information.	6. Problem solving and scientific skills	Students must demonstrate the ability to solve problems via logical thinking and critical analysis relevant to finance and economics.
5. Problem Solving	Evaluate critically the appropriateness of different approaches to solving problems and propose solutions to problems arising from analysis.	6. Problem solving and scientific skills	Students must demonstrate the ability to solve problems via logical thinking and critical analysis relevant to

			finance and economics.
6. Communication	Communicate effectively information and arguments in a variety of forms, to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively.	5. Communication, leadership and team skills	Understands the power of teamwork and ability to assume leadership in a team.
7. Application	Apply underlying concepts and principles outside the context in which they were first studied.	7. Information management and lifelong learning skills	Ability to manage self and time effectively in achieving deadline.
8. Reflection	Demonstrate qualities and transferable skills necessary for employment or further training including the development of existing skills, and acquisition of new competencies that will require the exercise of personal responsibility and decision-making and will enable students to assume significant responsibility within organisations.	3. Social Skills and Responsibilities	Ability to manage self and time effectively in achieving deadline.

LEVEL 4

SU Award Outcomes	Generic	Mapping : BUV to SU 8	
1. Knowledge and Understanding	Demonstrate knowledge of the underlying concepts and principles.	1. Knowledge	Understand and demonstrate knowledge of organisations, their management and the changing external and international environment in which they operate. Understand corporate finance theories and its application.
2. Learning	Develop lines of argument and make sound judgements in accordance with basic theories and concepts.	4. Values, attitudes and professionalism	Ability to meet datelines.
3. Enquiry	Present, evaluate and interpret qualitative and quantitative data showing an awareness of the key principles of Information Literacy.	2. Practical Skills	Ability to organize, synthesize and present information effectively.
4. Analysis	Evaluate and interpret concepts and principles	6. Problem solving and scientific skills	Students must demonstrate the ability to solve problems via logical thinking and critical analysis. Effective use of ICT and related technologies for learning and also to present knowledge.
5. Problem Solving	Evaluate the appropriateness of different approaches to solving problems.	6. Problem solving and scientific skills	Students must demonstrate the ability to solve problems via logical thinking and critical analysis. Effective use of ICT and related technologies for learning and also to present knowledge.
6. Communication	Communicate the results of study/work accurately, reliably, and with structured and coherent arguments.	5. Communication, leadership and team skills	Ability to organise, synthesize and present information effectively.

7. Application	Undertake further training and develop new skills within a structured and managed environment.	7. Information management and lifelong learning skills	Understands teamwork and ability to assume leadership in groups during the continuous assessment.
8. Reflection	Demonstrate qualities and transferable skills necessary for employment and/or further study requiring the exercise of some personal responsibility.	3. Social Skills and Responsibilities	Ability develop self discipline and time management in completing exam and assessment.

APPENDIX V

Module Descriptor

English for Higher Education

BUVBS101

Summary

This course is designed to provide students with foundational knowledge and skills in academic writing, listening, reading, and speaking skills. Students will develop their abilities in creating texts in English, reading for gist and for meaning, speaking and interacting with others through English, and other effective linguistic techniques for the university context.

The course will also introduce students to core concepts surrounding critical thinking and develop students' abilities to implement these notions in academic contexts. The total GLH for the module are 369 and this ensures students progress from their entry level (IELTS 4.5 or equivalent) to the minimum required standard (IELTS 6.0 or equivalent). Language learning is combined with academic and study skills in this module.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 9

Prerequisite: None

Contact

Module Leader: Clare Joanne Watson

Email: clare.w@buv.edu.vn

Hours of Study

Contact hours: 135

Independent Study Hours: 315

Total Learning Hours: 450

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Demonstrate writing skills and compose longer written texts using paragraphs, sentences, and correct grammar	
2	Listen and understand long extracts, varied accents, grammar, and tone	
3	Listen and understand for both gist and for explicit meaning	
4	Demonstrate reading skills, including comprehension, skimming and scanning	
5	Apply techniques for speaking, presenting, and discussing a range of topics with students and lecturers	
6		

Assessment Details

- Subject Learning Outcomes 7 Grammar and Vocab Quizzes 10%
- Subject Learning Outcomes 1,2,3,4,5,6 Group Presentation 30%
- Subject Learning Outcomes 1, 4 Final Reading and Writing Examination 30%
- Subject Learning Outcomes 5, 6 Final Speaking Examination 15%
- Subject Learning Outcomes Final Listening Examination 15%

Indicative Content

English BUVBS101 will equip students with a greater ability to communicate through writing, and speaking, as well as enhance their receptive skills with reading and listening. Overall, students will learn key foundational skills in academic English and develop a greater ability to use English in both formal and informal settings. The aim of this course is to build a strong foundation for students to extend towards more specialist, academic forms of English usage and comprehension.

Learning Strategies

Students will undertake a combination of formative and summative exams throughout the course which aim to test students' 4-skills in an academic setting.

Bi-weekly vocabulary and grammar quizzes will act as formative assessments for students demonstrate their progress with the language-focus content of the course.

As a midterm, students will complete a 15-minute group research presentation worth 20% of the grade which will cover writing, speaking, reading, and listening skills.

Students will complete a final reading and writing exam, a listening exam, and have a final oral exam which will account for 70% of their total skill grades in total.

10% Bi-Weekly Quizzes (vocab and grammar) 5 quizzes in total worth 2% each

20% Midterm Group Presentation

20% Final Speaking Exam

30% Final Reading & Writing Exam

20% Final Listening Exam

Total 100%

Texts

1. Pathways, 2nd Edition: Reading, Writing, and Critical Thinking, Laurie Blass, Mari Vargo, 2018, National Geographic

2. Pathways, 3rd Edition: Reading, Writing, and Critical Thinking, Laurie Blass, Mari Vargo, 2018, National Geographic

Resources

VLE learning support material to be provided for independent /self-directed learning.

Module handbooks

Open Textbook Library

Selected contemporary problem/practice based case examples

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.

- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Topic	Week	Classes	Self-Study	Assignment	Exam
Happiness / Inventive Solutions	1	20	10		
Connected Lives / Saving Our Seas	2	20	11	1	
Memory and Learning / Animals and Medicine	3	20	11		
Nature's Fury / Building Wonders	4	20	11	1	
Form and Function / Smart Advice	5	20	11		
Review and Midterms	6	20	5	1	5
Social Relationships / Science and Investigation	7	20	11		
City Solutions / Danger Zones	8	20	11	1	
The Travel Business / Information Design	9	20	11		
Global Challenges / Medical Innovations	10	20	11	1	
Final Assessment	11	10	11		4
Course review	12	20	11		2

Module Descriptor

BUSINESS COMMUNICATION

BUVBS227

Summary

This course provides students with the necessary knowledge to improve their business communication skills to enable them to become effective communicators. Students will be exposed to various business documents and their formats. They will then develop their skills in planning and writing effective business messages, taking into account various factors like audience needs and purpose. Students will also be guided on how to become more effective speakers and listeners in order to achieve effective verbal communication.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Kostas Tsontos

Email: kostas.t@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
-----	--------------------------	-----------------------------

1	Adopt appropriate listening and speaking skills to communicate effectively at an interpersonal level	Equip students to excel as holistic and progressive thinkers in all areas of today's dynamic and demanding business environment. Master effective skills for communicating, time organization, problem-solving and computer skills Contribute to society at
2	Write letters, memos, e-mails and messages using the correct format	Equip students to excel as holistic and progressive thinkers in all areas of today's dynamic and demanding business environment. Master effective skills for communicating, time organization, problem-solving and computer skills
3	Adopt appropriate non-verbal communication styles to enhance verbal communication	Equip students to excel as holistic and progressive thinkers in all areas of today's dynamic and demanding business environment. Master effective skills for communicating, time organization, problem-solving and computer skills Contribute to society at
4	Build effective writing tools for business communication	Equip students to excel as holistic and progressive thinkers in all areas of today's dynamic and demanding business environment. Master effective skills for communicating, time organization, problem-solving and computer skills
5	Interpret business communication within a global, ethical and technological context	Develop in students an understanding of how to create tomorrow's success with today's strategy in terms of business administration and management. Equip students to excel as holistic and progressive thinkers in all areas of today's dynamic and demanding
6		

Assessment Details

- Subject Learning Outcomes 2, 6, 7, 8 Business Report 40%
- Subject Learning Outcomes 1, 3, 5 Presentation 20%
- Subject Learning Outcomes 2, 4, 5 Final Examination 40%

Indicative Content

Business Communication equips students with the necessary written and spoken skills for effective business communication. Students are exposed to various business correspondences and taught practical strategies to write convincing and coherent messages. Students are also taught to strategise, and to use appropriate and ethical approaches in writing not only routine messages, but also persuasive and negative messages. Listening and speaking skills are also focused on to ensure effective interpersonal communication. This course also emphasises the need for business communication to be seen in a global context where various considerations such as technological advances and ethical considerations play a vital role in ensuring that all business messages achieve their aims in a positive manner.

Learning Strategies

Collaborative Learning: Students learn through working in pairs/groups to solve tasks/problems given. In this way, students learn to work together and share responsibility to achieve the common goal.

Authentic Learning. Students learn through engagements in various activities that simulate real-life scenarios. Students are presented with “real life” activities that will make learning more meaningful.

Assessment strategy will be both formative and summative:

Formative assessment strategies are used to check students’ current level of understanding and progress; to provide feedback to teacher and learners; and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions and assignments.

Summative assessments are used at the end of the module to formally assess a learner’s skill, knowledge and understanding of this course.

Texts

Business Communication Essentials: Fundamental Skills for the Mobile-Digital-Social Workplace (What's New in Business Communication), 8th edition, 9780134729404, Pearson, 2018, Bovee, C & Thill, J

Resources

VLE learning support material to be provided for independent /self-directed learning.

Module handbooks

Open Textbook Library

Selected contemporary problem/practice based case examples

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1 (Lecture)	Class 2 (Tutorial)	Student Centred Learning Guidance	Assessment
1	Business Communication basics	Class Quiz, Review and Discussion Questions	Chapter 1	
2	Emotional Intelligence, Reflection & Intercultural communication	Class Quiz, Review and Discussion Questions	Chapter 1 & (2)	
3	Business messages /letters	Class Quiz, Review and Discussion Questions	Chap. (4 - 5)	
4	Positive and negative messages	Class Quiz, Review and Discussion Questions	Chap. (7 - 8)	
5	Planning Reports	Class Quiz, Review and Discussion Questions	Chap. 10.1. - (10.4)	
6	Writing reports	Class Quiz, Review and Discussion Questions	Chap. 11.1 & 11.2	Assessment 1-2 issued to students
7	Revision - report practice	Class Quiz, Review and Discussion Questions	(Writing tips)	
8	Business presentations	Class Quiz, Review and Discussion Questions	Chap 12	

9	Visual & Oral presentation skills	Class Quiz, Review and Discussion Questions	(practice)	
10	The job search - Cover letters	Class Quiz, Review and Discussion	Chap. (13) - 14.1	
11	Revision	Class Quiz, Review and Discussion	Summary	
12	Assignment Support	1-1 sessions	Students should ensure they revise and understand the exam structure	Assignment submission Presentation Final Exam

Module Descriptor

ECONOMICS

BUVBS161

Summary

This course aims at providing an introduction to current economic issues as well as to basic economic principles. Essentially, the course will provide the key knowledge required to understand the more complicated theories and principles presented at the degree level in Management and Finance subjects.

Key facts

Faculty/Department: Business & Economics
 Module Type: Compulsory
 Number of credits: 3
 Prerequisite: None

Contact

Module Leader: Jon Neale
 Email: jonathan.n@buv.edu.vn

Hours of Study

Contact hours: 45
 Independent Study Hours: 105
 Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Understand basic foundations and models of Economics	
2	Be familiar with the concepts of trade-offs, comparative advantage and the market system	

3	Comprehend elasticity and the responsiveness of supply and demand	
4	Understand the connection between consumer choice and firms as well as production, technology and costs	
5	Understand market structure and firm strategy as well as differentiate between monopolies and oligopolies	
6		

Assessment Details

- Subject Learning Outcomes 1,3 : Group Presentation 20%
- Subject Learning Outcomes 2, 4, 5, 7, 8: Final Examination 40%
- Subject Learning Outcomes 9,10: Assignment 40%

Indicative Content

The first part of the semester will focus on Microeconomics, which is the study of the interaction of people and firms in markets. The concept of scarcity, choice and opportunity cost will be explored. We will examine how the forces of supply and demand operate in the markets. We will then look at theories concerning firm behaviour –how companies decide how much to produce, and how to produce it. Once some understanding is formed of these issues, we will proceed to look at the concept of public goods and market failures.

For the second half of the semester focus will be on Macroeconomics, the study of the economy as a whole. We will study the circular flow of income; economic growth and development, business cycles, and the impact of both monetary and fiscal policy on inflation, unemployment, interest rates, investment, the exchange rate, and international trade.

Learning Strategies

Collaborative Learning: Students learn through working in pairs/groups to solve tasks/problems given. In this way, students learn to work together and share responsibility to achieve the common goal.

Authentic Learning. Students learn through engagements in various activities that simulate real-life scenarios. Students are presented with “real life” activities that will make learning more meaningful.

Assessment strategy will be both formative and summative:

Formative assessment strategies are used to check students' current level of understanding and progress; to provide feedback to teacher and learners; and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions and assignments.

Summative assessments are used at the end of the module to formally assess a learner's skill, knowledge and understanding of this course.

Texts

Economics, Global Edition 8E, 9781292430645, Pearson, 2022, Hubbard, Glenn/O'Brien, Anthony Patrick

Resources

VLE learning support material to be provided for independent /self-directed learning.

Module handbooks

Open Textbook Library

Selected contemporary problem/practice based case examples

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week 1	Lecture 1 Supply, demand, the market. Price determination	Tutorial 1 Chapter Questions
Week 2	Lecture 2 Price controls, per-unit taxes and subsidies; consumer and producer surplus	Tutorial 2 Chapter Questions

Week 3	Lecture 3 Price Elasticity of demand, income elasticity of demand, cross-price elasticity of demand	Tutorial 3 Chapter Questions
Week 4	Lecture 4 Returns to scale, a firm's cost curves, profit maximization	Tutorial 4 Chapter Questions
Week 5	Lecture 5 Monopoly, perfect competition, and imperfect competition	Tutorial 5 Chapter Questions
Week 6	Lecture 6 Welfare Economics; an introduction	Tutorial 6 Chapter Questions
Week 7	Lecture 7 Introduction to Macroeconomic basics	Tutorial 7 Chapter Questions
Week 8	Lecture 8 The Keynesian 45° model, Consumption, Investment	Tutorial 8 Chapter Questions
Week 9	Lecture 9 The Keynesian 45° model, Government, foreign trade	Tutorial 9 Chapter Questions
Week 10	Lecture 10 Money Markets; their operation and influence on the real economy	Tutorial 10 Chapter Questions
Week 11	Lecture 11 Inflation, unemployment, the Phillips Curve	Tutorial 11 Chapter Questions
Week 12	Lecture 12 AD/AS analysis and revision	Tutorial 12 Chapter Questions & Revision

Module Descriptor

QUANTITATIVE ANALYSIS

BUVBS162

Summary

This subject is designed to engage students with the key concepts and problems in the study of Quantitative Techniques. At the end of the course, the students become familiar with the key ideas of descriptive statistics and would be able to apply a variety of methods for explaining, summarising and presenting data and interpreting results clearly using appropriate diagrams, titles and labels when required. Also they would be able to use simple linear regression and correlation analysis and know when it is appropriate to do so. It is helpful to view this introductory unit as an opportunity to develop the quantitative skills and analytical skills.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Prabu Mohan

Email: prabu.m@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
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1	Convert raw data to charts or diagrams that summarize the data	
2	Calculate measures of central tendency and measures of variability.	
3	Apply the rules of addition, multiplication of probabilities in different situations	
4	Distinguish between discrete and continuous probability distributions	
5	Identify the linear relationship between an independent and a dependent variable using the least squares principle	
6		

Assessment Details

- Subject Learning Outcomes 1,5 : Assignment 50%
- Subject Learning Outcomes 2,3,4: Final Exam 50%

Indicative Content

This subject is designed to provide students with sound basic mathematical and statistical knowledge for business studies. It enables students to understand the basic principles, procedures and techniques in the analysis of business information which assists in business planning and decision making.

Learning Strategies

Collaborative Learning: Students learn through working in pairs/groups to solve tasks/problems given. In this way, students learn to work together and share responsibility to achieve the common goal.

Assessment strategy will be both formative and summative:

Formative assessment strategies are used to check students' current level of understanding and progress; to provide feedback to teacher and learners; and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions and assignments.

Summative assessments are used at the end of the module to formally assess a learner's skill, knowledge and understanding of this course.

Texts

Statistical Techniques in Business & Economics 18E, 9781260239478, McGraw-Hill, 2020, Douglas Lind and William Marchal and Samuel Wathen

Resources

VLE learning support material to be provided for independent /self-directed learning.

Module handbooks

Open Textbook Library

Selected contemporary problem/practice based case examples

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1	Class 2	Student centred learning guidance
1	Introduction to Statistics Types of data and variables - Types of visual displays - tables and graphs - Qualitative data- Bar Charts- Pie Charts - line chart	Problems and exercise to reinforce the lectures	Chapter 1 and Chapter 2 (Main reference)
2	Introduction to Statistics Constructing a frequency distribution - Histograms - Frequency Polygon - Pareto	Problems and exercise to reinforce the lectures	Chapter 2 (Main reference)

	Diagram - Frequency Curve		
3	Numerical Measures - Ungrouped data Measures of Location - mean, median and mode; relatives' position of the mean, median and mode Measures of dispersion - range, variance, standard deviation, skewness.	Problems and exercise reinforce the lectures	to Chapter 3 and Chapter 3 (Main reference)
4	Numerical Measures- Grouped data Measures of Location - mean, median and mode; relatives' position of the mean, median and mode Measures of dispersion - range, variance, standard deviation, skewness.	Problems and exercise reinforce the lectures	to Chapter 3 and Chapter 4 (Main reference)
5	Correlation	Problems and exercise reinforce the lectures	to Chapter 13 (Main reference)

Module Descriptor

INTRODUCTION TO BUSINESS

BUVBS122

Summary

This foundation course will benefit the student in terms of the subsequent study of specialised subjects. It is helpful to view this introductory unit as an opportunity to develop a solid framework of knowledge, as well as a critical academic approach of business management.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Joe Schurley

Email: joseph.s@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Understand basic management concepts and theories including the functions of a manager, and contributions of theorists	

2	Understand the Management environment including external and internal environment as well as the impact of globalisation and social changes	
3	Planning processes including decision making	
4	Differentiate and comprehend organisational roles, both formal and informal	
5	Understand the basics of staffing including recruitment, selection, and human resources management	
6		

Assessment Details

- Subject Learning Outcomes 1,3 : Presentation 20%
- Subject Learning Outcomes 3,5,6: Essay 60%
- Subject Learning Outcomes 4, 5, 7, 8, 9, 10: Final Examination 20%

Indicative Content

This course is designed to engage students with the key concepts, models, debates and problems in the study of business and management. Students will explore the workings of business organisations, how they function, and how they interact with the environment. The unit will also require the student to consider some of the ways in which business organisations are managed, including the strategies used to guide them and the decisions involved in the role of the manager.

Learning Strategies

Collaborative Learning: Students learn through working in pairs/groups to solve tasks/problems given. In this way, students learn to work together and share responsibility to achieve the common goal.

Authentic Learning. Students learn through engagements in various activities that simulate real-life scenarios. Students are presented with "real life" activities that will make learning more meaningful.

Assessment strategy will be both formative and summative:

Formative assessment strategies are used to check students' current level of understanding and progress; to provide feedback to teacher and learners; and to guide the next phase of learning.

Types of formative assessments for this course will be discussions on tutorial questions and assignments.

Summative assessments are used at the end of the module to formally assess a learner's skill, knowledge and understanding of this course.

Texts

Business Essentials, Global edition 13E, 978-1292426938, Pearson - US, 2017, Ebert & Griffin

Resources

VLE learning support material to be provided for independent /self-directed learning.

Module handbooks

Open Textbook Library Selected contemporary problem/practice based case examples

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Weekly schedule				
Week	Class 1 (Lecture)	Class 2 (Tutorial)	Student Centred Learning Guidance	Assessment
1	Introduction to the module The global business environment	Business Profit and the External Environment	Chapter 1	
2	Business Ethics and Social Responsibility	Ethics in the Workplace	Chapter 2	
3	Understanding the global context of business	International Trade	Chapter 4	Assessment 1 (Group Presentation) issued
4	Managing the Business	Management Roles and Skills	Chapter 5	
5	Organising the Business	Informal Organization	Chapter 6	

6	Operations Management and Quality	Operations Control	Chapter 7	Assessment 2 (Individual Assignment) issued
7	Human Resource management and Labour Relations	Staffing the Organization	Chapter 10	
8	Presentation Preparation		NA	
9	Presentation	Presentation feedback and Assignment advice	NA	
10	Summary, conclusion, and revision of key concepts	Assignment focused work		
11	Assignment checking and development	Assignment checking and development		
12	Session for assessment and examination help Presentation feedback and Assignment advice		Exam revision and assessment finalisation	Assessment 1: Presentation 20% due Assessment 2: Individual Assignment 1200 words due Assessment 3 – MCQ WEEK 14

Module Descriptor

IT FOR GLOBAL BUSINESS

BUVBS123

Summary

Students will develop the skills needed to create text documents and presentation slides, manipulate and analyse data using spreadsheets, as well as organise and retrieve data using database. The module comprises two main parts, i.e. computer concepts and hands-on PC skills to develop a deeper understanding of the various software applications, which are run parallel throughout the semester.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Francesco Meca

Email: francesco.m@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Describe the process of an online-transaction in electronic commerce	

2	Describe the fundamentals of networks and telecommunications technology	
3	Explain how businesses use Information Systems in the organizations	
4	Discuss the uses of Internet technologies within businesses	
5	Classify the various computer hardware and software components available in the market	
6		

Assessment Details

- Subject Learning Outcomes 4, 6, 8

Group Presentation 20%

- Subject Learning Outcomes 1, 7, 9, 10

Individual Assignment 50%

- Subject Learning Outcomes 2, 3, 5

Final Examination 30%

Indicative Content

This module is designed to provide students with fundamental knowledge and skills needed over a broad range of business computing topics in preparation for studies at University level. BUS0715 begins by introducing students to the concepts and theories that underpins the operation of computer particularly the Personal Computer (PC). Students are taught basic through intermediate computer concepts with an emphasis on the PC and its practical use, including computer hardware, software, the Internet and World Wide Web, networks, E-commerce and database management system (DBMS).

Learning Strategies

Collaborative Learning: Students learn through working in pairs/groups to solve tasks/problems given. In this way, students learn to work together and share responsibility to achieve the common goal.

Authentic Learning. Students learn through engagements in various activities that simulate real-life scenarios. Students are presented with “real life” activities that will make learning more meaningful.

Assessment strategy will be both formative and summative:

Formative assessment strategies are used to check students' current level of understanding and progress; to provide feedback to teacher and learners; and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions and assignments.

Summative assessments are used at the end of the module to formally assess a learner's skill, knowledge and understanding of this course.

Texts

Digital Planet: Tomorrow's Technology and You 10e - Complete PNIE, 9781292021065, Pearson, 2013, George Beekman, Ben Beekman

Resources

VLE learning support material to be provided for independent /self-directed learning.

Module handbooks

Open Textbook Library

Selected contemporary problem/practice based case examples

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1	Class 2	Student Center Learning Guidance	Assessment
1	Introduction to Computers and Communications System	Class Quiz, Review and Discussion Questions	Chapter 1 + slides	
2	Data Representation of Computers	Class Quiz, Review and Discussion Questions	Chapter 2 + slides	

3	Computer Hardware & Specifications	Class Quiz, Review and Discussion Questions	Chapter 2, 3 + slides	
4	Software Systems and Applications	Class Quiz, Review and Discussion Questions	Chapter 4, 5, 6 + slides	
5	Building Information Systems	Class Quiz, Review and Discussion Questions	Chapter 14 + slides	
6	Information Systems in Global Business	Class Quiz, Review and Discussion Questions	Chapter 12 + slides	Assignments issued
7	Internet and the World Wide Web	Class Quiz, Review and Discussion Questions	Chapter 9 + slides	
8	Introduction to e-Commerce	Class Quiz, Review and Discussion Questions	Chapter 13 + slides	
9	Communications and Networks	Class Quiz, Review and Discussion Questions	Chapter 8 + slides	
10	Web 2.0 concepts	Class Quiz, Review and Discussion Questions	Chapter 10 + slides	
11	Database Management, Computer Security and Safety	Class Quiz, Review and Discussion Questions	Chapter 7 + slides	
12	Review of all chapters	Exam Preparation		Assignment Submission (W11 or W12), Presentation (W12), Final Exam (W13-W14)

Module Descriptor

Business Skills 1

BUVBS121A

Summary

The aim of this module is to provide students with an introduction to the study and transferrable skills necessary for the satisfactory completion of a higher education business course and subsequent employment and career development. In particular, the module will focus on communication and presentation skills and techniques. Personal Development Planning will also be introduced and developed.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Lee McMillan

Email:

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Demonstrate competence in the use of written and oral communication skills using a range of techniques and technology	Skills Knowledge

2	Initiate the compilation of a personal development plan	Knowledge Autonomy & Responsibilities
3		
4		
5		
6		

Assessment Details

25% HR Assignment of 500 words, assessing LO 2

25% Numeracy Examination, assessing LO2

25% Marketing Presentation & Slides, assessing LO1

25% Personal Development Plan, assessing LO's 1 and 2

Indicative Content

The aim of this module is to provide students with an introduction to the study and transferrable skills necessary for the satisfactory completion of a higher education business course and subsequent employment and career development. In particular, the module will focus on communication and presentation skills and techniques. Personal Development Planning will also be introduced and developed.

Topics will be drawn from: Understanding self and using the university learning facilities, including Study Skills, research skills and developing lines of enquiry and argument, essential literacy and numeracy skills for HE and employment, working in groups and developing team awareness, managing time and effective meeting management, presentation techniques and skills.

Learning Strategies

A combination of lectures and tutorials/workshops. Where necessary, students will be encouraged to utilise the University Study Skills support programme to increase student confidence in written and numeracy skills.

Texts

The Study Skills Handbook (Macmillan Study Skills) 5th ed, 9781137610874, Bloomsbury Publishing, 2019, Stella Cottrell

Resources

IT Network

Information and Library Resources

TV/DVD

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lecture	Tutorial	Student-centered learning guidance
1	Module introduction and PDP	Introduction	Chapters 1 and 2
2	Prepare Program for Personal Improvement	Skills Auditing	Chapter 4
3	Personal Development Planning	Basic Skills in Statistics	Chapter 6
4	Introduction to communications	Basic Skills in Statistics	Chapter 5 and 9
5	Oral Communication Part 1: Meeting Part 2: Presentation Skills	Basic Skills in Statistics	Chapter 13
6	Written Communications: Part 1 and Part 2	How to Participate in a Group Essay Development	Chapter 10
7	Numerical and Graphical Representation of data	Sampling methods.	Chapter 10

8	Distributions and Probability - Intro and Discrete Random Variables	Practice exam	Chapter 8
9	Probability - Binomial Distribution and Normal Distribution 1	Control of Academic Development	Chapter 14
10	Probability - Binomial Distribution and Normal Distribution 2	PowerPoint Development	Chapter 16
11	Revision	Revision	Chapter 17 and 15

Module Descriptor

English for Academic purpose

BUVEAP101

Summary

This course aims to build on students' foundation of English and refine towards usage in academic settings and contexts. The course thus introduces students to core notions found in the comprehension and creation of academic language, alongside building on students' abilities to demonstrate critical thinking and wider study skills.

Students will therefore become more confident in application and awareness of academic conventions in their work, alongside awareness of issues such as plagiarism and academic misconduct.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Clare Joanne Watson

Email: clare.w@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
-----	--------------------------	-----------------------------

1	Develop awareness of academic conventions in writing and speaking	
2	Build strategies for working through complex academic sources	
3	Accurately apply correct referencing systems in their work aligned with the school's conventions	
4	Develop critical thinking skills in academic contexts	
5	Demonstrate research abilities suitable for tertiary study	
6		

Assessment Details

- Subject Learning Outcomes 1,2,3,4,5 Annotated Bibliography & Research Plan 10%
- Subject Learning Outcomes 1,2,3,4,5 Final Reading and Writing Examination 30%
- Subject Learning Outcomes 1,2,3,4,5 Final Research Essay 30%
- Subject Learning Outcomes 1,2,3,4,5 Group Presentation 30%

Indicative Content

English for Academic Purposes (BUVBS101) aims to build on students' existing English competencies and refine these towards academic contexts. In taking this course, students will have a greater understanding of the conventions and formalities present in academic English alongside developing their ability to create texts and language deemed appropriate for academic purposes. Students will also explore fundamental notions surrounding research and judiciously choosing appropriate sources for their own explorations into topics of interest to them.

Learning Strategies

Students will undertake a combination of formative and summative exams throughout the course which aim to test students' 4-skills in an academic setting.

10% Annotated Bibliography & Research Plan

30% Final Reading & Writing Exam

30% Final Research Essay

30% Group Presentation

Total 100%

Texts

Academic Writing: A Handbook for International Students 5E, 9781138048744, Taylor and Francis, 2017, Stephen, B

Resources

VLE learning support material to be provided for independent /self-directed learning.

Module handbooks

Open Textbook Library

Selected contemporary problem/practice based case examples

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Topic	Week	Classes	Self-study	Assignment	Exam
Starting the Writing Process	1	3	2		
Choosing Topics & Research Areas	2	3	2		
Thesis Statements & Essay Outlines	3	3	2		
Judiciously Choosing Sources	4	3	2		
Referencing & Formality	5	3	2		
Writing Workshop	6	3	5	3	
Critical Writing, Tone & Register	7	3	2		

Structuring Introductions	8	3	2		
Paragraphing & Utilising Quotations	9	3	2		
Conclusions, Coherence & Linkers	10	3	2		
Editing & Revising	11	3	2	3	
Final Assessment	12	3	2	6	4

Module Descriptor

Introduction to Accounting

ACCT40288

Summary

This handbook provides you with:

- An introduction to the module
- the names of the module tutors and the module team;
- what previous students said about this subject;
- details of the teaching plan and how you will learn;
- where appropriate, details of supervised work experience.
- the resources you will need to use
- Staffordshire Graduate Attributes
- How you will be assessed
- How you will get feedback
- how to provide feedback on the module
- where appropriate, links with professional recognition/awards;

This module will provide an overview of the role, nature and context of financial accounting as an information providing activity. Students will develop conceptual and practical knowledge on financial accounting process and common major financial statements. This would foster an understanding of the role and nature of accounting information systems, as well as the use of financial accounting information for decision making and accountability.

This 15-credit module has a total of 72 contact hours and is delivered over 24 weeks in weekly 2-hour principal lectures supported by a 1-hour problem and practice based smaller tutorial group session.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Ajay Pillai

Email: ajay.p@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DESCRIBE THE ROLE AND NATURE OF FINANCIAL ACCOUNTING INFORMATION WITHIN THE INTERNAL AND EXTERNAL ENVIRONMENT OF AN ORGANISATION.	Knowledge and Understanding, Knowledge
2	DEMONSTRATE THE USE DOUBLE-ENTRY ACCOUNTING TECHNIQUES TO MAINTAIN ACCOUNTING RECORDS IN A BUSINESS SETTING.	Knowledge and Understanding, Autonomy & Responsibilities
3	EXPLAIN THE ACCOUNTING CONCEPTS AND LEGAL REQUIREMENTS UNDERPINNING THE PREPARATION OF FINANCIAL STATEMENTS.	Skills, Autonomy & Responsibilities
4	GENERATE COMMON FINANCIAL STATEMENTS AND REPORTS FROM COMPLETE AND INCOMPLETE ACCOUNTING DATA.	Autonomy & Responsibilities
5	EXPLAIN AND COMMUNICATE FINDINGS FROM ACCOUNTING INFORMATION.	Skills, Autonomy & Responsibilities and Skills
6		

Assessment Details

Group Assignment (1500 words), based on a reflective review of accounting techniques. 50%

Learning outcomes 1,3 & 5.

Final Examination (duration 1 Hour). This will be a closed book exam testing the concepts, principles and practical application of the principles of accounting. 50%

Learning outcomes 1,2,3,4 & 5.

Indicative Content

This course provides an overview of the role, nature and context of financial accounting as an information providing activity; Students will develop conceptual and practical knowledge on financial accounting process and common major financial statements. This would foster an understanding of the role and nature of accounting information systems, as well as the use of financial accounting information for decision making and accountability. Hence, enabling students to develop an awareness of the complexity of the financial reporting environment.

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge..

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this

course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

Frank Woods's Business Accounting, 15E, 9781292365435, Pearson, 2021, Frank Woods

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1 - Lecture	Class 2 - Tutorials	Independent Learning
1	Introduction to the module The accounting evaluation and the statement of financial position	Problem and practice-based learning to reinforce the lecture	Chapter 1 recommended text
2	The double entry system for assets, liabilities, and capital	Problem and practice-based learning to reinforce the lecture	Chapter 2 recommended text
3	Accounting concepts and legal requirements	Tutorials will be allocated to support revision for the first assessment	Chapter 10 recommended text
4	Introduction to double entry bookkeeping: Ba lancing off T accounts and the trial balance	Problem and practice-based learning to reinforce the lecture	Chapter 4 & 5 recommended text
5	The financial statements of a sole trader: Income Statement: an introduction	Problem and practice-based learning to reinforce the lecture	Chapter 7 recommended text
6	The financial statements of a sole trader: Statement of financial position	Problem and practice-based learning to reinforce the lecture	Chapter 8 recommended text
7	The financial statements of a sole trader - Adjustments to financial statements: Further considerations	Problem and practice-based learning to reinforce the lecture	Chapter 18 to 22 recommended text
8	Adjustments for financial statements	Problem and practice-based learning to reinforce the lecture	Chapter 19 to 22 recommended text

9	Ratio analysis I	Problem and practice-based learning to reinforce the lecture	Chapter 38 & 39 recommended text
10	Ratio analysis II	Problem and practice-based learning to reinforce the lecture	Chapter 38 & 39 recommended text
11	Single entry and incomplete records	Problem and practice-based learning to reinforce the lecture	Chapter 27 recommended text
12	Re-cap and revision	Re-cap and revision	Re-cap and revision

Module Descriptor

Introduction to Management

ACCT40290

Summary

This subject is designed to provide the student with the basic concepts and principles of management in organizations. It focuses on the context of managerial activity and covers the four major functions of management, i.e. planning, organizing, leading and controlling and places them in a historical, political and economic context.

Key facts

Faculty/Department: Business & Economics
 Module Type: Compulsory
 Number of credits: 3
 Prerequisite: None

Contact

Module Leader: Jyotsna Bichalwan
 Email: jyotsna.b@buv.edu.vn

Hours of Study

Contact hours: 45
 Independent Study Hours: 105
 Total Learning Hours: 150
 * 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DESCRIBE THE DIFFERENT THEORIES AND APPROACHES TO MANAGEMENT	Knowledge and Understanding, Knowledge

2	EXPLAIN THE MODELS OF DECISION-MAKING IN THE PLANNING PROCESS IN ORGANIZATIONS	Knowledge and Understanding, Autonomy & Responsibilities
3	EXPLAIN THE EFFECTIVENESS OF RESOURCE MANAGEMENT STRATEGIES	Skills, Autonomy & Responsibilities
4	ASSESS THE IMPORTANCE OF CONTROL SYSTEMS IN WORK AND ORGANIZATIONS	Autonomy & Responsibilities
5	EXPLAIN THE BUSINESS ENVIRONMENT CONTEXTS.	Skills
6		

Assessment Details

Assignment weighted at 50%

Final Examination (duration 1 Hour). This will be a closed book exam testing the concepts, principles of management - 50%

Learning outcomes 1,2,3,4 & 5.

Indicative Content

This subject is designed to provide the student with the basic concepts and principles of management in organisations. It focuses on the context of managerial activity and covers the four major functions of management i.e. planning, organizing, leading and controlling and places them in a historical, political and economic context. Topics covered include:

- Managers and Management
- Historical Evolution of Management (I)
- Historical Evolution of Management (II)
- Business Environment
- Organising
- Motivating Employees
- Leading
- Planning & Strategic Management (I)

- Planning & Strategic Management (II)
- Decision Making
- Human Resource Management
- Effective control

Learning Strategies

Action learning: Learning is achieved when students tackle real world tasks and learn with and through each other. They take individual responsibility and implement solutions and plans.

The assessment strategies include formative and summative assessments. Formative assessment includes quizzes to determine the ongoing understanding and progress of the student and provide feedback to the lecturer and student. Summative assessments (final examination) evaluate the level of conceptual understanding and application that the student has achieved.

For this module formative assessment will be undertaken through the inclusion of quizzes and presentations. Students will have the opportunity to prepare essays for feedback.

Texts

Contemporary Management, 12E, 9781264972432, McGraw-Hill Education, 2021, Gareth R Jones, Jennifer M George

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1 (Lecture)	Class 2 (Tutorial)	Student Centred Learning Guidance
1	Managers and Managing	Tutorial activity, Review and Discussion Questions	Chapter 1, Elon Musk Is in an Empire State of Mind (p.30)

2	Historical Evolution of Management	Tutorial activity, Review and Discussion Questions	Chapter 2, Deutsche Bank Found Inappropriate Communication (p.57)
3	Business Environment	Tutorial activity, Review and Discussion Questions	Chapter 5, PricewaterhouseCoopers Effectively Manages Diversity in Multiple Ways (p.123)
4	Managing in the global environment	Tutorial activity, Review and Discussion Questions	Chapter 6, Cultural Differences That Expatriates Face in International Business (p.178)
5	Motivating Employees	Tutorial activity, Review and Discussion Questions	Chapter 13, High Motivation Rules at the SAS Institute (p.379)
6	Leading	Tutorial activity, Review and Discussion Questions	Chapter 14, Jim Whitehurst Leads Red Hat (p.413)
7	Decision making and learning	Tutorial activity, Review and Discussion Questions	Chapter 7, Decision Making and Learning at 1-800-Flowers.com (p.185)
8	Manager as planner and strategist	Tutorial activity, Review and Discussion Questions	Chapter 8, Toys "R"Us Is Not Playing Around When It Comes to Planning (p.215)
9	Effective Control	Tutorial activity, Review and Discussion Questions	Chapter 11, The Zappos Holacracy (p.313_
10	Human Resource Management	Tutorial activity, Review and Discussion Questions	Chapter 12, Treating Employees Well Leads to Satisfied Customers and Low Turnover at the Four Seasons (p.345)
11	Summary & Conclusion	Tutorial activity, Review and Discussion Questions	
12	Exam preparation		Exam revision

Module Descriptor

Microeconomics

ACCT40292

Summary

This is an intermediate Microeconomics course designed to give students a thorough grounding in the essential concepts of neo-classical Microeconomics.

The first part of the course will concentrate on demand. After revising elementary concepts covered in earlier courses (the market equilibrium, price controls, consumer surplus, the various elasticities of demand, etc.) students will be introduced to Hicksian indifference curve analysis - built up over 2 or 3 weeks - before moving on to the Slutsky approach. The second part of the course will focus on supply. Basic Theory of the Firm principles (production, isoquant curves, cost curves) will be revised, before moving on to Market Structure: Perfect Competition, Monopoly, Monopolistic Competition and most importantly - Oligopolistic Competition. The Cournot-Nash equilibrium will be examined in depth, as well as various other oligopoly models.

The final section will be a brief exposition of the fundamentals of Welfare Economics.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Mark Harris

Email: mark.h@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DEMONSTRATE AN UNDERSTANDING OF THE RELATIONSHIPS (CAUSALITY AND CORRELATIONS) THAT EXIST BETWEEN THE VARIOUS MICROECONOMIC VARIABLES.	Knowledge and Understanding
2	COMPARE THE VARIOUS MICROECONOMIC TOOLS OF ANALYSIS AND ANALYTICAL FRAMEWORKS AND THEIR USE WITHIN THE REAL BUSINESS ENVIRONMENT AND CURRENT EVENTS BY DRAWING ON WEB RESOURCES AND NEWSPAPER ARTICLES.	Knowledge and Understanding, Autonomy & Responsibilities
3	RECOMMEND VARIOUS MICROECONOMIC THEORIES AND MODELS THAT CAN BE APPLIED IN THE CONTEMPORARY BUSINESS ENVIRONMENT.	Skills, Autonomy & Responsibilities
4	INFER KNOWLEDGE OF THE VARIOUS MICROECONOMIC CONCEPTS AND THEIR ROLE IN EXPLAINING THE WORKINGS OF THE BUSINESS ENVIRONMENT.	Autonomy & Responsibilities, Autonomy & Responsibilities
5	DEMONSTRATE STRUCTURING, COMMUNICATING AND DEFENDING ANALYSIS ORALLY, VISUALLY IN WRITING AND USING APPROPRIATE COMPUTER SOFTWARE.	Skills
6		

Assessment Details

Assignment weighted at 50%

Final Examination (duration 1 Hour). This will be a closed book - 50% Learning outcomes 1,2,3,4 & 5.

Indicative Content

In a continuously ever changing globalised business environment, businesses need to make quick, well informed and correct decisions in order to survive. This module is concerned about

the principles of microeconomics as they apply to the business environment. The module outlines the various microeconomic tools of analysis and analytical frameworks that are essential for business students to learn and understand to enable them to comprehend the economic environment of business in a structured way. It complements other Level Four business modules and provides a basis for Level Five and Six modules in both business and economics. Topics studies include:

- The nature and method of economics.
- Perspective of Economics
- Demand, Supply and the Market
- Concept to Elasticity of Demand and Supply
- Application of Demand and Supply. Utilize local issues to apply theory
- Production and Costs • Perfect Competition • Monopoly
- Monopolistic Competition

Learning Strategies

Action learning: Learning is achieved when students tackle real world tasks and learn with and through each other. They take individual responsibility and implement solutions and plans.

The assessment strategies include formative and summative assessments. Formative assessment includes quizzes to determine the ongoing understanding and progress of the student and provide feedback to the lecturer and student Summative assessments (final examination) evaluate the level of conceptual understanding and application that the student has achieved.

For this module formative assessment will be undertaken through the inclusion of a mid semester test and tutorial work for which feedback will be provided.

Texts

Economics 13E global, 9781292255460, Pearson, 2019, MICHAEL PARKIN

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.

- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lecture	Tutorial
1	Basics 1 Supply, demand, the market equilibrium, consumer surplus, price controls.	Tutorial Sheet 1 Problems and past examination questions covering the material covered in this week's lecture.
2	Basics 2 Per unit taxes and subsidies. The price elasticity of demand, the income elasticity of demand and cross-price elasticity of demand.	Tutorial Sheet 2 Problems and past examination questions covering the material examined in this week's lecture.
3	Consumer Theory 1 Introduction to indifference curve analysis. The principle of optimality. Income and substitution effects. The concepts of difference elasticities of demand seen through indifference curve analysis.	Tutorial Sheet 3 Problems and past examination questions covering the material examined in this week's lecture.
4	Consumer Theory 2 Refining the academic Hicksian approach with the more realistic Slutsky approach. The Slutsky equation and the Slutsky	Tutorial Sheet 4 Problems and past examination questions covering the material examined in this week's lecture.
5	Theory of the Firm 1 Basic production principles: isoquants, isocost lines, the cost minimisation principle, returns to scale, returns to a factor and building a	Problems and past examination questions covering the material examined in this week's lecture.

	firm's cost curves.	
6	Theory of the Firm 3 Continuing with cost curves, leading into the start of market structure. Perfect competition, short-run and long-run.	Tutorial Sheet 6 Problems and past examination questions covering the material examined in this week's lecture.
7	Theory of the Firm 4 Monopoly, monopolistic price discrimination and monopolistic competition.	Tutorial Sheet 7 Problems and past examination questions covering the material examined in this week's lecture.
8	Theory of the Firm 5 Oligopoly. The Cournot equilibrium. The Stackelberg equilibrium.	Tutorial Sheet 8 Problems and past examination questions covering the material examined in this week's lecture.
9	Welfare Economics 1 Introduction to the General Equilibrium framework. Allocative efficiency.	Tutorial Sheet 9 Problems and past examination questions covering the material examined in this week's lecture.
10	Welfare Economics 2 The problems of externalities, asymmetric information and public goods.	Tutorial Sheet 10 Problems and past examination questions covering the material examined in this week's lecture.
11	Revision	Mock exam
12	Drop-in consultations	Drop-in consultations

Module Descriptor

Quantitative methods for Business

ACCT40294

Summary

Quantitative Methods for Business is necessary for students to understand basic mathematical concepts and role of quantitative information in business. Students will acquire the knowledge of mathematical and statistical techniques that will assist them to recognize situations where quantitative procedures may be of benefit to organize, summarize and present data in relevant forms.

At the end of the course, students will be able to:

- Interpret results of quantitative analysis for business decision-making.
- Use appropriate statistical techniques for manipulating and analyzing business data.
- Calculate measures of central tendency and measures of variability.
- Identify the appropriate distributions involved in solving probability problems.
- Explain the importance of sampling and the Central Limit Theorem.
- Define the basic statistical principles and their limitation in the context of posing a hypothesis, collecting, analysing and interpreting the results.
- Differentiate between various types of statistical information and reporting.
- Use a computer-based data analysis package to critically analyse data including appropriate techniques in organizing and presenting different types of data.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Prabu Mohan

Email: prabu.m@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	INTERPRET RESULTS OF QUANTITATIVE ANALYSIS FOR BUSINESS DECISION- MAKING	Knowledge and Understanding
2	DEMONSTRATE THE USE OF APPROPRIATE STATISTICAL TECHNIQUES FOR MANIPULATING AND ANALYZING BUSINESS DATA	Knowledge and Understanding, Autonomy & Responsibilities
3	DEFINE THE BASIC STATISTICAL PRINCIPLES AND THEIR LIMITATION IN THE CONTEXT OF POSING A HYPOTHESIS, COLLECTING, ANALYZING AND INTERPRETING THE RESULTS	Skills, Autonomy & Responsibilities
4	DIFFERENTIATE BETWEEN VARIOUS TYPES OF STATISTICAL INFORMATION AND REPORTING	Skills, Autonomy & Responsibilities
5	USE A COMPUTER-BASED DATA ANALYSIS PACKAGE TO CRITICALLY ANALYZE DATA INCLUDING APPROPRIATE TECHNIQUES IN ORGANIZING AND PRESENTING DIFFERENT TYPES OF DATA	Autonomy & Responsibilities, Skills
6		

Assessment Details

Assignment weighted at 50%

Final Examination (duration 1 Hour). This will be a closed book exam - 50% Learning outcomes 1, 2, 3, 4 & 5.

Indicative Content

This subject is designed to provide students with an appreciation of the application of analytical tools to business decision contexts. It also develops students' abilities to access and critically interpret mathematics and statistics information. The subject places strong emphasis on developing a clear theoretical understanding of various analytical tools. This is particularly true in business where learning to deal with randomness, variation and uncertainty is a vital skill for anyone intending to apply their knowledge in any employment. Students will also gain an introduction to many of the quantitative techniques which will be used throughout their further studies in their chosen discipline. Topics studied include;

- Introduction to Quantitative Methods
- Mathematics of Finance: Simple & Compound Interest

- Annuity & Amortisation
- Linear Programming
- Introduction to Statistics and Descriptive Statistics
- Probability and Discrete Probability Distributions
- Continuous Probability Distribution and Sampling Distribution
- Confidence Interval
- Hypothesis Testing - One Population • Hypothesis Testing - Two Population
- Chi Square - Goodness-of-fit tests and Contingency Tests
- Simple Linear Regression and Correlation • Multiple Regression Model

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the

programme formally to assess a learner's skill, knowledge and understanding gained in this course.

Texts

Statistics for Business and Economics, 9E, 9781292315034, Pearson, 2012, Paul Newbold

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1	Class 2	Student centred learning guidance
1	Introduction to Statistics and Descriptive Statistics	Problems and exercise to reinforce the lectures	Chapter 1, 2 and 3 (Main reference)
2	Probability and Discrete Probability Distributions	Problems and exercise to reinforce the lectures	Chapter 4 and 5 (Main reference)
3	Continuous Probability Distribution and Sampling Distribution	Problems and exercise to reinforce the lectures	Chapter 6 and 7 (Main reference)
4	Confidence Intervals	Problems and exercise to reinforce the lectures	Chapter 8 and 10 (Main reference)
5	Hypothesis Testing - One Population	Problems and exercise to reinforce the lectures	Chapter 9 and 10 (Main reference)
6	Hypothesis Testing - Two Population	Problems and exercise to reinforce the lectures	Chapter 9 and 10 (Main reference)
7	Chi Square - Goodness-of-fit tests and Contingency Tests	Problems and exercise to reinforce the lectures	Chapter 13 (Main reference)
8	Simple Linear Regression and Correlation; Multiple Regression Model	Problems and exercise to reinforce the lectures	Chapter 14 and 15 (Main reference)
9	Introduction to Quantitative Methods Mathematics of	Problems and exercise to reinforce the lectures	Chapter 16 (Additional reference 1)

	Finance: Simple & Compound Interest		
10	Annuity & Amortisation	Problems and exercise to reinforce the lectures	Chapter 16 (Additional reference 1)
11	Revision and Mock exam		
12	Review	Feedback on Mock exam	

Module Descriptor

Introduction to Finance

ACCT40289

Summary

This subject introduces main concepts and methods associated with financial decision-making for individuals and enterprises: the concept of cash flow valuation, evaluation of financial performance, valuation of securities, risk and returns, capital budgeting, and an overview of international finance.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Joey Lai

Email: joey.lai@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DESCRIBE THE MAIN AREAS IN FINANCIAL MANAGEMENT, THE GOAL OF FIRMS, AGENCY	Knowledge, Knowledge

	PROBLEMS AND ROLE OF FINANCIAL MANAGERS	
2	DEMONSTRATE THE ABILITY TO INTERPRET AND DEVELOP THE ABILITY TO WORK WITH FINANCIAL STATEMENTS	Knowledge
3	INTERPRET THE RELATIONSHIP BETWEEN RISK AND RETURN WHILE APPLYING KNOWLEDGE FROM DIFFERENT INVESTMENTS SUCH AS BONDS AND EQUITY	Skills, Autonomy & Responsibilities
4	DESCRIBE A FIRM'S COST OF CAPITAL, AND THE IMPACT OF LEVERAGE AND DIVIDEND ON CAPITAL & IDENTIFY THE COMMON APPROACHES TOWARDS RAISING CAPITAL	Autonomy & Responsibilities
5	EXPLAIN THE IMPACT OF CURRENCY CHANGES ON INTERNATIONAL TRANSACTIONS AND THE ASSOCIATED RISKS	Skills, Autonomy & Responsibilities
6		

Assessment Details

Group Assignment (1500 words), based on a reflective review of accounting techniques. 50%

Learning outcomes 1,2 & 3.

Final Examination (duration 1 Hour). This will be a closed book exam testing the concepts, principles and practical application of the principles of accounting. 50%

Learning outcomes 1,2,3,4 & 5.

Indicative Content

This subject introduces main concepts and methods associated with financial decision-making for individuals and enterprises: the concept of cash flow valuation, evaluation of financial performance, valuation of securities, risk and returns, capital budgeting, and an overview of international finance.

Topics include:

- Intro to Financial Management
- Financial Statement, Taxes and Cash Flow
- Working with Financial Statement • Valuation of Future Cash Flows - Time Value of Money
- Valuation of Future Cash Flows
- Interest Rates and Bond Valuation
- Equity Market and Stock Valuation • Capital Budgeting - Net Present Value & Capital Decisions
- Risk and Return • Financing Issues - Cost of Capital • Financing Issues - Leverage and Capital Market Structure
- Financing Issues - Raising Capital
- International Aspects of Financial Management

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be diagnostic, formative and summative. Diagnostic assessments are used to determine the progressive capability of students. Types of assessments include discussions on tutorial questions, weekly tutorial assignments and mid semester test. Formative assessment strategies are used to test the current level of understanding and progress at any in a learning programme and provide feedback to teacher and learner and to guide the next phase of learning. The formative assessment for this course will be the group project assignment.

Texts

Business Finance: Theory & Practice, 11E, 9781292134406, Pearson, 2017, Eddie McLaney

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Area	Content	Independent learning
1a	Introduction to Financial Management	<p>Introduction to financial management</p> <ul style="list-style-type: none"> • The role of business finance • The objective of the firm • Risk and business finance • The relationship between business finance and accounting • The organisation of business • Corporate governance and the role of directors • Long-term financing of companies • Raising and repaying long-term finance • roles of management accountants • Liquidation • Derivatives • Private equity funds • Financial markets and the corporation 	<p>Read: Chapter 1 McLaney, E. (2017). Business Finance Theory and Practice. 11th Ed. Harlow: Pearson Education.</p> <p>Chapter 1 [Optional]. Arnold, G. (2013). Corporate Financial Management 6th Ed. Harlow: Pearson Education</p>
1b	A framework for financial decision making	<ul style="list-style-type: none"> • Financial decision making • Business objectives • Conflicts of interests: shareholders versus managers – the ‘agency problem’ • Financing, investment, and separation • Behavioural finance • Cost classification for control • Appendix - Formal derivation of the separation 	<p>Read: Chapter 2 McLaney, E. (2017). Business Finance Theory and Practice. 11th Ed. Harlow: Pearson Education</p>

		theorem	
2	Working with financial statements	<ul style="list-style-type: none"> • The financial statements m • Definitions and conventions of accounting • Problems with using accounting information for decision making • Creative accounting • Ratio analysis • Using accounting ratios to predict financial failure 	Read: Chapter 3 McLaney, E. (2017). Business Finance Theory and Practice. 11th Ed. Harlow: Pearson Education
3	Valuation of future cash flows - Time value of money	<ul style="list-style-type: none"> • Compounding • Discounting • Annuities • Perpetuities • Exercises 	Read: Chapter 4 McLaney, E. (2017). Business Finance Theory and Practice. 11th Ed. Harlow: Pearson Education
4	Interest rates and bond valuation	<ul style="list-style-type: none"> • Fundamental features of debt finance • Bonds • Bank borrowings • Syndicated loans • Credit rating • Valuing bonds • International sources of debt finance • Project finance • Securitization • Islamic finance • The term structure of interest rates 	Readings to be provided by instructor.
5	Equity market and stock valuation	<ul style="list-style-type: none"> • What is equity capital? • Preference shares • Methods of issue • The costs of new issues • Right issues • Valuing shares • 	Readings to be provided by instructor.
6 & 7	Capital Budgeting	<ul style="list-style-type: none"> • Basic concepts • Payback period • Accounting rate of return • Net Present value • Internal rate of return • Practical aspects of investment appraisal 	Chapters 4 & 5 McLaney, E. (2017). Business Finance Theory and Practice. 11 th Ed. Harlow: Pearson Education

8	Risk and return	<ul style="list-style-type: none"> • Introduction to risk and return • Expected values and use of probabilities • Attitudes to risk • Systematic risk and specific risk • Capital Asset Pricing model (CAPM) • Portfolio theory • Arbitrage pricing model • Diversification within the business • Risk - the story so far 	Chapters 6 & 7 McLaney, E. (2017). Business Finance Theory and Practice. 11 th Ed. Harlow: Pearson Education
9	Financing Issues I	<ul style="list-style-type: none"> • Sources of long-term finance • Cost of capital estimations and the discount rate • Gearing, the cost of capital and shareholders' wealth • The dividend decision I 	Chapters 8, 10, 11 & 12 McLaney, E. (2017). Business Finance Theory and Practice. 11 th Ed. Harlow: Pearson Education
10	Financing issues II International aspects of financial management	<ul style="list-style-type: none"> • The dividend decision II • Capital market efficiency • Foreign exchange • Problems of internationalization • Risks of internationalization, management of those risks and portfolio theory 	Chapters 9, 12 & 15 McLaney, E. (2017). Business Finance Theory and Practice. 11 th Ed. Harlow: Pearson Education
11 & 12	Revision and Mock Exam	<ul style="list-style-type: none"> • Mock Exam • Feedback on mock exam 	
Exact date, time and location of exam will be communicated later.			

Module Descriptor

Employability, IT and Reasoning Techniques

ENTP40034

Summary

The emphasis on this module is 'learning by doing'. That is to say that the learning takes place through personal experience, social interaction, and reflection. The learning programme is reflecting the view that learning can take place outside as well as inside the classroom. Students will be expected to attend several events throughout the module. These events may vary according to student need and timing of the event. These events will add value to the student learning experience and will encourage the students to reflect on learning events outside the classroom.

The students will be expected to keep a portfolio throughout the module and should include a description of the event, what was learned from it and how it impacts on the student's aspirations; thoughts on the development of their career skills set. Students should also draw on personal learning from across their programme i.e., on other modules that they are attending.

It should be noted that specific references should be made in the reflective portfolio to describe international/global aspects relating to either their study programme and/or to the events attended and their relevance in a global context.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Lee McMillan

Email: lee.m@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DEMONSTRATE COMPETENCE IN THE USE OF WRITTEN AND ORAL COMMUNICATION SKILLS, BOTH AS AN INDIVIDUAL AND IN GROUP SETTINGS, EMPLOYING A RANGE OF TECHNIQUES AND TECHNOLOGIES	Skills Knowledge
2	INITIATE THE COMPILATION OF A PERSONAL DEVELOPMENT PLAN	Knowledge Autonomy & Responsibilities
3	UNDERSTAND THE PROCESS OF CRITICAL REASONING AND EMPLOY THAT UNDERSTANDING IN SUPPORT OF THE STUDENT'S PERSONAL DEVELOPMENT AS A LEARNER	Skills
4	DEMONSTRATE COMPETENCE IN THE USE OF COGNITIVE SKILLS TO THE PROCESS OF RETRIEVING, ORGANISING, ANALYSING AND CRITICALLY EVALUATING INFORMATION RELATING TO ISSUES IN THE MANAGEMENT OF ORGANISATIONS	Autonomy & Responsibilities Knowledge
5		
6		

Assessment Details

Assignment Weighted at 50%

Assessment Reflective Portfolio of student experience incorporating the PDP and Action Plan weighted at 50%

Assessment will be by reflective portfolio (produced in electronic format using for example, PebblePad). It will include:

A Personal development statement/review

Reflection on skills development and review areas for further personal career development

The student will be expected to attend a number of events attended as directed by the tutor. These events may vary according to student need and timing of occurrence, but will be considered as being suitable and beneficial learning opportunities. Each Portfolio entry will involve a description of the event, what was learnt from it and how it impacts on a student's aspirations/ thoughts on the development of career skills. Students should also draw on personal learning from across their programme. Tutors will determine the number of events to be included in the Portfolio, which will be communicated to the student at the outset of the module.

Specific references should be made in the reflective portfolio to describe international/global aspects relating to either their study programme and/or to events attended and their relevance in the global context.

Within the reflective portfolio:

PDP there should also be evidence of your

1. Employability skills

Evidence demonstrating individual student competence in the various techniques delivered on the module. A video of a group presentation. (40%)

2. Information Literacy skills

Individually produced spreadsheet, word-processed document, presentation materials and poster (15%)

3. Reasoning skills
A 1000 word individual assignment (30%)

4. An action plan for future review (15%)

Indicative Content

1. Attend a series of events (the precise number will need to be agreed with the module leader/programme leader/personal tutor as appropriate reflecting the subject context). These may include:

- University-wide events and lectures & programme specific and/or industry related to any area of the University curriculum.
- Events external to the University which are either relevant to the core BA/BSc programme and/or of interest to the student (e.g. plays/films/concerts, public lectures, exhibitions)

- Create a personal development statement as part of a reflective portfolio

2. Attend a series of interactive student-centred Skills Workshops, which will include the appreciation and development of CV writing, study skills, employability skills, presentation/communication skills. In particular students will review the skills and qualities they already possess, with reference to how these skills relate to those skills and attributes regarded as critical by employers.

Introduction to module

Self-audit techniques Building a PDP and CV

Team Building

Effective Verbal Communication

Effective Written Communication

Research techniques

Business Calculations Time management

3. Make a presentation as part of a team

Business Presentations

4. IT skills

In their own time students will produce a professionally formatted: Word-processed document
spreadsheet using formulas

presentation

Poster (using Publisher, or equivalent)

5. Reasoning skills

Understanding the component parts of a reasoned argument. Assembling said parts into a sound argument

Identifying poor arguments

e.g. propaganda, unsupported claims, simple opinions etc.

Critically assessing the quality of arguments.

Critically assessing the quality of evidence used in the construction of arguments.

Using web databases for research purposes

Identifying high quality academic sources for use as evidence in academic work/arguments.
Using web sources in a professional manner.

Learning Strategies

The emphasis is upon learning by doing', where learning takes place through personal experience, social interaction and reflection. The learning programme is reflecting the view that learning can take place outside as well as inside the classroom. Contact will be in the form of interactive, student-centred workshops supported by role-playing, lectures and tutorials. Supporting learning materials will be available via use of a VLE or website where available.

Development of subject, skills knowledge and understanding will be supported through lectures, study materials and students self-directed study. Cognitive abilities will be developed through seminars and workshops that will include active learning processes, activities and discussions that are applied to the management context.

Texts

Critical Thinking Skills Developing Effective Analysis and Argument 3E, 9781137550507, Macmillan, 2017, Stella Cottrell

Resources

A range of resources, including, University library and IT facilities, the Internet, journals and databases

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Day	Lecture	Tutorial	Student centred learning guidance
1	Introduction to the module, introduction to the assessment.	<i>Discussion Question - Tutorial 1</i>	https://www.cuw.edu/departments/lrc/assets/handouts/4%20Learning%20Styles.pdf

	Knowing myself! Values and beliefs that influence people's behaviour and decision making	Critical thinking skills / Self-Audit techniques; Life Values Inventory	http://www.brainboxx.co.uk/a2_learnstyles/pages/LSall4.htm http://skillsforlearning.leedsbeckett.ac.uk/preview/content/models/02.shtml Cottrell, S., (2011) "Critical Thinking Skills" Palgrave, Basingstoke Chapter 2 'How well do you think'?
2	Personality Profiling Work based competencies	Personality test The importance of understanding individual skills and competences; SWOT analysis	http://personality-testing.info/tests/ODAT/ Cottrell, S., (2011) "Critical Thinking Skills" Palgrave, Basingstoke Chapter 8 'Where is the proof'?
3	CV, cover letter, Assessment centres, Interview techniques The international job markets	Practice and role play. Build personal development plan Preparation and Support with Assessment 1	Trought, F., (2012) "Brilliant Employability Skills" Pearsons, Chapter 3 Trought, F., (2012) "Brilliant Employability Skills" Pearsons, Chapters 2 and 5
4	Academic Writing. Structure, presentation Effective networking Communication and Negotiation	Preparation and Support with Assessment 2 Preparation and Support with Assessment 2	Cottrell, S., (2011) "Critical Thinking Skills" Palgrave, Basingstoke Chapter 9 https://www.pon.harvard.edu/shop/oil-pricing-exercise-3/
5	Leadership Vs Management Effective Teams	Preparation and Support with Assessment 3 Preparation and Support with Assessment 3	Cottrell, S., (2011) "Critical Thinking Skills" Palgrave, Basingstoke Chapter 12
6	Emotional Intelligence and Critical reasoning Academic Research Poster Presentation Support rest of assignment	Preparation and Support with Assessment 4 Preparation and Support with Assessment 4	

Module Descriptor

ORGANISATIONAL BEHAVIOUR

ACCT40293

Summary

This subject is designed to provide the candidate with an introduction to psychological and behavioural approaches to the study of organisation behaviour incorporating basic analytical tools and concepts used from the field that encourage an understanding of the behaviour of individuals and groups in the workplace.

Key facts

Faculty/Department: Business & Economics
 Module Type: Compulsory
 Number of credits: 3
 Prerequisite: None

Contact

Module Leader: Kostas Tsontos
 Email: kostas.t@buv.edu.vn

Hours of Study

Contact hours: 45
 Independent Study Hours: 105
 Total Learning Hours: 150
 * 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	EXPLAIN THE RELATIONSHIP BETWEEN MOTIVATION THEORIES AND MANAGEMENT PRACTICES	Knowledge and Understanding, Autonomy & Responsibilities, Skills

2	DEMONSTRATE AN UNDERSTANDING OF THE NATURE OF ORGANISATIONAL BEHAVIOUR WITHIN THE FIELD OF BUSINESS	Knowledge and Understanding
3	EXPLAIN THE DIFFERENT FACTORS THAT INFLUENCE THE BEHAVIOUR OF INDIVIDUALS AND GROUPS	Skills, Autonomy & Responsibilities
4	EVALUATE THE IMPACT OF ORGANISATIONAL STRUCTURE AND CULTURE ON BUSINESS SUCCESS	Autonomy & Responsibilities
5		
6		

Assessment Details

Group presentation (15 minutes) - 30%

Learning outcomes 1 & 2.

Final Individual Assignment (1200 words) - 70%

Learning outcomes 1,2,3 & 4.

Indicative Content

This subject is designed to provide the candidate with an introduction to psychological and behavioural approaches to the study of work and organisations. The course introduces some of the basic analytical tools and concepts from the field of organisation behaviour and work psychology that encourage an understanding of the behaviour of individuals and groups in the workplace.

Topics to be studied include:

- The nature of organizational behaviour
- Approaches to work, organization & management
- Understanding perception, learning & personality
- The psychological contract
- Theories of motivation
- Job satisfaction

- The key factors in job design
- Groups and their functions
- Roles in work groups
- Building groups into teams
- The communication process
- Using communication channels in organizations
- The barriers to communication
- Improving communication in organizations
- Factors influencing interpersonal relations
- Improving interpersonal relations in organizations
- Approaches to leadership
- Difference between managers and leaders
- Transformational vs. Transactional leadership
- Definition of power
- Bases of power
- Factors that influence power in organizations
- Organizational politics
- How power and politics can be moral
- The functions of organizational culture
- How members read their organisation ' s culture
- Managing organizational culture
- The factors that cause change
- Why change is often resisted

- Managing the planned change process

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge..

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner 's skill, knowledge and understanding gained in this course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

Work in the 21st Century: An Introduction to Industrial and Organizational Psychology 6E, 9781119493419, Wiley, 2018, Conte, Jeffrey M./Landy, Frank J.

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lecture	Reading	Tutorial	Assessment Schedule
1	Introduction to the module and organisational behaviour basics	Chapter 1	Case studies and end-of- chapter questions	
2	Values, Attitudes, Moods and Emotions	Chapter 9	Case studies and end-of- chapter questions	
3	The Nature of Work motivation	Chapter 8 (and part of 14)	Case studies and end-of- chapter questions	
4	The nature of work groups and teams	Chapter 13	Harvard Negotiation Game	{Class test}
5	Leaders and Leadership	Chapter 12	Case studies and end-of- chapter questions	
6	Organisational Culture	Chapter 14 (part)	Case studies and end-of- chapter questions	Assessments 1 and 2 released
7	Power and politics, Fairness and Diversity	Chapter 11	Assignment instructions	
8	Organisational Design and Performance	Chapter 4	Video analysis	{Class test}
9	Preparation for mock presentation		Mock presentations	
10	Preparation for group presentation		Presentation draft	
11	Assignment preparation	All chapters covered	Assignment focused work	
12	1-1 Sessions, Presentation, and Assignment submission			Presentation and Assignment submission

Module Descriptor

MACROECONOMICS

ECON40222

Summary

This course provides students with a thorough evaluation of intermediate Macroeconomics based upon the framework of the Hicksian IS/LM model, augmented by the Nobel Prize winning Mundell-Fleming model of open-economy activity in the modern world, considering flows of capital (or limited capital mobility) under all three kinds of exchange rate regimes.

The first few weeks will be devoted to a detailed and rigorous examination of the Keynesian 45-degree model in both a closed and open economy. The money side of the economy will then be analyzed before moving to the derivation of - and rigorous manipulation of - the infamous IS/LM model.

The rest of the term will be devoted to ISLM analysis in both a closed and open economy. Inflation, unemployment - and any possible links between these two so-called economic 'bads' - will be analyzed, culminating in IS/LM (flexible prices) analysis (aggregate demand / aggregate supply analysis in a closed economy framework).

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Jon Neale

Email: jonathan.n@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Compare the various macroeconomic tools of analysis and analytical frameworks and their use within the real business environment and current events by drawing on web resources and newspaper articles.	Knowledge and Understanding Knowledge
2	Infer how the major macroeconomic variables (such as national output, expenditure and income) and problems (such as inflation and unemployment) within the macro economy are measured and the extent	Knowledge and Understanding Autonomy & Responsibilities

	of their causality and correlations.	
3	Recommend various macroeconomic theories and models that can be applied in the contemporary macroeconomic scenario.	Skills Autonomy & Responsibilities
4	Demonstrate structuring, communicating and defending analysis orally, visually and in writing.	Autonomy & Responsibilities and Skills
5		
6		

Assessment Details

Group Assignment (1500 words) 50% meeting learning outcomes 1,3, and 5

Final Examination (duration 1 Hour) This will be a closed book exam. 50% meeting learning outcomes 1,2,3, 4 and 5

Indicative Content

This module introduces basic macroeconomic framework where students will use learn to use aggregate demand/supply, and Keynesian expenditure analysis to understand and interpret macroeconomic phenomena such as real GDP, potential output, business cycles, interest rates, and how federal government policies impact upon such macroeconomic indicators. Topics include:

- Introduction to Macroeconomics
- The Macroeconomic Environment of Business - The National Income
- Aggregate Demand and Aggregate Supply
- The Keynesian Income and Expenditure Model: Simple economy
- The Keynesian Income and Expenditure Model: Open economy
- Demand - side Policy: Fiscal Policy
- Financial Markets and the Banking System: Money Supply and Money Demand
- Demand-side Policy: Monetary Policy and Interest Rates: Implications for Business
- Supply-side Policies
- Unemployment & Inflation
- The International Business Environment: Balance of Payments and Exchange Rates
- International Trade: globalisation; balance of payments

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner 's skill, knowledge and understanding gained in this course.

Texts

Economics, 9780134735696, Pearson, 2020, Michael Parkin

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week 1	<p>Lecture 1</p> <p>Introduction to Macroeconomic basics.</p> <p>The Keynesian 45° model part 1</p>	<p>Tutorial 1</p> <p>Questions from the Chapter relating to the material introduced in Lecture 1.</p>
Week 2	<p>Lecture 2</p> <p>The Keynesian 45° model part 2: Consumption and Investment.</p>	<p>Tutorial 2</p> <p>The remaining questions from the Chapter relating to the material introduced in Lecture 1.</p>
Week 3	<p>Lecture 3</p> <p>The Keynesian 45° model part 3: the Government sector, foreign trade.</p>	<p>Tutorial 3</p> <p>Questions from the Chapter relating to the material introduced in Lecture 2.</p>
Week 4	<p>Lecture 4</p> <p>Money markets: their operation and influence on the real economy.</p>	<p>Tutorial 4</p> <p>Questions from the Chapter relating to the material introduced in Lecture 3.</p>
Week 5	<p>Lecture 5</p> <p>Derivation of the IS and the LM</p>	<p>Tutorial 5</p> <p>Questions from the Chapter relating to the material introduced in Lecture 4.</p>
Week 6	<p>Lecture 6</p> <p>IS/LM analysis in a closed economy framework.</p>	<p>Tutorial 6</p> <p>Questions from the Chapter relating to the material introduced in Lecture 5.</p>

Week 7	Lecture 7 IS/LM analysis in an open economy framework with no capital mobility.	Tutorial 7 Questions from the Chapter relating to the material introduced in Lecture 6.
Week 8	Lecture 8 IS/LM analysis in an open economy framework with perfect capital mobility.	Tutorial 8 Questions from the Chapter relating to the material introduced in Lecture 7.
Week 9	Lecture 9 Inflation, unemployment, the Phillips Curve and the Adaptive Expectations. Augmented Phillips Curve.	Tutorial 9 Questions from the Chapter relating to the material introduced in Lecture 8.
Week 10	Lecture 10 Derivation of the Aggregate Demand and the Aggregate Supply. Classical vs. Keynesian views of the AS.	Tutorial 10 Questions from the Chapter relating to the material introduced in Lecture 9.
Week 11	Lecture 11 IS/LM and AD/AS analysis in a world of flexible prices.	Tutorial 11 Questions from the Chapter relating to the material introduced in Lecture 10.
Week 12	Lecture 12 Revision.	Tutorial 12 Questions from the Chapter relating to the material introduced in Lecture 11, and revision.

Module Descriptor

Management Information Systems

ACCT40291

Summary

This course provides an overview of the role, nature and context of financial accounting as an information providing activity; Students will develop conceptual and practical knowledge on financial accounting process and common major financial statements. This would foster an understanding of the role and nature of accounting information systems, as well as the use of financial accounting information for decision making and accountability. Hence, enabling students to develop an awareness of the complexity of the financial reporting environment.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Francesco Meca

Email: francesco.m@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
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1	EXPLAIN THE IMPORTANCE OF INFORMATION SYSTEMS IN BUSINESS TODAY AND ASSESS THE ROLE OF THE INFORMATION SYSTEMS IN VARIOUS FUNCTIONS IN A BUSINESS	Knowledge and Understanding, Knowledge
2	ANALYSE THE CHANGING ROLE OF INFORMATION SYSTEMS AND TECHNOLOGY STRATEGIES TO ACHIEVE COMPETITIVE ADVANTAGE	Skills
3	DEMONSTRATE AN AWARENESS OF THE BROADER SOCIAL AND ORGANISATIONAL IMPLICATIONS OF INFORMATION SYSTEMS, AND OF THE NECESSITY TO MANAGE CHANGE	Skills, Autonomy & Responsibilities
4	EXPLAIN THE OPERATIONS OF INFORMATION SYSTEMS AND THE ROLE OF TECHNOLOGY WITHIN SYSTEMS, AND HOW COMPUTERISED INFORMATION SYSTEMS ARE DEVELOPED, ACQUIRED OR OUTSOURCED	Knowledge and Understanding, Autonomy & Responsibilities
5	APPLY WEB 2.0 CONCEPTS AND EMERGING TECHNOLOGIES TO ENHANCE COMMUNICATION, COLLABORATION, PERFORMANCE AND STRATEGY IMPLEMENTATION	Skills, Skills
6		

Assessment Details

Group Assignment (1500 words), based on a reflective review of accounting techniques - 50% Learning outcomes 1,2,3 & 5.

Final Examination (duration 1 Hour). This will be an open book exam testing all learning outcomes - 50% Learning outcomes 1,2,3,4 & 5

Indicative Content

This course provides an overview of the role, nature and context of financial accounting as an information providing activity; Students will develop conceptual and practical knowledge on financial accounting process and common major financial

statements. This would foster an understanding of the role and nature of accounting information systems, as well as the use of financial accounting information for decision making and accountability. Hence, enabling students to develop an awareness of the complexity of the financial reporting environment.

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning. Students will go through a reflective process within small co-operative learning groups.

Case based Learning. Students will hold discussions around specific situations, typically real world examples. This method is learner-centered and involves intense interaction between the participants. Case based learning focuses on the building of knowledge, critical thinking skills and team spirit.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge..

Assessment strategy will be both formative and summative. Formative assessment strategies (creating and compiling of portfolio, case study presentation, class participation) are used to test the current level of understanding and progress, to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this course.. Group presentation will form part of the summative assessment for this module. In addition case studies will form the basis of tutorials to check understanding of key concepts and theories.

Texts

Information Technology For Management NJ: John Wiley & Sons 10th International student edition, 9781118961261, Wiley, 2015, Efraim Turban, Dorothy E. Leidner, Ephraim R. McLean, James C. Wetherbe

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1	Class 2	Student Center Learning Guidance
1	Digital Technology: Growth and Performance in Business + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 1 textbook + ML' slides
2	Data Governance, IT Architecture, I-Cloud + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 2 textbook + ML' slides
3	Data Management; Analysis and Business Intelligence + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 3 textbook + ML' slides
4	Digital Networks; effect on financial performance + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 4 textbook + ML' slides
5	CyberSecurity, Risk Management, Financial Crimes + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 5 textbook + ML' slides
6	Internet Technologies & Search Strategies + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 6 textbook + ML' slides
7	Social Media Strategies & Metrics + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 7 textbook + ML' slides
8	Retail, Mobile and E-Commerce + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 8 textbook + ML' slides
9	Strategic Enterprise Systems + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 9, 10 textbook + ML' slides
10	Data Visualization & Geographic Systems + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 11 textbook + ML' slides
11	IT Strategy & Balanced Scorecard + MIS specific material provided by ML	Class Quiz, Review and Discussion Questions and Case Study	Chapter 12 textbook + ML' slides
12	Review of all chapters	Exam Preparation	

Module Descriptor

Corporate Finance

ACCT50536

Summary

The focus of this module is very much real-world with emphasis on the practical application of financial strategy in today's dynamic business environment. This module begins by an introduction to financial objectives and financial management together with issues of ownership and control. You will proceed to calculate, analyse, and interpret a wide range of financial ratios, including capital gearing and investor ratios. Working capital control and cash management techniques will also be examined. The problems with using accounting information and the creative accounting will be considered. You will learn the range of different sources of long, medium and short-term finance available to businesses.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Jed Clarke

Email: jed.c@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
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1	UNDERSTAND THE ROLE OF FINANCIAL MANAGEMENT IN THE PERFORMANCE OF ORGANISATIONS AND CRITICALLY APPRAISE ALTERNATIVE SOURCES OF FINANCE FOR BUSINESS FIRMS	Skills, Skills, Knowledge and Understanding Knowledge
2	CRITICALLY ANALYSE THE FINANCIAL POSITION AND PERFORMANCE OF ORGANISATIONS USING KEY RATIOS	Skills, Knowledge and Understanding, Knowledge, Autonomy & Responsibilities
3	APPLY ADVANCED DECISION-MAKING TECHNIQUES IN A RANGE OF SHORT TERM AND LONG TERM SITUATIONS AND COMMUNICATE FINDINGS	Autonomy & Responsibilities, Skills, Knowledge and Understanding, Knowledge, Autonomy & Responsibilities
4		
5		
6		

Assessment Details

Indicative Content

The focus of this module is very much real-world with emphasis on the practical application of financial strategy in today's dynamic business environment.

This module begins by an introduction to financial objectives and financial management together with issues of ownership and control.

You will proceed to calculate, analyse and interpret a wide range of financial ratios, including capital gearing and investor ratios. Working capital control and cash management techniques will also be examined. The problems with using accounting information and the creative accounting will be considered.

You will learn the range of different sources of long, medium and short-term finance available to businesses,

including the various forms of equity finance, borrowings, hybrid finance, retained earnings and government based assistance. This leads to a consideration of the costs of raising different types of finance, and then to the concept of the weighted average cost of capital and the preferred

capital structure. We then introduce how stock markets operate, their trading systems and regulation and the efficient market hypothesis.

The module progresses by enhancing the study of investment appraisal evaluation techniques used in practice, including advanced aspects of the use of DCF techniques, consideration of capital rationing and taxation implications.

Learning Strategies

Whole group sessions - a series of participatory lectures will disseminate knowledge and understanding as the foundation for a structured programme of tutorial sessions. Topical business-world examples and case studies will be used extensively to support learning.

Small group sessions - a series of weekly tutorial sessions where students will work individually and in groups on practical exercises to reinforce their learning.

The class room delivery will be supported by materials available on the VLE to guide further self-directed study at a pace and time convenient to the student.

Students will be provided with general guidance in the module study guide, and receive specific guidance and training where needed.

The tutorial sessions include case-based exercises and activities that require students to prepare work outside formal contact hours and to discuss findings with tutor and peers during the tutorial session. As such, formative feedback will be a feature of these sessions.

Extensive use is made on online discussions to extend learning between sessions.

Texts

Principles of Corporate Finance, 14E, 9781265074159, McGraw-Hill International Edition, 2022, Richard A. Brealey

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.

- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lectures	Tutorials	Student centred learning guidance
1	Introduction to the module and an overview of corporate finance	Students work on questions provided in page 14-16; and some additional work on pricing a corporate bond	Chapter 1, 2 & 3
2	Making investment decisions with the NPV rule, and project risk analysis	Students work on questions 1-9 provided in page 152-153	Chapter 6
3	Risk and the cost of capital	Students work on questions provided in page 242-246	Chapter 9
4	Weighted average cost of capital	Students work on the work assigned by Module Leader.	
5	Efficient markets and behavioral finance	Students work on the work assigned by Module Leader.	Chapter 13
6	An overview of corporate financing; Does debt policy matter?	Students would present their works.	Chapter 14, 15 & 17
7	How much should a firm borrow?	Students work on the work assigned by Module Leader.	Chapter 18
8	How do firms decide on the dividend payout?	Students work on the work assigned by Module Leader.	Chapter 16
9	Pay-out policy and valuation	Independent learning	Chapter 19
10-11	Ratio analysis and working capital management	Students work on the work assigned by Module Leader.	Chapter 30
12	Introduction to International finance	Students work on the work assigned by Module Leader.	Chapter 27 & 31

Module Descriptor

Financial Markets

ACCT50523

Summary

Financial markets aim to introduce students to the money and capital market environment in which business organizations operate. The module presents an overview of the financial system and its various components, including financial markets, instruments, and institutions. Students will gain an understanding of the financial system, its operations and component parts; yield curve analysis, the term structure of interest rates, and exchange rate interaction; sources and types of business finance, short, medium, and long term, domestic and overseas, and associate pricing formulae; the structure and operation of Vietnamese financial institutions and markets; the major types of risk and the derivative products available to manage financial risk; the structure, functions and role of prudential supervision in the financial markets.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Ajay Pillai

Email:

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DISCUSS THE STRUCTURE AND OPERATION OF FINANCIAL INSTITUTIONS AND MARKETS IN VIETNAM	Knowledge and Understanding, Knowledge
2	EXPLAIN GOVERNMENT MONETARY POLICY AND THE TERM STRUCTURE OF INTEREST RATES	Knowledge and Understanding, Autonomy & Responsibilities
3	EVALUATE SHORT AND MEDIUM TO LONGER TERM FINANCIAL INSTRUMENTS	Skills, Autonomy & Responsibilities
4	ANALYSE THE DERIVATIVE PRODUCTS AVAILABLE TO MANAGE FINANCIAL RISK	Skills, Autonomy & Responsibilities
5	APPLY COMPUTER SOFTWARE PACKAGES FOR ANALYSING ISSUES RELATING TO MONEY AND BANKING	Autonomy & Responsibilities, Skills, Skills
6		

Assessment Details

Individual Assignment (1500 words), based on all learning outcomes - 50% Learning outcomes 1, 3 & 5.

Final Examination (duration 1 Hour). This will be a closed book exam all learning outcomes -50%. Learning outcomes 1, 2, 3, 4 and 5.

Indicative Content

Financial market introduces students to the money and capital market environment in which business organizations operate. The module presents an overview of the financial system and its various components, including financial markets, instruments, and institutions.

On completion of this module students should demonstrate an understanding of a financial system, its operation and component parts; yield curve analysis, the term structure of interest rates, and exchange rate interaction; sources and types of business finance, short, medium and long term, domestic and overseas, and associate pricing formulae; the structure and operation of Malaysian financial institutions and markets; the major types of risk and the derivative products available to manage financial risk; the structure, functions and role of prudential supervision in the financial markets.

Topics include:

The Financial System: Overview

The Payment System

Financial Institutions and Regulation

Funds and Insurance

Introductions to Financial Markets

The Money Market

The Capital Market

The Foreign Exchange & Capital Market

Interest Rate Determination:

Term and Risk Structure of Interest rate

Derivatives Markets and Risk Management

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

Finance and Financial Markets, 4E, 9781137515629, Bloomsbury Publishing, 2018, Keith Pilbeam

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1 - Lecture	Class 2 - Tutorial	Reading/Tutorial
1	Introduction to Financial markets The financial system	Class Activities to reinforce lecture.	Readings Chs 1 & 2. Teaching notes uploaded in Canvas.
2	Financial Institutions and regulations - The role of FIs and the rationale of regulation.	Class Activities to reinforce lecture.	Readings Chs 3 & 18 Teaching notes uploaded in Canvas.
3	Financial Intermediation and financial markets - Funds and Insurance	Class Activities to reinforce lecture.	Readings Chs 2 & 3 Teaching notes uploaded in Canvas.
4	The money market and capital market	Class Activities to reinforce lecture.	Readings Chs 5 & 6 Teaching notes uploaded in Canvas.
5	The foreign exchange and capital market	Class Activities to reinforce lecture.	Readings Ch 7 Teaching notes uploaded in Canvas.
6	Interest rate determination	Class Activities to reinforce lecture.	Readings Chs 12 & 14 Teaching notes uploaded in Canvas.
7	Term and risk structure of interest rates	Class Activities to reinforce lecture.	Readings Ch 12 Teaching notes uploaded in Canvas

8	Derivatives markets and risk management - Forward, Futures, Swaps & Derivatives	Class Activities to reinforce lecture.	Readings Chs 14, 15 & 16 Teaching notes uploaded in Canvas.
9	Revision	Covers learning outcomes 1, 2 and 3.	Mock Test 1
10	Revision	Covers learning outcomes 4 & 5	Mock Test 2
11	Revision 1 for Final Exam	Covers all learning outcomes	Mock Exam
12	Revision 2 for Final Exam	Covers all learning outcomes	Revision 2 for Final Exam

Module Descriptor

Professional Development (Enterprise, Entrepreneurship and Citizenship)

ENTP50075

Summary

This module in developing the themes and learning gained in Enhancing Career and Personal Success provides further learning opportunities, including work-based/work-related experiences that enable students to acquire the skills and qualities that will enhance their career prospects, horizons, and personal success, thus preparing the student for the expectations of the world of work, namely:

1. Have the ability to carry out inquiry based learning and critical analysis.
2. Be work ready and employable - be technologically, digitally and information literate
- and understand the importance of being enterprising and entrepreneurial
3. Be able to apply Staffordshire Graduate attributes to a range of life experiences to facilitate life-long learning.

This module focuses on what are regarded as entrepreneurial and innovative mind-sets, behaviors, and skills. The student has already been introduced to the value of innovation, creativity, collaboration, and risk-taking skills. These are applicable to a wide range of careers and disciplines, from the public sector, charities, universities, and social enterprises to corporate organizations large and small and new venture start-ups. The module will encourage a way of thinking and behaving relevant to all parts of society and the world-of-work. It is intended to present exciting and innovative opportunities to utilize for their own personal career development. Such opportunities might range from voluntary/pro bono work in social enterprises, participation in sport, to apprenticeships, to work-placements, to part-time work and so on.

This module offers the opportunity to build on the knowledge the student has acquired so far in pursuing the Staffordshire Graduate Employability Programme and their degree programme as a whole, specifically looking at the world of work and citizenship. Business, Tourism and Events students have already been introduced to:

- Understanding and working in the workplace (Resourcing The Organization and also Entrepreneurial Marketing)
- What 'being enterprising' really means (Entrepreneurial Marketing)

- Innovation and Risk-taking (Entrepreneurial Marketing)

This module will introduce the students to:

- Entrepreneurial/Intrapreneurial mind-sets, behaviors, and skills/ contributions from the world of work.
- Developing Citizenship, personal and corporate responsibilities.
- Using the PDP effectively in the preparation of a CV and covering letter/application preparation techniques (including on-line interviews), Selection and Assessment centers.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Sandra Sneiderman

Email: sandra.s@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Be work ready and employable and understand the importance of being enterprising and entrepreneurial through the reflection upon your career goals in relation to your personal and professional development and citizenship	Knowledge, Autonomy & Responsibilities
2	Demonstrate competence in a variety of skills associated with job interviews and professional writing through being a good communicator with the confidence to interact with a range of	Knowledge, Autonomy & Responsibilities

	colleagues. Effectively communicate your skill and abilities to employers through the problem solving and contextualisation of your own experiences in work-based situations	
3	Self-evaluate and reflect on your progress in developing the attributes considered essential for the Staffordshire Graduate	Skills, Autonomy & Responsibilities
4		
5		
6		

Assessment Details

To satisfactorily complete the module the student is required to record and reflect upon his/her learning experiences gained inside and outside the classroom; the latter primarily being work-related/ work-environment experiences. This is achieved through the use of a personal development plan (PDP).

The summative assessment will comprise the creation of a Brand Me presentation, weighted at 50% and the production of a personal reflective journal based on work experience, weighted at 50% - these will assess all Learning Outcomes

The portfolio provides the opportunity for students to critically evaluate their progress in acquiring the Staffordshire Graduate Attributes

There are formative assessment points (personal tutorials) during the semester for students to receive feedback on their PDP and progress from an assigned tutor. This will give them an indication of their current performance in relation to the Learning Outcomes before submitting the PDP for summative assessment at the end of the module.

In addition to gaining formative feedback on their PDP, students will be formatively assessed on the development of various job application documents (e.g. CV, cover letter, application form) and will be encouraged to seek feedback from the Career centre or module or personal tutors.

Indicative Content

This module in developing the themes and learning gained in Enhancing Career and Personal Success provides further learning opportunities, including work-based/ work-related experiences that enable students to acquire the skills and qualities that will enhance their career prospects, horizons and personal success, thus preparing the student for the expectations of the world of work, namely:

1. Have the ability to carry out inquiry based learning and critical analysis

2. Be work ready and employable - be technologically, digitally and information literate - and understand the importance of being enterprising and entrepreneurial

3. Be able to apply Staffordshire Graduate attributes to a range of life experiences to facilitate life-long learning.

This module focuses on what are regarded as entrepreneurial and innovative mind-sets, behaviours and skills. The student has already been introduced to the value of innovation, creativity, collaboration and risk-taking skills. These are applicable to a wide range of careers and disciplines, from the public sector, charities, universities and social enterprises to corporate organisations large and small and new venture start-ups. The module will encourage a way of thinking and behaving relevant to all parts of society and the world-of-work. It is intended to present exciting and innovative opportunities to utilise for their own personal career development. Such opportunities might range from voluntary/pro bono work in social enterprises, participation in sport, to apprenticeships, to work-placements, to part-time work and so on.

This module offers the opportunity to build on the knowledge the student has acquired so far in pursuing the Staffordshire Graduate Employability Programme and their degree programme as a whole, specifically looking at the world of work and citizenship.

Business, Tourism and Events students have already been introduced to:

- Understanding and working in the workplace (Resourcing The Organisation and also Entrepreneurial Marketing)
- What 'being enterprising' really means (Entrepreneurial Marketing)
- Innovation and Risk-taking (Entrepreneurial Marketing)

This module will introduce the students to:

- Entrepreneurial/ Intreprenurial mind-sets, behaviours and skills/ contributions from the world of work
- Developing Citizenship, personal and corporate responsibilities
- Using the PDP effectively in the preparation of a CV and covering letter/application preparation techniques (including telephone interviews), Selection and Assessment centres.

Learning Strategies

The module features a wide range of learning methods, appropriate to the content. These will include interactive, student- centred workshops, role-playing, lectures and tutorials supported by the use of a virtual learning environment (Blackboard) and the careers portal (eCoach). The

emphasis continues to be upon 'learning by doing', where learning takes place through personal experience, social interaction and reflection. In the workplace the student will be seeing and doing things themselves as well as observing and interacting with others. Such experiences can be called upon as exemplars of learning through work in respect of the vocational ideas, knowledge and skills that become transferable and applicable to other work contexts.

The module will facilitate close contact with the world-of-work, drawing on contributions from external practitioners (discipline related or not) to support the student learning experience as well as the development of appropriate networking opportunities.

Students will have the opportunity to hear employers drawn from a wide and varied range of organisations who will identify and explain what they consider to be the key attributes when recruiting graduates.

The time spent in the work-related environment should be a minimum of 25 hours during the duration of the module. This time will be recorded in the PDP with evidence of reflection on what has been learned from these work-related experiences.

Students will be encouraged to continue their work-related experience beyond the level 5 module itself. Engagement in work-related experiences can include any of the following:

- Work placement
- Volunteering experience
- Social enterprise project
- Existing part time work
- Organising an event or series of events
- Setting up a new club/society
- Job shadowing

Texts

Skills for success: Personal development and employability, 4E, 9781352011593, Macmillan, 2021, Stella Cottrell

Resources

Portfolio Guidance

Student Handbook/ Module Notes

Computing facilities for accessing material on the web/ Blackboard will be available to support the module

The module will be supported by an Enterprise & Employability Resource Bank that will provide learning materials from your Faculty/School, Careers as well as external contributors. Students will be encouraged through the Students Union's Enterprise Society to make use of student-led activities such as workshops, mentoring and networking events provided by NACUE (National Consortium of University Entrepreneurs) as well using and populating a website/depository for disseminating and sharing 'good practice'.

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1	Tutorials	Textbook chapters	Assignment Schedule
1	Introduction. Self-development. Feedback	Art of reflecting + PDP planning	Chapter 2	Overview of key elements of the assessments
2	Goal setting (Personal SWOT analysis / SMART Goals)	Job search skills	Chapter 2	Related to 1-2
3	Communication - Verbal / non-verbal Interview	INTERVIEW / ETIQUETTE	Chapter 10 and 16	Related to 1-2
4	Communication - written RESUME AND COVER LETTER	Resume + cover letter	Chapter 10 and 15	Related to 1-2
5	Professional / Citizenship - PDP	Resume + cover letter	Chapter 15	Related to 1-2
6	Being Professional / Enterprise / Entrepreneurialism	REVIEW - RESUME, CL, INTERVIEW	Chapter 10, 15 and 16	Release assessments

7	Attitude / Accountability and Workplace relationship	Planning a PDP	Chapter 2 and 7	Related to 2
8	Leadership	PDP development	Chapter 12	Related to 2
9	Motivation and Teams	Writing a reflective journal	Chapter 12	Related to 2
10	Conflict and Negotiation	Public speaking skills	Chapter 13	Related to 2
11	Critical thinking / Innovation	PDP development	TBA	Related to 2
12	Final discussion - self-assessment	Assignment help	-	Assessments submission

Module Descriptor

International Trade and Multinational Business

ACCT50524

Summary

In an ever progressing and changing business environment; trade, finance and investment play a crucial and significant role in the world economy. This module concentrates on the introduction of the key theories explaining international trade, finance and investment. Framework of this module will give importance to expose learners with to the fundamental concepts of international trade, finance and investment and tools that are essential for them to understand and analyze the operation of international currency markets and the different types of exchange rate regimes. It complements other Level Two Economics/Finance modules and provides a basis for Level Three Economics/Finance modules.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Jon Neale

Email: jonathan.n@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	ANALYSE THE KEY THEORIES EXPLAINING INTERNATIONAL TRADE, FINANCE AND INVESTMENT IN THE CONTEXT OF THE WORLD ECONOMY	Skills, Knowledge
2	DISCUSS THE HISTORICAL FACTORS DETERMINING THE EXISTENCE AND GROWTH OF INTERNATIONAL TRADE AND INVESTMENT	Knowledge and Understanding, Autonomy & Responsibilities
3	EVALUATE THE WORKINGS OF THE MULTINATIONAL BUSINESS IN THE WORLD TRADING SYSTEM	Skills, Autonomy & Responsibilities, Skills
4	DEMONSTRATE AN UNDERSTANDING OF THE OPERATION OF INTERNATIONAL CURRENCY MARKETS AND THE DIFFERENT TYPES OF EXCHANGE RATE REGIMES	Knowledge and Understanding, Autonomy & Responsibilities
5	ANALYSE THE IMPACT OF FOREIGN DIRECT INVESTMENT UPON PATTERNS OF ECONOMIC DEVELOPMENT	Skills, Knowledge and Understanding
6		

Assessment Details

Assignment weighted at 50%

Final Examination (duration 1 1/2 Hours). This will be a closed book exam testing all learning outcomes - 50%

Learning outcomes 1, 2, 3, 4 & 5.

Indicative Content

In an ever progressing and changing business environment; trade, finance and investment play a crucial and significant role in the world economy. This module concentrates on the introduction of the key theories explaining international trade, finance and investment. Framework of this module will give importance to expose learners with to the fundamental concepts of international trade, finance and investment and tools that are essential for them to understand and analyze the operation of international currency markets and the different types of exchange

rate regimes. It complements other Level Two Economics/Finance modules and provides a basis for Level Three Economics/Finance modules.

- The Foundations of Trade Theory - Mercantilism, Classical trade theory: Ricardo and classical liberalism, Neo-classical trade theory
- Alternative theories of trade; Economic growth, welfare and international trade
- Foundations of Trade Policy: Instruments and Impact of trade Policy.
- Foundations of Trade Policy: Trade policy and multinational business.
- Foundations of Trade Policy: From GATT to the WTO
- Foundations of Trade Policy: Current issues in international trade management.
- Multinational Business in the World Trading System:
 - The growth of foreign direct investment.
- Multinational Business in the World Trading System:
 - Theories of foreign direct investment.
- Multinational Business in the World Trading System:
 - Current issues in multinational business activity.
- International Finance:
 - The growth of international capital markets.
- International Finance:
 - The operation of foreign exchange markets.
- International Finance:
 - Managing exchange rate risk.

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this course. For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

International Economics, 7th Edition, 9781292214160, San Diego State University, 2017,

James Gerber

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1	Class 2
1	Introduction to International Trade	Class Quiz, Review and Discussion Questions and Case Study
2	Patterns of International Trade	Class Quiz, Review and Discussion Questions and Case Study
3	Specific Factors Model of International Trade: Gains and Losses	Class Quiz, Review and Discussion Questions and Case Study
4	Heckscher-Ohlin Model;	Class Quiz, Review and Discussion Questions and Case Study

5	Labour and Capital Movement	Class Quiz, Review and Discussion Questions and Case Study
6	Monopolistic Competition	Class Quiz, Review and Discussion Questions and Case Study
7	Offshoring of Goods and Services	Class Quiz, Review and Discussion Questions and Case Study
8	Perfect Competition: Imports & Tariffs	Class Quiz, Review and Discussion Questions and Case Study
9	Imperfect Competition: Imports & Tariffs	Class Quiz, Review and Discussion Questions and Case Study
10	Export Policies: Resource-based & High Tech Industries	Class Quiz, Review and Discussion Questions and Case Study
11	International Trade Agreements	Class Quiz, Review and Discussion Questions and Case Study
12	Review of all chapters	Exam Preparation

Module Descriptor

Modelling and Estimation

ACCT50526

Summary

The module provides a model for the students to understand the mathematical underpinnings of the economic models and application of standard econometric approaches to testing economic theories using appropriate data. An awareness of the problems that are often encountered when using standard econometric approaches to analyse economic data, and an ability to use appropriate techniques to deal with these problems would also be delivered. Students would also be exposed to a working knowledge of the standard econometric tools. There are numerous constraints faced and objectives needs to be achieved in the daily economic activities in both micro and macro perspective.

This module concentrates on the introduction of econometric tools to analyze and solve competing models. The students will be able to examine some key analytical and modelling techniques that are used in modern economics. The module will also enhance students mathematical, statistical, and computer-related skills, and their understanding of the problems associated with using published data. The module also provides a foundation for level 3 economics modules, especially the project.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Joey Lai

Email: joey.lai@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DEMONSTRATE AN UNDERSTANDING OF THE MATHEMATICAL UNDERPINNING OF STANDARD ECONOMETRIC TOOLS AND HOW THEY CAN BE USED.	Knowledge and Understanding, Knowledge, Autonomy & Responsibilities.
2	ANALYSE STANDARD ECONOMETRIC APPROACHES TO TESTING ECONOMIC THEORIES USING APPROPRIATE DATA.	Skills, Autonomy & Responsibilities
3	DISCUSS QUANTITATIVE TECHNIQUES IN ANALYSING ECONOMIC PROBLEMS.	Skills, Autonomy & Responsibilities, Skills.
4		
5		
6		

Assessment Details

Assignment Weighted at 50%

Final Examination (duration 1 1/2 Hours). This will be a closed book exam testing all learning outcomes - 50%

Learning outcomes 1, 2 & 3.

Indicative Content

The module provides a platform for the students to understand the mathematical underpinnings of the economic models and application of standard econometric approaches to testing economic theories using appropriate data. An awareness of the problems that are often encountered when using standard econometric approaches to analyse economic data, and an ability to use appropriate techniques to deal with these problems would also be delivered. Students will also be exposed to a working knowledge of the standard econometric tools. There are numerous constraints faced and objectives needs to achieved in the daily economic activities in both micro and macro perspective. This module concentrates on the introduction of econometric tools to analyze and solve competing economic models. The students will also be able to examine some key analytical and modelling techniques that are widely used in modern

economics. The module will also enhance students' mathematical, statistical and computer-related skills, and their understanding of the problems associated with using published data. . The module also provides a foundation for level 3 economics modules, especially the project. Topics to be studied include:

- Introduction to Estimation and Modelling
- Unconstrained optimization: necessary and sufficient conditions for maxima and minima, concavity and convexity.
- Application: profit maximization and the theory of the firm
- Partial differentiation. Constrained optimization: models involving an equality constraint. Lagrangean multipliers.
- Applications: maximizing utility, the theory of production, constrained sales-revenue maximization.
- Using econometric tools to estimate the coefficients of selected models containing several explanatory variables.
- Interpretation and understanding of the various outputs
- Testing hypotheses and interpreting coefficients. Goodness of fit. Choice of models.
- Linear versus log-linear models. Calculating elasticity of demand.
- Econometric problems: multicollinearity, mis-specification and serial correlation
- Ways of identifying and dealing with these problems.
- Selected applications: modelling aggregate consumption, modelling the demand for selected foodstuffs, competing models of inflation

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this

course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this course.

For this module formative assessment will be undertaken through regular completion of tutorial work with additional work to be completed outside of the University as directed independent study. Students will receive feedback on these additional tasks to aid their understanding of this complex topic. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

Mathematics for Economics and Business (9th Edition), 9781292191683, Pearson, 2018, Ian Jacques

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Topic	Details	Tutorial
1	Introduction to modelling and estimation	Linear equations Non-linear equations	Tutorial Numerical exercises
2	Unconstrained optimisation	Optimization and its role in modelling	Tutorial Numerical exercises
3	Partial differentiation	Functions with several variables and optimization (constrained and unconstrained)	Tutorial Numerical exercises
4	Using econometric tools	Applications for models with several variables	Tutorial Numerical exercises

Week	Topic	Details	Tutorial
5	Interpretation and understanding of the various outputs.	Coefficients in statistics, descriptive statistics, correlations	Tutorial Numerical exercises Reading: Ch. 23
6	Testing hypothesis and understanding of the various outputs	Hypothesis testing and analysis of error	Tutorial Numerical exercises
7	Linear versus log-linear models. Calculating elasticity of demand.	Linear and multiple regression as predictive models	Tutorial Numerical exercises
8	Econometric problems	ANOVA tables and linear and multiple regression.	Tutorial Numerical exercises
9	Selected applications I	Modelling aggregate consumption, modelling the demand for selected foodstuffs, competing models of inflation	Tutorial Numerical exercises
10	Selected applications II	Modelling competing models of inflation	Tutorial Numerical exercises.
11	Mock Test & Feedback		Tutorial: Revision
12	Feedback	Feedback on mock test and revision	Tutorial: Revision

Module Descriptor

Credit Management

ACCT50522

Summary

The subject provides students with the general principles of credit management as well as ensuring students' understanding in the application of credit management principles. The module allows students' understanding on clear distinction of credit management for personal, business as well as international market. In the end the module enhances students' understanding on the importance of credit management in personal and business environment and lays a foundation for more complex credit management topics.

Topics include: • Introduction to Credit Management

- The Financial Effect of Credit Management
- Credit Policy & Organization
- Assessing Risk in Trade Credits
- Credit Rating & Risk Categories
- Debt Collection
- Export Credit
- Retail Credit Management
- Credit Insurance
- Foreign Exchange & Credit Management

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Jed Clarke

Email: jed.c@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DEMONSTRATE AN UNDERSTANDING OF THE PRINCIPLES OF CREDIT MANAGEMENT AND THE KNOWLEDGE TO APPLY THESE PRINCIPLES.	Knowledge and Understanding, Knowledge, Skills
2	DISCUSS CREDIT MANAGEMENT PRINCIPLES FOR PERSONAL, BUSINESS AND INTERNATIONAL ENVIRONMENT.	Knowledge and Understanding, Autonomy & Responsibilities
3	EVALUATE CURRENT CREDIT MANAGEMENT PRACTICES AND BEHAVIOURS IN THE LOCAL AND INTERNATIONAL ENVIRONMENT.	Skills, Autonomy & Responsibilities, Autonomy & Responsibilities
4		
5		
6		

Assessment Details

Individual Assignment (1500 words), based on a reflective review of credit management techniques. 50%

Learning outcomes 1, 2 & 3.

Final Examination (duration 1 Hour). This will be a closed book exam testing the concepts, principles and practical application of the principles of credit management. 50%

Learning outcomes 1, 2 & 3.

Indicative Content

The subject provides students with the general principles of credit management as well as ensuring students' understanding in the application of credit management principles. The module allows students' understanding on clear distinction of credit management for personal, business as well as international market. In the end the module enhances students' understanding on the importance of credit management in personal and business environment

and lays a foundation for more complex credit management topics. Topics include:•
Introduction to Credit Management• The Financial Effect of Credit Management• Credit Policy &
Organization

- Assessing Risk in Trade Credits
- Credit Rating & Risk Categories
- Debt Collection• Export Credit• Retail Credit Management• Credit Insurance
- Foreign Exchange & Credit Management

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this

course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

"Credit Management", 6th edition, 9780566088438, Gower (Routledge), 2010, Glen Bullivant (FICM)

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lecture Session	Tutorial Session	Student centred learning guidance
1	Introduction to Credit Management	Questions and discussion points provided by lecturer	Read Chapter 1 - Credit Management Function
2	The Financial Effect of Credit Management	Discuss chapter 2 The Financial Effect of Credit Management	Read Chapter 2 - The Financial Effects of Credit Management
3	Credit Policy & Organization	Discuss chapter 3 Credit policies and Organisation	Read Chapter 3 - Credit Policy and Organisation
4	Assessing Risk in Trade Credits	Discuss Chapter 5 of text Assessing risk in trade credits	Read Chapter 5 - Assessing Risk in Trade Credits
5	Credit Rating & Risk Categories	Discuss Chapter 6 of text Credit rating and risk categories	Read Chapter 6 - Credit Rating & Risk Categories
6	Debt Collection	Discuss Chapter 11 collection of trade debts	Read Chapter 11 - Debt Collection
7	Export Credit	Discuss Chapter 16 Export credit insurance and 17 Export credit and collection. Go over assignment requirements	Read Chapters 16 & 17 - Export Credit and Finance
8	Retail Credit Management	Discuss chapter 20 Retail credit management	Read Chapter 20 - Retail Credit Management
10	Credit Insurance	Lecturer to supply readings for	

		discussion	
11	Foreign Exchange & Credit Management	Discuss chapter 19 Foreign Exchange	Read Chapter 19 - Foreign Exchange
12	Independent Study		

Module Descriptor

Investment Management

ACCT50525

Summary

This module will explore and analyse the theory, concepts, tools and techniques of investment and portfolio management. The course builds upon and extends the concepts and techniques studied in the introduction to finance and corporate finance modules. At the conclusion of the course the student should be familiar with current industry practice and an understanding of the theoretical framework supporting investment analysis and portfolio management.

On completion of this module students should demonstrate an understanding of the Investment environment, theories involved, analysis used, valuation models, portfolio management and portfolio performance evaluation techniques. The course is a capstone module and, as such, draws on and integrates materials from earlier modules, as well as introducing new materials.

This module handbook is designed to give you an overview of the module, what you can expect as well as what is expected of you.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Aiman Abousher

Email: aiman.a@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	DEMONSTRATE AN UNDERSTANDING OF THE CHARACTERISTICS OF FINANCIAL ASSETS AND THE INVESTMENT ENVIRONMENT INCLUDING INDUSTRY ETHICS	Knowledge and Understanding, Knowledge.
2	DISCUSS THE MAIN CONCEPTS OF MODERN PORTFOLIO AND CAPITAL MARKET THEORY AND THEIR LINK TO ASSET PRICING MODELS	Knowledge and Understanding, Autonomy & Responsibilities.
3	3. DEMONSTRATE AN UNDERSTANDING OF EQUILIBRIUM ASSET PRICING MODELS AND FACTOR MODELS	Knowledge and Understanding, Skills, Autonomy & Responsibilities
4	GENERATE COMMON FINANCIAL STATEMENTS AND REPORTS FROM COMPLETE AND INCOMPLETE ACCOUNTING DATA	Autonomy & Responsibilities
5	DEMONSTRATE AN UNDERSTANDING OF INVESTMENT ANALYSIS, INCLUDING A COMPETENCE IN THE USE OF VARIOUS EQUITY AND BOND VALUATION MODELS	Skills, Autonomy & Responsibilities, Skills
6		

Assessment Details

Assignment weighted at 50%

Final Examination (duration 1.5 hours). This will be a closed book exam testing all learning outcomes - 50%

Learning outcomes 1,2,3,4&5

Indicative Content

This module will explore and analyze the theory, concepts, tools and techniques of investment and portfolio management. The course builds upon and extends the concepts and techniques

studied in the introduction to finance and corporate finance modules. At the conclusion of the course the student should be familiar with current industry practice and an understanding of the theoretical framework supporting investment analysis and portfolio management.

On completion of this module students should demonstrate an understanding of the Investment environment, theories involved, analysis used, valuation models, portfolio management and portfolio performance evaluation techniques. The course is a capstone module and, as such, draws on and integrates materials from earlier modules, as well as introducing new materials.

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this

course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

Investment Analysis and Portfolio Management 11th Edition, 9781305262997, Cengage Learning, 2018, Frank K. Reilly (Author), Keith C. Brown (Author), Sanford J. Leeds (Author)

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1 - Lecture	Class 2 - Tutorial	Student centred learning guidance
1	Introduction of the Module Handbook Introduction of the Module Understanding the basics of Investment Management	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during lectures and tutorials.
2	The Investment Setting and Industry Ethics - Chapter 1 and 17	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during lectures and tutorials.
3	Asset Allocation and Security Selection - Chapter 2	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during lectures and tutorials.
4	Organisation and functioning of security markets - Chapter 3	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during

			lectures and tutorials.
5	Efficient Capital Markets - Chapter 5	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during lectures and tutorials.
6	Asset Pricing Models and Factor Models - Chapter 7	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during lectures and tutorials.
7	Asset Pricing Models and Factor Models - Chapter 7	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during lectures and tutorials.
8	Equity Valuation - Chapter 8	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during lectures and tutorials.
9	The Practice of Fundamental Investing - Chapter 10	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of

			understanding during lectures and tutorials.
10	Bond Fundamentals and Valuation - Chapter 12	Class Activities to reinforce lecture.	Application of what students learn in class to the real world, with real life examples. Students will be asked question to check their level of understanding during lectures and tutorials.
11	Revision 1 for Final Exam - Mock Exam 1 - Chapter 1, 17, 2, 3, & 5	Revision 1 for Final Exam - Mock Exam 1 - Chapter 1, 17, 2, 3, & 5	Revision 1 for Final Exam - Mock Exam 1 - Chapter 1, 17, 2, 3, & 5
12	Revision 2 for Final Exam - Mock Exam 2 - Chapter 7, 8, 10 & 12	Revision 2 for Final Exam - Mock Exam 2 - Chapter 7, 8, 10 & 12	Revision 2 for Final Exam - Mock Exam 2 - Chapter 7, 8, 10 & 12

Module Descriptor

Advanced Corporate Finance

ACCT50537

Summary

Advanced corporate Finance covers theoretical and major issues in corporate finance. The breadth of corporate finance and corporate treasury management will be examined. Various methods of company and share valuation will be explored, linking this to the other areas in the module.

This module will examine take-over and merger activity considering real-life case studies and the various financing methods available including the growing importance of private equity finance. Capital reconstruction, divestments, diversifications, and corporate failure. This module continues by considering the measurement and analysis of the different types of risk, and the various methods available for business to manage these risks effectively. Portfolio theory and Capital Asset Pricing Model will be studied in this context.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Ajay Pillai

Email: ajay.p@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	APPLY ADVANCED DECISION-MAKING TECHNIQUES IN A RANGE OF SHORT TERM AND LONG TERM SITUATIONS AND COMMUNICATE FINDINGS	Autonomy & Responsibilities, Skills, Knowledge and Understanding, Knowledge, Autonomy & Responsibilities
2	CRITICAL UNDERSTANDING OF THE COMPLEXITIES INVOLVED IN ASSESSING AND MEASURING FINANCIAL RISK AND THE RETURN ON INVESTMENT	Skills, Knowledge and Understanding, Knowledge, Autonomy & Responsibilities
3	3. APPLY A RANGE OF MODELS/TECHNIQUES IN THE PROCESS OF BUSINESS VALUATION	Autonomy & Responsibilities, Knowledge and Understanding, Knowledge, Autonomy & Responsibilities
4		
5		
6		

Assessment Details

Assignment weighted at 50%

EXAMINATION LENGTH 2 HOURS, COVERING LEARNING OUTCOMES 1, 2 & 3 weighted at 50%.

Indicative Content

The breadth of corporate finance and corporate treasury management is examined. You will then go on to explore the various methods of company and share valuation, linking this to the areas studied throughout the module.

You will examine take-over and merger activity considering real-world case studies and the various financing methods available including the growing importance of private equity finance. We will also examine capital reconstructions, divestments, diversification and corporate failure.

The module continues by considering the measurement and analysis of the different types of risk, and the various methods available for businesses to manage these risks effectively. Portfolio theory and the Capital Asset Pricing Model will be studied in this context.

The module will then consider the determinants of a company's dividend policy together with a framework for analysing dividend policy.

The module concludes by exploring international aspects of Corporate Finance and will include consideration of the advantages of multi-national companies (MNCs) over national companies, the complexities of foreign direct investment (FDI) and exchange rate hedging strategies.

Learning Strategies

Whole group sessions - a series of participatory lectures will disseminate knowledge and understanding as the foundation for a structured programme of tutorial sessions. Topical business-world examples and case studies will be used extensively to support learning.

Small group sessions - a series of weekly tutorial sessions where students will work individually and in groups on practical exercises to reinforce their learning.

The classroom delivery will be supported by materials available on the VLE to guide further self-directed study at a pace and time convenient to the student.

Students will be provided with general guidance in the module study guide, and receive specific guidance and training where needed.

The tutorial sessions include case-based exercises and activities that require students to prepare work outside formal contact hours and to discuss findings with tutor and peers during the tutorial session. As such, formative feedback will be a feature of these sessions.

Extensive use is made on online discussions to extend learning between sessions.

Texts

Corporate Financial Management 6th Edition, 9781292140445, Pearson , 2019, Glen Arnold / Deborah Lewis (Author)

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1 - Lecture	Class 2 - Tutorial	Reading/Tutorial
1	Introduction to Advanced corporate Finance The financial world	Class Activities to reinforce lecture.	Readings Chs 1 & 2. Teaching notes uploaded in Canvas.
2	Risk and project appraisal Sensitivity, analysis, Expected value and risk analysis	Class Activities to reinforce lecture.	Readings Ch 6 Teaching notes uploaded in Canvas.
3	WACC & CAPM	Class Activities to reinforce lecture.	Readings Ch 7 Teaching notes uploaded in Canvas.
4	Portfolio theory	Class Activities to reinforce lecture.	Readings Ch 7. Teaching notes uploaded in Canvas.
5	Working Capital Management <ul style="list-style-type: none"> - Basic concepts. - Working capital and liquidity - Management of cash, receivables, inventories, and payables 	Class Activities to reinforce lecture.	Readings Chs 1 & 2. Teaching notes uploaded in Canvas.
6	Valuation methods - I	Class Activities to reinforce lecture.	Teaching notes uploaded in Canvas.
7	Valuation methods - II	Class Activities to reinforce lecture.	Teaching notes uploaded in Canvas.
8	Valuation by DCF	Class Activities to reinforce lecture.	Teaching notes uploaded in Canvas.
9	Mergers & Acquisitions	Class Activities to reinforce lecture.	Readings Ch 14. Teaching notes uploaded in Canvas.
10	Revision	Covers all learning outcomes	Mock Test
11	Revision 1 for Final Exam	Covers all learning outcomes	Mock Exam
12	Revision 2 for Final Exam	Covers all learning outcomes	Revision 2 for Final Exam

Module Descriptor

Research Methods

ACCT50527

Summary

This module is designed to ensure students understand the steps in research process and various research approaches for different research objectives. Moreover, it enables the students to relate different data collection methods to research needs, ways to analyse and interpret research data and to know how a research proposal can be written. The various topics that are covered include research design, implementation and finally interpretation of research as these are related to problems in an organizational setting. This course will also cover issues on access and research ethics. At the end of this module, students will have learnt a range of research approaches, strategies and methods in handling their research projects.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Joao Fialho

Email: joao.f@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	ANALYSE HOW TO SELECT A RESEARCH TOPIC AND EVALUATION OF APPROPRIATE LITERATURE	Knowledge and Understanding, Knowledge, Skills
2	DISCUSS THE APPROPRIATE RESEARCH APPROACH AND STRATEGY AND CONSIDER ETHICAL IMPLICATIONS WITH REGARD TO A SELECTED RESEARCH APPROACH.	Knowledge and Understanding, Autonomy & Responsibilities, Autonomy & Responsibilities
3	DESIGN A COMPLETE RESEARCH PLAN AND SELECT THE APPROPRIATE DATA COLLECTION METHODS BY RECOGNIZING THE STRENGTHS AND WEAKNESSES OF EACH METHOD.	Autonomy & Responsibilities, Autonomy & Responsibilities
4	ANALYZE AND INTERPRET THE RESEARCH DATA AND CONSTRUCT A RESEARCH PROPOSAL.	Skills
5		
6		

Assessment Details

Assignment weighted at 50%

Group Assignment (2500 words), based on all learning outcomes - 50%

Learning outcomes 1,2,3 & 4

Indicative Content

To ensure students understand the steps in research process and various research approaches for different research objectives. Moreover, enable students to relate different data collection methods to research need, ways to analyze and interpret research data and to know how a research proposal can be written.

This module examines research designs commonly used in business decision making. Topics include research design, implementation and finally interpretation of research as these are related to problems in an organizational setting. This course will also cover issues on access and research ethics. This course provides a guide to the research process and with the needed knowledge and skills to undertake research as well as highlighting some common research pitfalls. At the end of this module, students will learn a range of research approaches, strategies

and methods in handling their research projects. Skill development in statistical applications software is also one of the objectives of this course. Students are required to submit a research proposal as part of the course requirements

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this

course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

Research Methods for Business Students, 8th Edition, 9781292208787, Pearson , 2019, Adrian Thornhill / Philip Lewis / Mark N. K. Saunders (Author)

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1	Class 2	Student centred learning guidance (provide clear detail of what students are expected to do in their own time for that week)
1	Introduction	Activities to reinforce the lectures	
2	Formulating and clarifying the research topic	Activities to reinforce the lectures	Main text: Chapter 2
3	Critically reviewing the literature	Activities to reinforce the lectures	Main text: Chapter 3
4	Understanding the research philosophies	Activities to reinforce the lectures	Main text: Chapter 4
5	Formulating the research design	Activities to reinforce the lectures	Main text: Chapter 5
6	Research ethics	Activities to reinforce the lectures	Main text: Chapter 6
7	Data collection - Using secondary data	Activities to reinforce the lectures	Main text: Chapter 7-8
8	Data collection - Primary data	Activities to reinforce the lectures	Main text: Chapter 9-11
9	Analysing quantitative data	Activities to reinforce the lectures	Main text: Chapter 12
10	Analysing qualitative data	Activities to reinforce the lectures	Main text: Chapter 13
11	Writing and presenting the project report	Activities to reinforce the lectures	Main text: Chapter 14
12	Revision	Revision	

Module Descriptor

International Finance

ACCT60304

Summary

The module introduces main concepts and method associated with international financial decision-making for multinational business. Among the concepts being covered is on the multinational financial management, foreign exchange, risk analysis and tools, financing foreign trade, international portfolio investment and corporate strategy.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Ajay Pillai

Email:

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	CRITICALLY EVALUATE THE IMPORTANCE OF THE INTERNATIONAL MONETARY SYSTEM AND COUNTRY RISK	Knowledge and Understanding, Knowledge, Skills, Autonomy & Responsibilities

2	ANALYSE THE METHODS OF FINANCING FOREIGN TRADES	Knowledge and Understanding, Skills, Autonomy & Responsibilities
3	ANALYZE RISK MANAGEMENT FOR INTERNATIONAL TRANSACTIONS	Skills, Autonomy & Responsibilities
4	EVALUATE DIFFERENT COST OF CAPITALS FOR FOREIGN INVESTMENTS INCLUDING THE IMPACT OF EXCHANGE RATES.	Autonomy & Responsibilities, Skills, Autonomy & Responsibilities
5	CRITICALLY APPRAISE THE IMPORTANCE OF INTERNATIONAL PORTFOLIO INVESTMENTS.	Skills, Autonomy & Responsibilities.
6		

Assessment Details

Assignment Weighted at 50%

Final Examination (duration 2 hours). This will be a closed book exam testing all learning outcomes 50%

Learning outcomes 1, 2, 3, 4 and 5.

Indicative Content

This subject introduces main concepts and methods associated with international financial decision-making for multinational business. Among the concept being covered is on the multinational financial management, foreign exchange, risk analysis and tools, financing foreign trade, international portfolio investment and corporate strategy. Topics include

- Introduction to Multinational Financial Management
- Determination of Exchange Rates
- International Monetary System
- Country Risk Analysis
- Foreign Exchange Market
- Currency Futures and Options Market
- Swaps and Interest rate Derivatives
- Financing Foreign Trade

- Cost of Capital for Foreign Investments
- International Portfolio Investment
- Corporate Strategy and Foreign Direct Investments
- Managing Multinational Financing System

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

CTE International Financial Management Mindtap+ Supplement 13E, 9789814792356, Thompson, Jeff Madura (Author)

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Topic	Details	Reading
1	Introduction to Multinational Financial Management	<p>Introduction to the module</p> <p>To understand the nature and benefits of globalization</p> <p>To explain why multinational corporations the key players in international economic competition today.</p> <p>To understand the motivations for foreign direct investment and the evolution of the multinational corporation (MNC)</p> <p>To identify the stages of corporate expansion overseas by which companies gradually become MNCs</p> <p>To explain why managers of MNCs need to exploit rapidly changing global economic conditions and why political policymakers must also be concerned with the same changing conditions</p> <p>To identify the advantages of being multinational, including the benefits of international diversification</p>	<p>Reading</p> <p>Tutorial</p>

Module Descriptor

Project

XXSE60108

Summary

As an undergraduate student you are required to complete an individual project comprising of a critical literature review. The purpose of this module is to allow you to extend and deepen your knowledge of an aspect of a business-related subject area appropriate to your award. Students will apply a range of secondary research skills covered in Research Methods. One of the most important tasks in research is a critical review of literature relating to a certain research issue.

For a student submitting work for assessment, there is a secondary function of a critical literature review; it is a way of claiming credit for what you have read, and showing that you understand the broad shape of your subject. It should validate the research that you are doing, and show how it fits the work being done more widely in your subject area.

In order to show that you deserve credit for your reading, the literature review is far more than a book list or bibliography. It is a review – in other words; a critical assessment of relevant material in the public domain, or at least as much of it is appropriate to your level of study.

Further matters concerning the project will be outlined in the introductory lecture and this will be supported by your allocated supervisor.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Jyotsna Bichalwan

Email: jyotsna.b@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Develop knowledge of, analyse and critically assess the literature in a given business-related subject area	Skills, Knowledge and understanding
2	In conjunction with a supervisor, formulate research questions or objectives in the given subject area	Knowledge
3	Construct an argument employing relevant, valid evidence in support of a conclusion that directly addresses the problem posed by the research question(s) or objective(s)	Autonomy & Responsibilities, Skills
4	Demonstrate competence in independent learning	Autonomy & Responsibilities, Autonomy & Responsibilities
5	Demonstrate competence in the communication skills needed to generate the required format of written presentation	Skills, Autonomy & Responsibilities
6		

Assessment Details

A progress report of 500 words weighted at 15% [Tests learning outcomes 1, 2, 3, 4, 5] An assignment 2000 words long, weighted at 85% comprising a critical literature review and reasoned argument tackling research questions/objectives agreed with the student's supervisor. [Tests learning outcomes 1, 2, 3, 4, 5]

Indicative Content

Students will extend and deepen their knowledge of an aspect of a business-related subject area appropriate to their award. They will apply a range of secondary research skills covered in the Research Methods subject.

Learning Strategies

Guided independent learning is the core strategy on this module. You will have workshop sessions with a group of fellow students to discuss ideas, approaches and problems, and one-on-one meetings with your supervisor to review progress. Both of these will occur in a timetabled weekly slot. The module handbook will provide a detailed learning schedule.

Texts

Research Methods for Business Students, 8th Edition, 9781292208787, Pearson , 2019, Adrian Thornhill / Philip Lewis / Mark N. K. Saunders (Author)

Resources

The library

The module website The Web

Module Texts

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lecture	Workshop	Student centred learning guidance	Assessment Schedule
1	LECTURE 1		Students should carefully read the Project Handbook, assessment papers and fully understand the requirements of the modules' assessment. Students should identify a business-related topic and research question and a justification for its suitability.	
2	LECTURE 2		An initial literature search should be undertaken to assess availability of appropriate resources to allow research the topic/research question.	
3			Once allocated students should meet with their Supervisor and discuss the suitability of their chosen topic/research question.	

			Students should meet with their Supervisor and seek clarification of any specific details regarding their Project Progress Report.	
4				
5	LECTURE 3	WORKSHOP	In preparation for the Lecture/Workshop students should carefully review their progress and identify questions that they would like help from the Module Leader.	
6				Issue of assessments: Progress Report and the Critical Literature Review.
7			Students should meet regularly with their Supervisor (e.g. weekly or fortnightly) and seek clarification of any specific details regarding their Project Critical Literature Review.	
8				
9-10-11				Week 9- Submission of Progress Report (15% weighted)
12				Week 12- Submission of Critical Literature Review (85% weighted)

Module Descriptor

Applied Econometrics

ACCT60301

Summary

The module will help students to build upon the work undertaken in Modelling and Estimation, by both broadening and deepening students' knowledge of econometric methods. They will also be able to develop a critical appreciation of the uses and shortcomings of various econometric methods and techniques whereby they will be introduced to certain problems involved in modelling and forecasting with time-series data.

This module will also enhance students' statistical and analytical skills to the point where they are able to approach the analysis and interpretation of economic data with confidence and experience and they will also be able to explore a wide range of topical applications of econometrics.

There are numerous econometric problems in the data available for empirical testing, This module concentrates on the introduction of econometric tools to analyze empirically, ways of identifying and dealing with these problems whereby they will be exposed to diagnostic tests and criteria for choosing models.

Selected applications such as: modelling both at micro and macro level such as aggregate consumption, inflation, National Income to name a few will be introduced.

Topics include: • Introduction to Time Series Analysis • Econometric problems revisited: multicollinearity, • Econometric problems revisited: Model mis-specification

• Econometric problems revisited: serial correlation

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Mark Harris

Email: mark.h@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	CRITICALLY APPRAISE CONCEPTS AND ASSUMPTIONS UNDERLYING THE ECONOMETRIC AND TIME-SERIES METHODS CONSIDERED IN THE MODULE	Knowledge and Understanding, Knowledge
2	DEMONSTRATE AN UNDERSTANDING OF STANDARD ECONOMETRIC APPROACHES TO TESTING ECONOMIC THEORIES USING APPROPRIATE DATA	Knowledge and Understanding, Autonomy & Responsibilities
3	CRITICALLY EVALUATE VARIOUS ALTERNATIVE ECONOMETRIC AND TIME- SERIES METHODS	Skills, Autonomy & Responsibilities
4	CRITICALLY EVALUATE THEIR OWN AND OTHER RESEARCHERS' STATISTICAL FINDINGS	Skills, Autonomy & Responsibilities, Skills
5		
6		

Assessment Details

Assignment weighted at 50%

Final Examination (duration 2 hours). This will be a closed book exam testing all learning outcomes 50%

Learning outcomes 1, 2, 3 & 4

Indicative Content

The module will help students to build upon the work undertaken in Modelling and Estimation, by both broadening and deepening students' knowledge of econometric methods. They will also be able to develop a critical appreciation of the uses and shortcomings of various

econometric methods and techniques whereby they will be introduced to certain problems involved in modelling and forecasting with time-series data. This module will also enhance students' statistical and analytical skills to the point where they are able to approach the analysis and interpretation of economic data with confidence and experience and they will also be able to explore a wide range of topical applications of econometrics.

There are numerous econometric problems in the data available for empirical testing, This module concentrates on the introduction of econometric tools to analyze empirically, ways of identifying and dealing with these problems whereby they will be exposed to diagnostic tests and criteria for choosing models. Selected applications such as: modelling both at micro and macro level such as aggregate consumption, inflation, National Income to name a few will be introduced. Topics include:

- Introduction to Time Series Analysis
- Econometric problems revisited: multicollinearity,
- Econometric problems revisited: Model mis-specification
- Econometric problems revisited: serial correlation
- Econometric problems revisited: heteroscedasticity.
- Diagnostic tests and criteria for choosing models
- Modelling philosophies: general-to-specific versus specific-to-general approaches. • Testing for stability of coefficients.
- Selected applications such as: modelling aggregate consumption, modelling demand for selected foodstuffs, modelling inflation, the econometrics of advertising, the econometrics of demographic change, wage equations, housing models.
- Special problems of using time-series data.
- Introduction to selected forecasting techniques. • Basic introduction to logit models

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner's skill, knowledge and understanding gained in this course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

CTE Introductory Econometrics with Mindtap+ Supplement 6E, 9789814780216, Cengage Learning; , 2015, Jeffrey M. Wooldridge

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lecture	Tutorial
1	Introduction Statistics refresher: a recap of the fundamental principles of statistics and probability	Tutorial Sheet 1 Problems and past examination questions covering the material covered in this week's lecture.
2	Regression Linear regression in detail. Non-linear regression: an overview	Tutorial Sheet 2 Problems and past examination questions covering the material examined in this week's lecture.
3	The nature of Econometrics 1 The nature of econometrics and economic data, part 1.	Tutorial Sheet 3 Problems and past examination questions covering the material

		examined in this week's lecture.
4	The nature of Econometrics 2 The nature of econometrics and economic data, part 2.	Tutorial Sheet 4 Problems and past examination questions covering the material examined in this week's lecture.
5	Homoskedasticity 1 Homoscedasticity (or homogeneity of variances) is an assumption of equal or similar variances in different groups being compared. This is an important assumption of parametric statistical tests because they are sensitive to any dissimilarities. Uneven variances in samples result in biased and skewed test results.	Tutorial Sheet 5 Problems and past examination questions covering the material examined in this week's lecture.
6	Homoskedasticity 2 Testing for homoskedasticity. The Goldfeld-Quandt test	Tutorial Sheet 6 Problems and past examination questions covering the material examined in this week's lecture.
7	Multiple Regression 1 Multiple regression is a statistical technique that is used to analyse the relationship between a single dependent variable and several independent variables. JASP	Tutorial Sheet 7 Problems and past examination questions covering the material examined in this week's lecture.
8	Multiple Regression 2 The problems associated with statistical inference when doing multiple regression	Tutorial Sheet 8 Problems and past examination questions covering the material examined in this week's lecture.

9	Heteroskedasticity Heteroskedasticity happens when the standard deviations of a predicted variable, monitored over different values of an independent variable or as related to prior time periods, are non-constant.	Tutorial Sheet 9 Problems and past examination questions covering the material examined in this week's lecture.
10	Time series & forecasting An introduction to econometric models using time-series.	Tutorial Problems and past examination questions covering the material examined in this week's lecture.
11	Revision	Mock exam
12	Drop-in consultations	Drop-in consultations

Module Descriptor

Risk Management

ECON60082

Summary

This module considers decision making under uncertainty and it serves to help students understand the challenges in managing businesses across national boundaries.

The topics covered are related with real problems involving risk decisions and will include concepts as:

- The decisions to invest/borrow/hedge and bid
- Extensions of investment appraisal including Capital Asset Pricing
- Hedging, particularly foreign currency exposures

Students will also hone their problem-solving skills through analysis of transnational management case studies.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Shashi Chaudhary

Email: shashikant.c@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	COMPARE, USE AND APPRAISE DIFFERENT THEORIES AND PERSPECTIVES OF DECISION MAKING	Knowledge Knowledge
2	ANALYSE AND APPLY APPROPRIATE PROBLEM SOLVING TECHNIQUES TO COMPLEX BUSINESS PROBLEMS	Skills Autonomy & Responsibilities Skills
3	APPLY APPROPRIATE PROBLEM SOLVING TECHNIQUES TO COMPLEX BUSINESS PROBLEMS	Autonomy & Responsibilities Autonomy & Responsibilities
4	DEMONSTRATE THE ABILITY TO CRITICALLY ANALYSE AND EVALUATE RELEVANT CONCEPTS TO DECISION MAKING	Skills Knowledge
5	EVALUATE SOLUTIONS TO DECISION MAKING IN A BUSINESS CONTEXT AND COMMUNICATE COMPLEX ISSUES	
6		

Assessment Details

Assignment Weighted at 50%

50% end of year, 2 hour Examination which assesses all Learning Outcomes

Indicative Content

This module considers decision making under certainty. Aspects will include:-

- The decisions to invest/borrow/hedge and bid

Extensions of investment appraisal including Capital Asset Pricing

- Hedging, particularly foreign currency exposures

- Auctions as the process of price discovery

Learning Strategies

The learning strategy for this module is based around students committing a total of 150 hours of activities towards achieving the learning outcomes. These will be split between 39 hours of direct contact with a tutor and 111 hours of directed, guided and self-study, together with preparation for and completion of the assessment tasks. Learning support material will be provided for the module.

The module will draw upon a mixture of activities including lectures, web-based activities, case study analysis, relevant videos and in-class discussions, individual and group problem solving and self-directed learning.

Texts

Corporate Finance, 7th edition, 9781292103037, FT Prentice Hall, 2016, Denzil Watson (Author)

Resources

Libraries

The Module website

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lectures	Tutorials	Student centred learning guidance
1-2	An overview of investment appraisal methods (NPV, IRR, Payback Period etc.)	Numerical and scenarios	Watson & Head (2017), Chapter 6
3-4	Analysing Risks in Projects (uncertainty in cashflows, interest rate risk, inflation risk, forex risk etc.)	Numerical and scenarios	Watson & Head (2017), Chapter 7
5-6	Risk - Reward Trade-off: Portfolio theory and Asset Pricing Theories (CAPM and APT)	Numerical and evaluation	Watson & Head (2017), Chapter 8
7-8	Financing Projects (ways of raising funds to invest) and cost of financing (WACC). Does capital structure matter?	Numerical and scenarios	Watson & Head (2017), Chapter 9
9	Risk Management and Risk Management Techniques	Independent works	Watson & Head (2017), Chapter 12
10	Derivatives as instruments to hedge one's exposure	Independent works	Watson & Head (2017), Chapter 12
11	Managing FOREX Risk	Numerical and scenarios	Watson & Head (2017), Chapter 12
12	Review	Review	Review

Module Descriptor

Work Experience

ORGB60292

Summary

To provide observational experience of working in a business environment; To increase awareness of how a business operates in practice; To develop personal transferable skills. Students will undertake a 'placement' in a business environment. There is no formal content. The aim is to:

- Provide an observational experience
- Increase awareness of how the business operates in practice
- Develop personal transferable skills

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Lee McMillan

Email: lee.m@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
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1	Demonstrate an in depth understanding of individual strengths and weaknesses and create strategies to improve these within the context of a working environment.	Autonomy & Responsibilities
2	Demonstrate skills to assess an organisation over a wide range of business areas and to critically evaluate performance in a systematic and logical manner.	Skills, Autonomy & Responsibilities, Knowledge, Autonomy & Responsibilities
3	To critically evaluate the personal areas for development and business development.	Autonomy & Responsibilities
4	Be able to produce a business report that includes a full critical appraisal of an actual business and devise realistic recommendations as to an area of weakness to be improved to a standard suitable for presentation to senior management.	Skills, Autonomy & Responsibilities, Skills, Autonomy & Responsibilities
5		
6		

Assessment Details

1. Work experience diary. (20%)

Learning Outcomes 1, 2 and 3.

2. Work experience evaluation. (20%) Learning Outcomes 1 and 3.

3. Research report. (60%) Learning Outcome 1, 2, 3 and 4.

Indicative Content

To provide observational experience of working in a business environment; To increase awareness of how a business operates in practice; To develop personal transferable skills.

Students will undertake a 'placement' in a business environment. There is no formal content. The aim is to:

- Provide an observational experience
- Increase awareness of how the business operates in practice
- Develop personal transferable skills

Learning Strategies

The work experience is the key strategy in achieving the outcomes supported by three formal tutorials: To develop an action plan for the work experience; to agree research topic in the light of the placement; to monitor progress on the placement and written element, plus supervisory tutorials. The latter are informal, and are to provide support for the reflective element of the module.

Individual Tutorials: (6 hours) There will be 3 'formal' meetings:

1. To develop an action plan for work experience
2. To agree a research topic in the light of the placement
3. To monitor progress on the placement and on the assessment

There will be 3 informal meetings to provide support for the reflective element of the module.

Independent Study (154 hours)

This is indicative as the work experience will take place over a minimum of 15 workdays either in one or more blocks or spread over a semester. The student will undertake independent research into the area selected for the research report.

Texts

Research Methods for Business Students, 8th Edition, 9781292208787, Pearson, 2019, Adrian Thornhill / Philip Lewis / Mark N. K. Saunders (Author)

Resources

Access to appropriate texts and journals

Module Study Guides

Computing facilities will be needed to access material available on the web and specialist on-line databases.

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1	Class 2	Student centred learning guidance
1	Introduction to module	Activities to reinforce the lectures	
2	Independent Study / Work Experience	Independent Study / Work Experience	Main text: Chapter 2
3	Business analysis: Internal & External	Activities to reinforce the lectures	Main text: Chapter 3
4	Independent Study / Work Experience	Independent Study / Work Experience	Main text: Chapter 4
5	Independent Study / Work Experience	Independent Study / Work Experience	Main text: Chapter 5
6	Practical research planning	Activities to reinforce the lectures	Main text: Chapter 6
7	Independent Study / Work Experience	Independent Study / Work Experience	Main text: Chapter 7-8
8	Data collection - Primary data	Activities to reinforce the lectures	Main text: Chapter 9-11
9	Independent Study / Work Experience	Independent Study / Work Experience	Main text: Chapter 12
10	Writing the experience report	Activities to reinforce the lectures	Main text: Chapter 13
11	Writing the experience report	One to one meetings	Review of report
12	Final assignment preparation	One to one meetings	Review of report

Module Descriptor

FUTURES AND OPTIONS

ACCT60302

Summary

Futures and Options are the two major types of stock derivatives in a share market. This module is designed to test candidate's knowledge and understanding of the Futures and Options in the ASEAN region.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Ajay Pillai

Email:

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	CRITICALLY EVALUATE THE CONCEPTS AND STRUCTURE OF THE FUTURES AND OPTIONS MARKETS	Knowledge and Understanding, Knowledge, Autonomy & Responsibilities

2	CRITICALLY APPRAISE ALL CONTRACTS INCLUDING STRATEGIES SUCH AS HEDGING, ARBITRAGE AND SPECULATION	Knowledge and Understanding, Autonomy & Responsibilities, Skills
3	APPRAISE OPTIONS INCLUDING VALUATION PRICING MODELS AND TRADING STRATEGIES INCLUDING PAY-OFF DIAGRAMS	Skills, Autonomy & Responsibilities, Skills
4	DEMONSTRATE A PRACTICAL UNDERSTANDING OF MARKET ANALYSIS - FUNDAMENTAL AND TECHNICAL ANALYSIS OF FUTURES MARKET	Autonomy & Responsibilities, Skills
5		
6		

Assessment Details

Assignment Weighted at 50%

Final Examination (duration 2 hours). This will be a closed book exam testing all learning outcomes - 50%

Learning outcomes 1, 2, 3 & 4.

Indicative Content

This module is designed to test candidate 's knowledge and understanding of the Futures and Options in ASEAN region. Topics include:

- Introduction to Futures
- Commodity Futures I
- Commodity Futures II
- Commodity Futures III
- Equity Futures
- Single Stock Futures

- Interest Rate Futures
- Bond Futures
- Market Analysis
- Introduction to Option
- Option Strategies
- Option Pricing

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner 's skill, knowledge and understanding gained in this course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

Options, Futures, and Other Derivatives, Global Edition 9th edition, 9781292212890, Pearson, 2014, HULL (Author)

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Class 1 - Lecture	Class 2 - Tutorial	Reading/Tutorial
1	Introduction to Future & Options Introduction and mechanisms of future markets	Class Activities to reinforce lecture.	Readings Chs 1 & 2. Teaching notes uploaded in Canvas
2	Hedging strategies using futures	Class Activities to reinforce lecture.	Readings Ch 3 Teaching notes uploaded in Canvas.
3	Interest rates	Class Activities to reinforce lecture.	Readings Ch 4 Teaching notes uploaded in Canvas.
4	Determination of future and forward prices	Class Activities to reinforce lecture.	Readings Ch 5 Teaching notes uploaded in Canvas.
5	Interest rates futures	Class Activities to reinforce lecture.	Readings Ch 6 Teaching notes uploaded in Canvas.
6	Swaps	Class Activities to reinforce lecture.	Readings Ch 7 Teaching notes uploaded in Canvas.
7	Mechanics of options market	Class Activities to reinforce lecture.	Readings Ch 10 Teaching notes uploaded in Canvas.
8	Properties of stock options	Class Activities to reinforce lecture.	Readings Ch 11 Teaching notes uploaded in Canvas.
9	Trading strategies involving options	Class Activities to reinforce lecture.	Readings Ch 12 Teaching notes uploaded in Canvas.
10	Employees stock options and future options	Class Activities to reinforce lecture	Readings Chs 16 & 18 Teaching notes uploaded in Canvas.
11	Revision 1 for Final Exam	Covers all learning outcomes	Mock Exam
12	Revision 2 for Final Exam	Covers all learning outcomes	Revision 2 for Final Exam

Module Descriptor

INTERNATIONAL ECONOMIC THEORY AND POLICY

ACCT60303

Summary

Welcome to the international economic theory and policies module. You should now be aware of phenomena such as economic integration along with globalisation. This module is a continuation of the macroeconomy in an open framework, it aims at shedding light onto the interconnectedness of world economies. In this module, questions regarding the aftermath of national decisions onto economic partners as well as how dependent the national economy is towards decisions emanating from abroad will be tackled. This module aims at being theoretic and descriptive. Several macroeconomic models will be covered and discussed in comparison to real life evidence. The module is also a chance to get a glimpse into the seminal contribution of Paul Krugman to today's macroeconomic consensus as it is designed and largely inspired from Krugman's handbook.

In more depth topics include:

- The nature of economic policy formation and implementation
- Key concepts in international economic policy.
- Macroeconomic coordination.
- Strategic trade issues
- International investment
- Competition policies
- Global Corporate Issues
- Crisis management

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Jon Neale

Email: jonathan.n@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	CRITICALLY EVALUATE THE IMPLICATIONS FOR INTERNATIONAL ECONOMIC POLICY OF THE VARIOUS THEORIES AND CONCEPTS.	Knowledge and Understanding, Knowledge, Skills
2	ANALYSE THE ORIGINS AND CAUSES OF ECONOMIC PROBLEMS AFFECTING THE INTERNATIONAL ECONOMY INCLUDING COMPETITION AND THEREBY APPRAISE THE CONSTRAINTS AFFECTING INTERNATIONAL ECONOMIC POLICY	Knowledge and Understanding, Skills, Autonomy & Responsibilities
3	CRITICALLY APPRAISE THE ECONOMIC AND POLITICAL BACKGROUND TO ATTEMPTS TO CO-ORDINATE INTERNATIONAL MACRO-ECONOMIC POLICY	Skills, Autonomy & Responsibilities
4	DEMONSTRATE A CRITICAL APPROACH TO ISSUES RELATING TO STRATEGIC TRADE AND FINANCE INCLUDING INTERNATIONAL INVESTMENT.	Autonomy & Responsibilities
5	ANALYSE THE PRINCIPLES AND PRACTICE OF INTERNATIONAL ECONOMIC CRISIS MANAGEMENT	Skills, Autonomy & Responsibilities, Skills
6		

Assessment Details

Assignment Weighted at 50%

Final Examination (duration 2 Hour s). This will be a closed book exam testing all learning outcomes - 50%

Learning outcomes 1, 2, 3, 4 and 5.

Indicative Content

Indicative Content

This module examines the various analytical techniques used in capital budgeting decisions and the capital structure decisions. Capital structure, estimation of cost of capital and the dividend decisions are examined from an empirical and theoretical viewpoint. Other topics include the dividend decisions and the relationship between financing decisions and the cost of capital. In more depth topics include:

- The nature of economic policy formation and implementation
- Key concepts in international economic policy
- Macro-economic co-ordination
- Strategic trade issues
- International investment
- Competition policies
- Global Corporate Issues
- Crisis management

Learning Strategies

Action Learning. Learning is achieved by engaging students in activities that have elements of problem solving combined with intentional learning.

Authentic Learning. Students will be presented with activities that are framed around "real life" contexts in which students will find learning more meaningful and motivating. Thus they will be more engaged in the process of acquiring knowledge.

Assessment strategy will be both formative and summative. Formative assessment strategies are used to test the current level of understanding and progress and to provide feedback to teacher and learner and to guide the next phase of learning. Types of formative assessments for this course will be discussions on tutorial questions, short quizzes and assignments. Summative assessment is used both in the mid and at the end of the programme formally to assess a learner 's skill, knowledge and understanding gained in this course.

For this module formative assessment will be undertaken through regular completion of tutorial work along with quizzes to check knowledge and understanding of basic concepts within accounting. To prepare students for the end of module summative exam, a mid semester test will take place under exam conditions.

Texts

International Economics: Theory and Policy 11th edition, 9781292214948, Pearson, 2018, Paul R. Krugman; Maurice Obstfeld; Marc Melitz

Resources

BUV VLE

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lecture	Tutorial
1	Chapter 1: Introductory Trade Issues: History, Institutions, and Legal Framework	Exercises and case study
2	Chapter 2: The Ricardian Theory of Comparative Advantage	Exercises and case study
3	Chapter 3: The specific factor model	Exercises and case study

4	Chapter 4: The Heckscher-Ohlin Model	Exercises and case study
5	Chapter 5.1: Trade Policy Effects with Perfectly Competitive Markets	Exercises and case study
6	Chapter 5.2: Trade Policy Effects with Perfectly Competitive Markets	Exercises and case study
7	Chapter 6: Domestic Policies and International Trade	Exercises and case study
8	Chapter 7: National Income and the Balance of Payments	Exercises and case study
8	Chapter 8: The FOREX	Exercises and case study
10	Chapter 9: The Free Trade vs. Protectionism Controversy	Exercises and case study
11	Chapter 10: Interest Rate Parity and Purchasing Power Parity	Exercises and case study
12	Revision	Mock exam

Module Descriptor

STRATEGIC HUMAN RESOURCE MANAGEMENT

HRMG60050

Summary

Welcome to Strategic Human Resource Management. The module considers the strategic contribution that HRM can make to organisational objectives, effectiveness, and performance.

This will be achieved through studying models, tools and concepts as applied to:

- External and internal environments
- Stakeholder contribution and control
- HR strategies including the debate between 'best fit' and 'best practice'
- Measures of organisational performance

Leading to HR strategies for:

- Structures, including outsourcing.
- Planning, recruitment, and selection.
- Learning and development.
- Performance appraisal and reward.
- Employee relations, involvement and communication

Within the context of:

- Ethical imperatives of the modern workplace
- Continuity and change
- Business and employee expectation
- European frameworks

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Michael Lomax

Email: michael.l@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

* 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	The ability to compare and evaluate alternative hr strategy theories and perspectives	Knowledge
2	The systematic understanding and critical evaluation of hr strategy decision making in an organisation	Knowledge
3	The application of analytical skills and appropriate problem solving techniques together with knowledge learned	Autonomy & Responsibilities Knowledge Autonomy & Responsibilities
4	The ability to communicate complex issues	Skills
5		
6		

Assessment Details

Assignment Weighted at 50%

A 2 hour examination based on a seen case study 50% Covers LO 1, 2, 3 and 4

Indicative Content

The module considers the strategic contribution that HRM can make to organisational objectives, effectiveness and performance.

This will be achieved through studying models, tools and concepts as applied to:

External and internal environments

Stakeholder contribution and control

HR strategies including the debate between 'best fit' and 'best practice'

Measures of organisational performance

Leading to HR strategies for:

Structures, including outsourcing

Planning, recruitment and selection

Learning and development

Performance appraisal and reward

Employee relations, involvement and communication

Within the context of:

Ethical imperatives of the modern workplace

Continuity and change

Business and employee expectation

European frameworks

Learning Strategies

The learning strategy for this module requires students to commit 150 learning hours. Of this, there will be 30 hours of class support and 120 hours of independent and self-directed study.

Texts

Human Resource Management, 6th edition: Theory and Practice, 9781137572592, Red Globe Press, 2017, Bratton, John; Gold, Jeff

Resources

Library

Electronic databases

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

Week	Lecture	Tutorial	Key Text Readings
1	Introduction to the module and the nature of HRM and Strategy.	Case Study Discussion	Review Chapter 1
2	Corporate strategy and strategic HRM	Case Study Discussion	Review Chapter 2
3	HRM outcomes and line management / Workforce planning and diversity	Case Study Discussion	Review Chapters 3 and 4
4	Recruitment, selection, and talent management	Case Study Discussion	Review Chapter 5
5	Performance management and appraisal	Case Study Discussion	Review Chapters 6
6	Reward management and inequality	Case Study Discussion	Review Chapter 8
7	Labour relations and collective bargaining / Employee relations and voice	Case Study Discussion	Review Chapters 9 and 10
8	HRM and ethics / Employee health, safety, and wellness	Case Study Discussion	Review Chapters 11 and 12
9	Learning and human resource development	Case Study Discussion	Review Chapter 7
10	Organizational culture and HRM / Green HRM and environmental sustainability	Case Study Discussion	Review Chapters 15 and 16
11	Revision / Exam Preparation	Revision / Exam Preparation	Mock Exam
12	Revision / Exam Preparation	Revision / Exam Preparation	Mock Exam

Module Descriptor

INTERNATIONAL MARKETING

MKTG60318

Summary

This module is designed to enable students to develop marketing strategies and plans in and across a range of different international environments with a focus on the traditional and contemporary elements of international and global marketing. As well as extending students' marketing and strategic skills obtained in the core modules into a global context which reflects the growing importance of multinational organizations, the module also develops knowledge and skills in international marketing processes.

Topics covered in the module will be drawn from: a comparison of varying models of the differences between the concepts of international and global marketing; globalization and fragmentation of markets; contextualized review of the major dimensions of international and global marketing - political, economic and cultural differences between markets; analysis and targeting of international marketing opportunities; international market selection and expansion; market entry mode decisions - evaluation and operation of export, contractual and investment techniques; global positioning and branding; marketing mix issues; international marketing planning; contemporary issues.

Key facts

Faculty/Department: Business & Economics

Module Type: Compulsory

Number of credits: 3

Prerequisite: None

Contact

Module Leader: Joe Schurley

Email: joseph.s@buv.edu.vn

Hours of Study

Contact hours: 45

Independent Study Hours: 105

Total Learning Hours: 150

** 01 contact hour = 50 minutes, as per Circular 17/2021/TT-BGDĐT*

Module Details

Learning Outcomes

No.	Module Learning Outcomes	Programme Learning Outcomes
1	Identify and critically evaluate the major environmental influences affecting global and international markets to justify recommended strategies	Knowledge
2	Apply appropriate analytical models and frameworks to analyse, assess and critically appraise global and international marketing situations	Skills Autonomy & Responsibilities
3		
4		
5		
6		

Assessment Details

Assignment Weighted at 50%

An individual 2500 word assignment - 50% (Tests Learning Outcomes 1 and 2)

Indicative Content

This module is designed to enable students to develop marketing strategies and plans in and across a range of different international environments with a focus on the traditional and contemporary elements of international and global marketing. As well as extending students' marketing and strategic skills obtained in the core modules into a global context which reflects the growing importance of multinational organisations, the module also develops knowledge and skills in international marketing processes.

Topics covered in the module will be drawn from: a comparison of varying models of the differences between the concepts of international and global marketing; globalisation and fragmentation of markets; contextualised review of the major dimensions of international and global marketing - political, economic and cultural differences between markets; analysis and targeting of international marketing opportunities; international market selection and expansion; market entry mode decisions - evaluation and operation of export, contractual and investment techniques; global positioning and branding; marketing mix issues; international marketing planning; contemporary issues.

Learning Strategies

The learning strategy for the module requires students to commit 150 learning hours (including assessment) of this there will be 30 hours of class support and 120 hours of independent and self directed study. Support will also be given by access to Scheduled Tutor Office Hours to support the

module.

6 hours of lectures/large group based activity

12 hours of formal lectures

12 hours of tutor led activity - workshops and case study activity

Lectures will provide students with a broad theoretical overview and the conceptual frameworks needed to appraise and analyse current and contemporary environmental influences on international and global marketing. Tutorial/seminar support activities will provide students with the opportunity to develop and use a range of intellectual skills to apply the underpinning theories with a greater international and global focus through vignettes, cases and scenarios in order to formulate practical solutions in preparation for the assessment.

Independent study will require students to read and think about the case study preparatory questions that will form the basis of the tutorial/seminar discussions. Students are also required to organise and review their lecture notes and undertake preparatory reading and research on assigned material in order to participate in, and lead, class discussions individually and as part of a group.

Texts

International Marketing Strategy: Analysis, Development & Implementation 8th edition, 9781473758742, Cengage, 2022, Robin Lowe (Author), Isobel Doole (Author), Alexandra Kenyon (Author)

Resources

Resources Library

Internet

TV/Video

Implementation Guidelines

- The Faculty/Department must disseminate and explain the module descriptor to all module lecturers.
- In the first class of the module, all module lecturers must disseminate and explain the module descriptor to students.
- Module lecturers must adhere to the approved module descriptor.

Learning & Teaching Plan

WEEK	Lecture Session	Tutorial Session	Key Text Reading / Learning Guidance	Assessment Schedule
1	Introduction to International Marketing	Case Study / Group Exercise	Chapter 1	
2	The World Trading Environment	Case Study / Group Exercise	Chapter 2 & 3	
3	Social & Cultural Considerations	Case Study / Group Exercise	Chapter 4	
4	Marketing Research & Opportunity Analysis	Case Study / Group Exercise	Chapter 5	
5	Niche Marketing Strategies for SME's	Case Study / Group Exercise	Chapter 6 & 7	
6	Global Strategies	Case Study / Group Exercise	Chapter 8	Assessment Issued
7	Market Entry Strategies	Case Study / Group Exercise	Chapter 9	
8	International Product & Service Management	Case Study / Group Exercise	Chapter 10	
9	International Communications	Case Study / Group Exercise	Chapter 11	
10	Management of International Distribution & Logistics	Assignment Workshop Session	Chapter 12	
11	Pricing for International	Assignment Workshop	Assignment Work	

	Markets	Session		
12	Strategic Planning in Technology Driven International Marketing	Case Study		Assessment Due

APPENDIX VI

Sandra Schneiderman

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Australian National
Curriculum
History and
Language and Literacy

International Baccalaureate
Individuals & Societies
English
DP History

Victorian Institute of Teaching
Registration-Current

Working with Children Police
Check-Current

I am a committed teacher with considerable educational experience in Australia and overseas, working in a range of roles and responsibilities, with the ability to affect change and deliver outcomes. My primary focus has been to enhance learning outcomes for my students through the delivery of high quality teaching, designed to optimise student's literacy and knowledge acquisition skills. I have a consistent work ethic and an on-going enthusiasm for innovative teaching and learning. These strengths, coupled with my flexibility and creativity to adapt to new teaching modes in the classroom and digitally, gives my teaching practice a unique global perspective. I value the right of every student to an enriching and inclusive education, and one which will equip them for the 21st century workplace and world.

My key strengths in teaching are:

- Providing structures and positive feedback to students and enhancing personal bests
- Confidently using a wide range of ICT to ensure effective teaching and learning practices
- Catering for individual differences
- Teaching cross-curricular, transferable critical thinking skills using a range of multi-model resources
- Facilitating students' opportunities to demonstrate independent and co-operative group based learning
- Working collegially in teams and independently
- Having the experience and flexibility to adapt to various global and academic curriculums
- Being open to learning and teaching current theoretical knowledge

Qualifications

The University of Melbourne

- Masters of Education 2013
- Postgraduate Certificate (Middle School Literacy) 2010
- Bachelor of Education (Secondary) (Double Major: History and Librarianship) 1987

Monash University

- Postgraduate Certificate in Gifted Education 2004
- Postgraduate Certificate in Gender Studies/Australian History 1991

IB Association

- Diploma Certification
- (Cat 2) 2018
- MYP Certification 2014

Experience

United Nations International School (Hanoi, Vietnam)

2014 - current

- DP History,
- MYP Individuals & Societies (9-10)
- Interdisciplinary Learning (7-10)
- MYP English (7-10)
- Personal Project
- Extended Essay

Star of the Sea College (Melbourne, Australia)

2005 - 2014

- VCE English & History teacher

Professional Development

- CELTA (pending)
- IB DP Workshop 3 History, Singapore 2018
- Brown University 'Choices' Program, Singapore 2018
- Cognitive Coaching Workshops, 1 & 2, Hanoi and Genoa, Italy 2017 & 18
- Assessing for Learning (Dylan Wiliam, Hong Kong) 2018
- Student and Teacher Self-advocacy (Fran Prolman, Hanoi) 2017 & 18
- MYP Certification (Hong Kong) 2015
- Google Educator Certification 2014
- Recipient of the Pauline Glass, Gandel Educators Scholarship Program, Yad Vashem, Israel, 2013
- VCE Australian History Examiner 2010 - 2013
- History Teachers Association of Victoria, presenter and attendee 2002-14

Teaching Highlights & Key Achievements

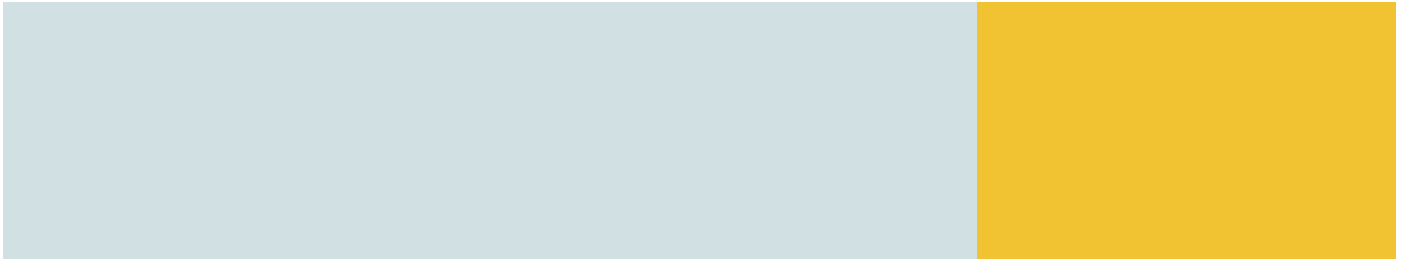
- Implementing, delivering and standardizing a dynamic and continuously evolving Humanities and senior History curriculum
- Mentoring Student Teachers: Monash University & University of Melbourne (20 years)
- Continuous professional development, including through international on-line I.B. community groups and with other IB schools in Hanoi
- Developing and delivering three Interdisciplinary Units into the Humanities/English/Maths and Science curriculum
- VCE History Assessor: Australian History (Annual invitation)
- Annual presenter of VCE and Secondary School Australian History curriculum for Victoria
- Scholarship recipient of the Pauline Glass Holocaust and Genocide Educator program, Yad Vashem, Jerusalem
- Developing Grades 8 - 10 Holocaust and Genocide Literacy and History units

Referees:

Daniel Cooper
MYP and Humanities Coordinator
UNIS
mypcoordinator@unishanoi.org

Ali Waugh
Director of University Guidance
Hanoi International School
awaugh@hisvietnam.com

Fiona King
(previous) HOD English and EAL and
Student Teacher Supervisor
Star of the Sea College
fionak7@westnet.com.au
+64 408358881



CURRICULUM VITAE

Name Adrian Wee Tiong Weng

Year of birth April, 1968

Nationality Malaysian

Email adrian.wee@rmit.edu.vn, adrianwee70@gail.com

Education Bachelor of Economics (Major in Accounting)
Monash University, Melbourne, Australia

Master of Business Administration (Major in Marketing)
University of New England, New South Wales, Australia

Doctor of Business Administration (completed 2016)
(Research on Culture, Communication and Management)
Southern Cross University, New South Wales, Australia

Linkedin <https://www.linkedin.com/in/dr-w-41bb082b/>

Youtube <https://www.youtube.com/channel/UCXh9Dfy4G-Qb0PxvzdC53NQ>

ACADEMIC HISTORY

Jun 2005 to Present **Lecturer and Course coordinator, RMIT University, Vietnam**

- Responsible for designing, planning and coordinating business and management courses in the Bachelor of Business undergraduate program
- Collaborating with team members on course development, course customization and course assessments. Coaching and mentoring team members to ensure consistency in delivery and course experience
- Liaising with coordinators in Melbourne with respect to course contextualization, assessments and moderation
- Assuming other professional academic duties such as monitoring student's progress, providing course and career counseling, supervising examinations, assessments and course evaluations
- Teaching International Business, Global Trade, Contemporary Management, Organizational Behavior, Organizational Analysis, Financial Accounting, Management Accounting, Marketing Principles, Global Branding, Digital media, Content Creation, Creativity Innovation and Design, Entrepreneurship etc

AWARDS

- Best Teacher award 2007, runners up
- Excellence in Teaching award 2016

JOURNAL PAPERS

- Weng, AWT 2015, 'Communication at the international workplaces: The foreign managers' perspective', *International Journal of Business and Management*, vol. 10, no. 4, pp.82
- Weng, AWT 2017, 'Leadership and communication in HCMC, Vietnam', *International Journal of Business and Management*, vol. 12, no. 5, pp.111
- Weng, AWT 2018, 'CSR reporting in locally owned hotels in Malaysia', *Asian Social Science*, vol.14, no. 8, pp. 16
- Smith, MR, Weng, AWT, Kijbumrung, T & Suhor, A 2018, 'Do Western Companies Appropriately Adapt Their Indonesian Promotional Websites to an Indonesian Audience? A Study Applying Content Analysis of Cultural Cues Reveals Some Answers', *Asian Social Science*, vol. 14, no. 12
- Weng, AWT 2019, 'Facebook use in Malaysian owned and operated hotels', submitted to *Asia Pacific Journal of Tourism Research* in October 2019

PROFESSIONAL HISTORY

Jan 2002 to Feb 2005 Training Manager, KPMG Malaysia

- Jointly responsible for overseeing the training department with a total of 10 staff consisting of 3 managers and 6 training coordinators
- Responsible for planning, organizing and coordinating training events for KPMG Kuala Lumpur, a large professional accounting firm with a workforce approximating 1500 employees
- Liaising with the other department managers to identify training needs, and drawing up appropriate training plans
- Working with training providers to develop suitable course content, and evaluating individual training and the overall program
- Administering firm wide annual training needs analysis (TNA) to ensure the firm's current and future needs for training are properly addressed

- Supervising executive development programs designed to develop young, aspiring employees with potential to managerial positions
- Coordinating company wide events including the annual Managers Conference, the Corporate Governance Award dinner, Regional Partners Conference, other public seminars and forum
- Delivering soft skills training to the firm's employees, that includes leadership development, managing teams, effective presentation and facilitation, personal effectiveness, conflict resolution, developing client relationships and successful coaching

Jan 1999 to Nov 2001 Lecturer, Metropolitan University College, Malaysia

- Responsible for curriculum development and teaching the 1st and 2nd year accounting subjects for the Curtin University of Technology (Australia) Undergraduate Program
- Working with student recruitment to promote the Curtin academic programs including coordinating and staffing educational exhibitions, school visits, seminars and other events

July 1994 to Nov 1998 Investment Executive, TA Securities, Malaysia

- Responsible for gathering and analyzing company financial statements, industry and economic data, financial periodicals and newspapers for investment decisions
- Writing research reports on companies, industries and economy. Making recommendations on the purchase or sale of company securities.

COMPUTER SKILLS

Proficient in the following commercial programs:

- Microsoft Office Suite, Google Office Apps
- Canvas and Blackboard (Course management software)
- NVivo and Endnote (Qualitative Research software)
- Lightworks and Adobe Premiere Pro (Video editing Softwares)

LANGUAGES

English and Bahasa Malaysia are my native languages. My reading, speaking and writing skills for both languages are excellent.

REFEREES

Dr. Justin Kong

Lecturer, RMIT School of Business
Handiresco Building
521 Kim Ma, Ba Dinh District, Hanoi
Tel : (02) 4 37261460
Email : justin.kong@rmit.edu.vn

Dr. Gana Gopalakrishnan

Lecturer, RMIT School of Business
Handiresco Building
521 Kim Ma, Ba Dinh District, Hanoi
Tel : (02) 4 37261460
Email : gana.gopalakrishnan@rmit.edu.vn

Dr. Phil Smith

Senior Lecturer, RMIT School of Business
702 Nguyen Van Linh
District 7, HCMC
Tel : (02) 4 37261460
Email : phil.smith@rmit.edu.vn

CURRICULUM VITAE

PERSONAL DETAILS

NAME: **AIMAN ABOUSHER.** (Member, NIA, IIA, CPA, ASA, CMA, FPA)

Teaching Awards:

1. *Winner, Vice Chancellor's Teaching Excellence Award, 2004, Victoria University.*
2. *Winner, Commendation for Excellence in Teaching, Award, 2008, Deakin University.*
3. *Winner, Commendation for Excellence in Teaching, Award, 2012, Ballarat University*
4. *Nominated, Teacher of the Year, 2013, RMIT University – Vietnam (Hanoi campus)*
5. *Nominated, Teacher of the Year, 2014, RMIT University, Vietnam (Hanoi campus)*

ADDRESS: ROYAL CITY,
R1 Lobby B,
Level 16,
Apartment no 20
Hanoi – Vietnam

PHONE : (M) 01219044223

E-MAIL: aiman.abousher@rmit.edu.vn

NATIONALITY : AUSTRALIAN

WORK EXPERIENCE

I have synthesised the application of my formal qualifications together with my experience across a range of responsibilities. I have successfully demonstrated this in teaching a wide range of subjects at Deakin University, Victoria University, and Kangan Institute in Australia as well as at three overseas institutions over the past Seventeen years. Below are the details of my teaching experience.

I am currently a full-time Senior Lecturer in Finance and Line Manager within the Department of Accounting, Economics, Finance and Marketing in the School of Commerce and Management at RMIT University – Vietnam

(2013 – 2015) As a Senior Lecturer in Finance I teach the following courses in the Department of Accounting, Economics, Finance and Marketing:

- BAFI3201 - Personal Wealth Management
- BAFI3192 - Risk Management
- BAFI3194 - Investment
- BAFI3200 - International Finance
- BAFI3182 – Financial Markets

My duties as a Senior Lecturer in Finance included delivering lectures and Tutorials on the Hanoi campus, liaising with Course Coordinators and full-time staff, preparing and delivering lectures and tutorials, preparing and marking assessments. I liaison with industry professionals to update unit material to current industry standards to make the teaching material more relevant, current, innovative, and practical for my students.

My duties as a Direct Line Manager also include looking after 17 staff within the AEFM Department (Accounting, Economics, Finance, and Marketing) from different disciplines. I prepare staff teaching allocation, staff workloads, and staff work plans, Assist with timetable preparing to make sure there are in line with class room sizes. I help staff with any teaching difficulties and work with staff in finding solutions to help them be more effective teaching and understand their students learning.

Lecturer, Centre for Business – Accounting, Finance, and International Trade, Kangan Institute

2008-2013 I teach the following unit in the Centre for Business, Kangan Institute. I am also a coordinator for a range of Accounting and Finance units.

- Provide Management Accounting Information
- Prepare and Analysis Management Accounting Information
- Plan for International Trade
- Evaluate Organisation Finance Performance
- Make Decision within a Legal Context
- Manage Budgets and Financial Plans
- Implement and Monitor Marketing Activities
- Process Payroll
- Direct Quality Management of a project program
- Manage Payroll
- Promote Products and Services
- International Banking and Finance

My duties included co-ordination on the Broadmeadows campus, liaising with sessional and full-time staff, preparing and delivering lectures, preparing and marking assessments, co-ordinating and maintaining the KBT online websites, and performing administrative tasks. I prepared all teaching material including the Competency Outline, lecture slides, Student questions with solutions, reference material for the unit, assignment with solutions and the marking guide. I liaison with industry professionals to update unit material to current industry standards to make the teaching material more relevant, current, innovative, and practical for my students.

Associate Lecturer, School of Accounting, Economics, and Finance, Deakin University

2005-2008 I have taught the following unit in the School of Accounting, Economics, and Finance at Deakin University. I am also a coordinator for a range of Accounting and Finance units.

- MAF202 - Money and Capital Markets
- MAF203 - Business Finance
- MAF302 - Corporate Finance
- MAF303 - Treasury Management
- MAA103 - Accounting for Decision Making
- MAA203 – Accounting Concepts and Systems
- MAA260 - International Financial Reporting
- MAA301 – Financial Accounting Theory and Practice

My duties included co-ordination on the Geelong campus, liaising with sessional and full-time staff, preparing and delivering lectures and tutorials, preparing and marking assessments, co-ordinating and maintaining the unit websites on Deakin Studies Online, and performing administrative tasks. I prepared all teaching material including the Unit guide, lecture slides, tutorial questions with solutions, reference material for the unit, assignment with solutions and the marking guide. I liaised with industry professionals to update unit material to current industry standards to make the teaching material more relevant, current, innovative, and practical for my students.

2000-2005 **Teacher, Department of Financial Services, Victoria University**

I worked as a full-time lecturer in the Department of Financial Services, TAFE-Business, Victoria University. My duties included a range of responsibilities including delivering lectures, conducting tutorials, course development, being the unit chair for various subjects, preparing examination and other assessment components, liaising with staff, and assisting students with improving their academic performance. I taught a wide range of subjects over the years and these include:

2004 **Corporate Finance**
Financial Risk Management
Financial Planning and Management
Corporate Accounting
Advanced Corporate Accounting
Micro Economics
Economics for Business
Stock Market Essentials
Technical Analysis of Share price
Fundamental Analysis of Share Price

- 2003** **Corporate Finance**
Financial Planning and Management
Macroeconomics
Economics for Business
Financial Forecasting
Financial Risk Management
Advanced Corporate Accounting
- 2002** **International Banking and Finance**
Corporate Finance
Financial Risk Management
Economic Principles
MYOB
Financial Planning and Management
Advanced Corporate Accounting
Accounting Basic Reports
Accounting to Trial Balance
External Auditing
Macroeconomics
- 2001** **External Auditing Procedures**
Internal Control Principles
Financial Accounting Applications I & II
Accounting to Trial Balance
Accounting Basic Reports
Financial Planning and Management
International Banking and Finance
- 2000** **Financial Planning and Management**
Accounting to Trial Balance and Basic Reports
Commercial Law
Contract Law
Advanced Accounting Spreadsheet
Computing, Keyboarding and Word-processing
Internal Control Principles
Business Mathematics and Statistics
Using a Graphic User Interface
Spreadsheet Fundamentals
Financial Applications I & II

2001-2003 **INTERNATIONAL TEACHING EXPERIENCE**

As part of Victoria University's affiliation with universities in Auckland (**New Zealand**), Hanoi (**Vietnam**), and Changzhou (**China**), I was selected to go overseas and teach at Edenz College in Auckland, Hanoi Industrial College in Hanoi, and the Hohai University in Changzhou.

In **February-March, 2003**, for five weeks, I taught **Management Accounting Principles** and **Business Law** to the Diploma in Accounting students in the Department of Accounting at the **Hohai University** in Changzhou, **China**. I compiled extensive teaching material, student notes, and revision material for students to suitably acquire the information and be prepared for the examination. I compiled assessment tools as well. I used a flexible-teaching approach to accommodate the students' level of comprehension of English. The goals of the course were successfully achieved by the end of five weeks through patience, determination, motivation, and persistence.

In **July, 2002**, I was requested to write an **Accounting course manual** for the Diploma in Commerce course for **Edenz College** in **Auckland**. The manual comprises extensive teaching material, student notes, teacher notes, revision papers, test papers, exam papers, and lecture slides for five subjects. These include Financial Accounting Applications 1 & 2, MYOB, Accounting to Trial Balance, and, Accounting for Basic Reports. This manual is now being exclusively used to teach the students of the course. I had been to the College to instruct the teachers on the structure of the manual and the manner in which it should be utilized. The staff and Principal of the College were extremely pleased with my effort and commended me for the clarity and simplicity of presentation of information.

In **September, 2001**, for five weeks, I taught **Accounting to Trial Balance, Economics for Business** and **Contract Law**, to the Diploma in Accounting students (numbering 110) in the Department of Accounting at the **Hohai University** in **China**. I was required to re-structure a 17-week course into a five-week course and hence re-organised the teaching structure to accomplish the goals of the course, but in a manner that did not disadvantage the students in any way. I used a flexible-teaching approach to accommodate the students' level of comprehension of English. I therefore compiled extensive teaching material, student notes, and revision material for them to suitably acquire the information and be prepared for the examination. I compiled the assessment tools as well for the different subjects. The goals of the course were successfully achieved by the end of five weeks through patience, determination, motivation, and persistence.

In **April, 2001**, I went to **Hanoi, Vietnam**, whereby I taught **Accounting to Trial Balance, Basic Reports**, and **Computing** to the Diploma in Accounting students (numbering 120) in the Department of Accounting at the **Hanoi Industrial College**. Teaching 120 students who had English as a Second Language was a challenge. However, with my extensive teaching experience and considerable understanding of cultural variations in learning styles, I was able to adapt my teaching style to the learning style of students. I was responsible for providing student notes and assessment material for all three subjects.

Teaching overseas has provided with a tremendous amount of experience with regard to adopting flexible teaching styles in accordance with the students' learning styles. It has also given me rich experience in teaching a diverse range of students, adapting to different and difficult teaching situations, and managing huge numbers of students. I believe this will certainly be an advantage to my teaching capability as a Lecturer in Finance.

2002-2005 **CONSULTANT FOR FINANCE AND ACCOUNTING SUBJECTS**

I was a consultant at the Centre for Educational Development and Support at Victoria University. I assisted students in all Finance, Economics, and Accounting-related subjects and provided appropriate guidance and support to enable their understanding of the subject material. I was requested to be a consultant by the Centre as a result of the positive feedback obtained from several students and staff members regarding my teaching ability and proficiency in a range of Finance and Accounting-related subjects. Both staff and students have commended me for my role in aiding the development of necessary skills among students to accomplish the requirements of their respective courses.

1998-2000 **SESSIONAL TEACHER**

I taught a range of subjects in the Higher Education and TAFE Sectors of Victoria University and the Kangan Batman Institute of TAFE as a Sessional Teacher.

2000 **Victoria University:**

I taught **International Banking and Finance** to the **Honours** students in the Department of Accounting and Finance (Higher Education). I was responsible for preparing lecture notes, student notes and examination material. I regularly liaised with the subject co-ordinator and attended staff meetings.

1999 **Company Accounting and Financial Statements** for the Advanced Diploma in Banking and Finance course in the Department of Financial Services.

Financial Applications I & II for the Associate Diploma of Business Accounting course in the Department of Financial Services, School of TAFE-Business.

Company Accounting & Financial Statements for the Advanced Diploma in Accounting course in the Department of Financial Services.

Financial and Financial Handling for the Certificate II & IV in Business (Office Administration) course in the Department of Administration and Legal Studies, School of TAFE-Business.

Kangan Batman Institute of TAFE:

Accounting to Trial Balance for the Certificate III in Business (Office Administration) course in the Business Administrative department.

Computer Applications for the Certificate II and III (Technology) course in the Business Administrative department.

I was a Mentor at the **Flexible Learning Centre**, teaching various Finance, Accounting and Computing courses. Some of the subjects I taught include monitoring **Cash Control for Accounting** purposes, maintaining **Financial Records for Reporting** purposes, and **Processing Payroll**. My duties involved providing assistance to students in encapsulating course material, marking assignments and ensuring they complete courses within set timelines.

1998 I taught **Economics for Business** for the Associate Diploma of Business (Legal Practice) course in the Department of Administration and Legal Studies in the School of TAFE-Business, Victoria University.

I taught **Financial Applications I & II** for the Associate Diploma of Business (Accounting) course in the Department of Financial Services, School of TAFE-Business at Victoria University.

I believe that my extensive teaching experience will enable me to contribute effectively to the development of subject material along with appropriate teaching technology, teaching, planning and introduction of new courses within the Department, performing administrative duties, conducting relevant research. I have contact with members from the Industry and am proficient in course development procedures. I am confident that I can play a vital role in the implementation of educational programs and classroom strategies that will enhance the performance of students. Indeed, I am confident of teaching a variety of subjects in the department and also be involved in research activities.

I have ensured that no student is disadvantaged by preparing and providing specialised teaching material for students with a disability. Also, my knowledge of different cultures has empowered me to be aware of cultural differences and to better understand students and colleagues of multicultural ethnic backgrounds and cater to their needs. Several staff members and students have commended me for my outstanding role as a Teacher and Mentor as a result of my proficiency in delivering course modules, providing academic support, and establishing and maintaining a supportive and conducive learning environment. I have consistently received a very good evaluation from students in all subjects I teach. I was **awarded the Vice-Chancellor's Teaching Excellence Award** for 2004 at Victoria University in recognition of my "excellent teaching and learning skills, my level of personal commitment to TAFE teaching and learning, exemplary standard of professionalism, positive outcomes achieved by students attributed to my contribution, and my knowledge and standing in relation to the industry."

ACADEMIC QUALIFICATIONS

2015 DOCTORAL OF BUSINESS ADMINISTRATION (DBA)

I have completed my 'Research Proposal' in the area of 'Financial Education' for submission into a Doctoral Program. I am currently researching the top 20 Universities in the world recognised for their Doctoral Program Studies and am in the process of communicating and finding the most suitable University in terms of my research, supervision and reputation.

I plan to be enrolled into a Doctoral Studies Program by mid-2015.

2005-07 GRADUATE CERTIFICATE IN HIGHER EDUCATION

I have one more unit to complete 'Scholarship of Teaching' in my Graduate certificate in higher education in the Department of Education, Deakin University. Doing the Graduate Certificate in Higher Education helped me liaise with other academic professionals and discuss various effective teaching and learning styles, positive research supervision, and the scholarship of teaching. The course also gave me an insight and better understanding towards research findings, and knowledge related to a range of tertiary teaching and learning contexts. I also learnt how to understand and effectively use University related policies, procedures and practices to further my career as an academic, knowledge and skill of quality teaching and learning as well as effective approaches and strategies to curriculum design, assessment, and the scholarship and leadership of teaching.

2005-06 HONOURS DEGREE

I completed my Honours degree in the School of Accounting, Economics and Finance at Deakin University. Doing my honours helped sharpen my research skills and made me understand the effectiveness of proper research techniques. During my honours I learnt the quality of time management in research, the effectiveness of data collection, putting a proper research structure in place, having a clear goal and focus, understanding the basics of research such as 'what is my research question? What am I trying to find and putting measures in place to achieve that objective. I also learnt how to construct my sentences and link authors to justify my point and highlight my findings. My honours thesis was titled 'Effectiveness of Seminars in Educating Adults in Financial Literacy. It went on to be accepted in the *International Journal of Knowledge, Culture and Change Management*, Volume 7, Issue 2. I received very good feedback on my thesis from my peer's reviewers. My honours thesis was funded by UniSuper and my findings from my thesis helped them structure the content of their seminar under different age groups. It also helped them change the way in which they conducted their seminars depending on the different age groups.

1997-99

MASTER OF FINANCE

I completed the Master of Finance degree in the Department of Economics and Finance, Royal Melbourne Institute of Technology, Melbourne, Australia. I have studied subjects that are vital to the fulfilment of achieving current and future employment aspirations. The subjects include Legal Aspects of Company Finance, Money markets and Fixed Income Securities, Quantitative Methods in Finance, Financial Statement Analysis, International Finance and Asian Capital Markets, Financial Econometrics and Managerial Finance. I carried out an independent research project entitled 'Forecasting Exchange Rates' wherein I compared several relevant theories and used the appropriate methodologies to forecast exchange rates. The minor thesis I wrote has provided me with research skills to carry out future research projects and has also given me an insight into current research techniques. By working on group projects, I have acquired the skills required to work in a team, including efficient communication, cooperation, consolidating different decisions, planning and organisational skills and a commitment to achieving team goals.

1995-97

DIPLOMA IN COMPUTER ACCOUNTING AND END-USER COMPUTING

I completed a Diploma in Computer Accounting and End-User Computing at First Computers, India, and am proficient in the use of several computer packages, apart from Microsoft Office (Word, PowerPoint, Access, Excel) and Netscape. These include dBase, WordStar, Lotus, Ex Accounting Package (an Accounting software package). The course was completed in English.

1993-96

BACHELOR OF COMMERCE

I completed the Bachelor of Commerce degree at Baldwins College, India, with a major in Accounting, and achieved a First Class in all three years of my under-graduation. The course was completed in English.

PROFESSIONAL DEVELOPMENT AND TRAINING COURSES

2008

I have been a member with National Institute of Accounting (NIA) since 2004, during which I have been actively involved in keeping upto date with changes in Australian Accounting Standards. I have been recognised by the NIA as a **Professional National Accountant (PNA)**.

- 2004** I was instrumental in starting the course, **Diploma in Stock Market and Investment** in the Department of Financial Services, Victoria University. I liaised with industry professionals from Stock Market and Investment Group Pty Ltd to develop the course. I prepared the lecture material, course outlines, module outlines, assessments and was instrumental in bring funding into the Department.
- 2003** I have completed the training and am presently a certified **Internal Auditor** for Victoria University. I am therefore qualified to audit departments within the university to ensure that the required policies and standards are in accordance with the Australian Quality Training Framework.
- 2002** I completed the **Certificate IV in Assessment and Workplace Training** course at Victoria University. I have acquired a thorough understanding of the processes and tools involved in preparation of assessment components. I have also gained adequate knowledge in training issues related to the workplace, which includes planning, preparation, delivery strategies and techniques.
- 2002** I completed the **TAFE Virtual Campus** training course at Victoria University, whereby I acquired the skills to develop an online teaching course.
- 2000** As part of my Professional Development at Victoria University, I was involved in consolidating the **Training Package and Competency Standards** for the Diploma in Accounting, Advanced Diploma in Accounting, and Certificate III in Financial Services.

AWARDS

- 2014** I was nominated for the second time in a row during my teaching in RMIT Vietnam, I have been nominated by my students for the **‘Teacher of the Year’** for my passion, hard work, dedication in looking after my students learning and also genuinely caring about my students in their education and wanting to make sure they learn and perform well and achieve high academic goals.
- 2013** During my teaching in RMIT Vietnam, I have been nominated by my students for the **‘Teacher of the Year’** for my passion, hard work, dedication in looking after my students learning and also genuinely caring about my students in their education and wanting to make sure they learn and perform well and achieve high academic goals.

- 2012** On 6th of June 2012 for the third time in my academic career I received the highest award a lecturer can ever receive in his/her career. I was recognised by the Deputy Vice Chancellor and received the **‘Commendation for Excellence in Teaching the Applied Degree Program’**. I was recognised for my hard work and dedication in successfully launching the new and innovative **‘Applied Degree program’** to Industry Professional, Managers, and Company Directors.
- 2008** on Feb 29 of 2008 for the **second time** in my academic career I received the highest award a lecturer can ever receive in his/her career. I was chosen by the Deputy Vice-Chancellor (Academic) as one among 17 staff in the entire university out of 1000 staff to receive a **‘Commendation for Excellence in Teaching’** in recognition of my outstanding student evaluation results for semester 2, 2007. The award reflects my hard work and dedication towards my students learning. I have always strived to make learning interesting and practical for my students by incorporating real life examples within the theory and application they study in my lectures and tutorials.
- 2006** The students of the Bachelor of Commerce majoring in Finance/Financial Planning awarded me with a trophy to thank me for my dedication and commitment towards their learning, which states ***“To Aiman Abousher, in appreciation for the dedication you have shown your students”***. A group of 16 students from the Commerce Students society later invited me for dinner to show me their appreciation for teaching them.
- 2004** Winner, **Vice Chancellor’s Teaching Excellence Award**, Victoria University. For the first time I received the highest award any lecturer can ever receive in his or her academic career. I was chosen by the Vice Chancellor to receive the ‘Vice Chancellors Teaching Excellence Award’ for my excellent contribution towards teaching. The award was in recognition of my ***“excellent teaching and learning skills, my level of personal commitment to TAFE teaching and learning, exemplary standard of professionalism, positive outcomes achieved by students attributed to my contribution, and my knowledge and standing in relation to the industry.”***
- 2003** The students of the Advanced Diploma in Accounting course voted me as the **‘Best Teacher’** in the Department of Financial Services in light of my hard work and dedication in teaching them and preparing them for the real world. I was awarded a trophy.
- 1999** I was awarded the **‘Best Sessional Support Teacher’** by the Department of Financial Services, Victoria University in recognition of my effort to the successful induction of Sessional teachers into the department, along with providing them consistent support and guidance, which enabled them to perform their duties efficiently.

PUBLICATIONS

Abousher, A., Clayton, B., Kerry, M., & Olynyk, M. (2007). 'Effectiveness of Seminars in Educating Adults in Financial Literacy.' *International Journal of Knowledge, Culture and Change Management*, Volume 7, Issue 2.

Abousher, A. (2002). *Accounting Manual for Diploma in Commerce*. Melbourne: Victoria University Press.

Abousher, A. (December, 2001). *Teaching in China: Necessity of a flexible teaching approach*. Paper presented at the Learning Matters Symposium, Victoria University.

(July, 2001). *Aiman, our man in Vietnam*. Featured in the Victoria University Newsletter – Nexus, Vol. 11 (5), 6.

PROFESSIONAL AFFILIATION

- Member, the Institute of Internal Auditors (IIA) – Australia.
- Professional National Accountant Member (PNA), National Institute of Accounting (NIA)
- Affiliate Educational Member, Financial Planning Association (FPA)
- Associate Member, Certified Practicing Accountants (CPA)
- Associate Member, Certified Management Accountant (CMA)
- Associate Member, Australian Shareholders Association (ASA)

Jed Clarke

Tower D, West Bay,
Phung Cong, Van Giang,
Hung Yen Province.

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Profile

I am a recent graduate from Staffordshire University with a B.A(Hons) in Finance and Accounting. I am a confident individual striving to become an English teacher as I am already a member of TEFL and I am now looking for a permanent role where I can put my skills and experience to the test and progress within my career.

Education

2014 – 2018

Staffordshire University

**B.A(Hons)
Finance and Accounting
Awarded 1st Class**

Modules

- Financial Reporting
- Fundamentals of Management Accounting
- Introduction to Financial Accounting
- Financial Services Environment
- Economic Environment
- Computerised Accounting
- International Corporate Finance
- Financial Strategy
- Financial Research
- Advanced Management Accounting
- Personal & Business Taxation
- Business Law
- Employability & Study Skills
- Professional Development Enterprise
- Audit and Corporate Governance
- Business and Law Placement

Skills Gained:

- Knowledge of Microsoft Programs including Excel
- Knowledge of using Sage
- Experience in budgeting
- Excellent problem solving skills
- Ability to work to prioritise and work to deadlines
- Knowledge of computerised ledger systems
- Knowledge of preparing journals/accruals
- Excellent team working skills
- Strong knowledge of Accounting principles

2009 – 2012

Stoke-on-Trent College

A Level

2004 – 2009

Birches Head High School

GCSE

- 16 GCSE's including Maths, English and Science

Employment

September 2017 – Present

Staffordshire University

**International
Liaison Officer**

Responsibilities Include:

1. Promoting the international partnership between the two universities using different advertising techniques such as social media and blog sites.
2. Presenting to various sized audiences
3. Liaising with the partnerships manager

August 2016 – August 2017

Staffordshire University

Student Placement

I spent a year rotating around each of the following areas within the finance department.

- Accounts Receivables
- Accounts Payables
- Procurement
- Purchasing
- Management Accounts
- Financial Accounts
- Business Partners

Responsibilities Include:

- Reconciliations
- Preparing budget & capital reports
- Preparing journals, accruals and prepayments
- Preparing monthly packs including commentary and advisory
- Attended monthly budget meetings
- Preparation of annual financial statements
- Data Analysis

March 2015 – August 2016

UniPaths

Director

Responsibilities Include:

- Gathering data from questionnaires and analysing the data to determine demand.
- Designing and confidently performing pitches to businesses.
- Developing and maintaining a good relationship with business managers
- Managing a small Team of four
- Face to face communication and advertising to students.
- Handling cash payments and providing receipts.
- Producing Leaflets, Social Media sites and a website

Relevant Skills

- TEFL certified member
- Excellent Communication skills (Verbal and written)
- Willingness to Travel and multi-culture
- Passionate & enthusiastic
- Very self-motivated
- Always wanting to develop and learn new skills
- Excellent I.T skills

Interests and Achievements

- Floor manager of a film crew for a charity event at the Britannia Stadium in which we filmed over six hours of footage and condensed it down to a five minute video for the organiser to use for his charity website.
- Strong interest in travelling
- Strong interest in Business and entrepreneurialism (attending events)
- Strong interest in sports, attend the gym and play football regularly

References

Andrea Naylor (Finance Manager)
Staffordshire University
Stoke-on-Trent, ST4 2DE
07894952300
Andrea.Naylor@bcu.ac.uk

Alison Maguire (Personal Tutor)
Staffordshire University
Stoke-on-Trent, ST4 2DE
01782 294960
A.J.Maguire@staffs.ac.uk

Curriculum Vitae

Ajay Kumar Pillai
MDIS Residences
503, Stirling Road
Singapore 148959
ckrishjay@gmail.com
(65)81027364



Academic Accolades and Professional Profile:

- A Management Graduate in Finance with over 15 years of experience in Industry which includes over 11 years of experience in Teaching.
- An enthusiastic and energetic, 'people person' who communicates and interacts well with the ability to inspire and motivate. Interested in research especially in the area of Behavioral Finance and Management Accounting.
- Distinction in Dissertation (MBA) & Corporate Strategy and Operations Management Modules, topped Project Management Module.
- Have been the local program director for MSc Finance Grenoble Program.
- Received the MDIS Staff Productivity Incentive award for ten years.
- Chaired Internal Exam Board meetings.

Educational Background:

CIMA (Advanced Diploma)	2014
ICSI, India (Company Secretaryship)	2008
MBA University of Surrey, UK	2005
ICWAI (Intermediate)	1991
BCOM (Calcutta University)	1989
Currently doing PhD (Business & Management)	

Experience:

**March 2020-
Present**

Senior Lecturer

MDIS Singapore

2010-2016

Adjunct Lecturer

Southern Cross University

2012-2015

Local Program Director
for MSc Finance, Grenoble

MDIS Singapore

June'06-August'08

Lecturer

SCMS Cochin.

May'04-Dec'05

Asst. Financial Analyst.

Spring Recruitment, UK

Jan'00-Jul'03

Internal Auditor

Muthoot Bankers

Jan'94-Dec'99
Ltd

Finance Manager

The Great India Tour Co Pvt

Feb'92-Feb'93

Costing Executive

Kerala Automobiles Ltd

Apr'90-Nov'91

Audit Executive

Chartered Accountant Firm

SUMMARY OF TEACHING EXPERIENCE

University / Institution	Programme	Module Title	Period taught
SSTM Kerala University, Cochin, India SCMS (School of Communication and Management Studies), Cochin, India	MBA & Degree Programs	<ul style="list-style-type: none">• Accounting for Managers• Financial Management• Corporate Governance & Ethics• Financial Accounting• Management Accounting	July'06-July'08

MDIS Singapore	PC, Diploma and Advanced Diploma	<ul style="list-style-type: none"> ● Introduction to accounting ● Cost Accounting ● Principles of Accounting and Finance ● Management Accounting ● Business Accounting and Finance ● 	Oct'08 – Oct'12
MDIS Singapore	Graduate Diploma in Accounting and Finance	<ul style="list-style-type: none"> ● Cost & Management Accounting for Decision Making ● 	Oct'08 – Present
Edith Cowan University MDIS (Singapore)	BSc (Hons)	<ul style="list-style-type: none"> ● Business Accounting ● Management Accounting 	Jan'09-Jan'10
Southern Cross University MDIS (Singapore)	BSc (Hons)	<ul style="list-style-type: none"> ● Accounting for Business 	Jan'09-Jan'16
University of Bradford MDIS (Singapore)	BSc (Hons) in Accounting and Finance	<ul style="list-style-type: none"> ● Introduction to Accounting ● Financial Accounting ● Management Accounting ● Financial Management ● Contemporary Issues in Accounting ● Auditing ● Corporate Reporting ● Capital markets, Investments and Finance 	Oct'08 – Present
University of Bradford MDIS (Singapore)	MBA	<ul style="list-style-type: none"> ● International Financial Management 	Oct '12-Oct '13

University of Derby	Degree	<ul style="list-style-type: none"> • Management Accounting and Performance Evaluation (MAPE) 	Feb'2015-Feb 2016
University of Bradford MDIS (Tashkent, Uzbekistan)	Degree	<ul style="list-style-type: none"> • Financial Management • Contemporary Issues in Accounting • Capital Markets, Investment and Finance 	Mar '12-May' 12
University of Wales (Tashkent, Uzbekistan)	MBA	<ul style="list-style-type: none"> • Management of Accounting and Finance 	Oct'09 – Oct'13
University of Wales (Tashkent, Uzbekistan)	Degree	<ul style="list-style-type: none"> • Introduction to Accounting • Financial Management 	Oct'09 – Oct'13
Bangor University	BSc (Hons) Business Studies & Finance	<ul style="list-style-type: none"> • Management and Financial Accounting • Financial Accounting • Corporate Governance and Regulation • Financial Markets and Institutions 	Feb'16 to present
University of Sunderland / MDIS (Singapore)	Bachelor of Arts (Hons) Accounting and Financial Management	<ul style="list-style-type: none"> • Strategic Management Accounting • International Financial reporting • Financial Markets 	Jan'16 to present
Zhejiang Technical Institute of Economics, China	ADITC (Advanced Diploma in international Trade and Commerce)	<ul style="list-style-type: none"> • Financial Management 	June'16 to present

Vels-MDIS (Chennai, India)	Advanced Diploma in Business Management	• Management of Finance	September'04 to present
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Academic Experience

- Lecturing Accounting & Finance Modules
- Conducting Workshops
- Chairing Internal Exam Board Meetings
- Involved in research and designing of new courses and materials.
- Assessing student's course work and material.
- Involved in the set up of exams and the marking of results.
- Attending External Examination Board or Meetings when required.
- Providing mentoring, advice and support to students on a personal level.
- Actively leading class discussions and encouraging debate.
- Organized, implemented and monitored Programmes and assessments.
- Was responsible for preparing learning material for courses and devising relevant practical activities.
- Interaction with University partners.
- Module leaders for various area in Singapore and overseas campuses

Research:

List of Articles Published

1. Pillai, A. K. (2006) Expectations and Perceptions in Information Services. SCMS Journal of Indian Management, III (3), 82-99.
2. Pillai, A.K. (2007). Behavioral Considerations in Cost Allocation. The Icfai Journal of Behavioral Finance, 4 (3), 49-58.
3. Pillai, A.K. (2007). ERP Implementation in Rolls-Royce: A Project Management Approach. The Icfai Journal of Systems Management, 5(3), 25-33.

4. N. Rajagopal and Pillai, A.K. (2007). Measuring Employee Expectation and Engagement, *Review of Professional Management*, 5(1), 23-31.
5. Pillai, A.K. (2007). Behavioural Considerations of Cost Allocation in Indian Industry: An Empirical Examination, *IMPACT Indian Institute of Management*, 2(1), 56-66.
6. N. Rajagopal and Pillai, A.K. (2007). Inter-Relations between system variables and effectiveness in the context of organizational change, *Business Review*, 2(2), 60-66.
7. Pillai, A.K. (2008). A Study of Behavioural Variables Influencing Cost Allocation System, *PES Business Review*, 3(1), 24-34.
8. Pillai, A.K. (2008). Empirical Examination of a Cost Allocation Model: Using the Theory of Planned Behaviour, *Vilakshan*, 5(2), 75-92.
9. Pillai, A K and N Rajagopal. (2008). Strategic lessons and Theoretical Explanations – The Vodafone Mannesmann Case, *Journal of Contemporary Research*, 2(1), 60-79.
10. Pillai, A.K. (2007). Influence of Incentives in Cost Allocation, *Fortune New Delhi Journal of International Management*, 4(1), 50-60.
11. Pillai, A.K. (2008). Activity Based Costing or Time Driven Activity Based Costing? *The Management Accountant Journal*, 43(12), 944-47.
12. Pillai, A. K., and Dr Liu, A. (2014). Allocating with Style – An Empirical Examination of Decision Styles of Managers, *Management Development Journal of Singapore*, 20(1), 9-33.
13. Pillai, A K (2015). An Empirical Analysis of General Decision Making Syles in Cost Allocation, *Management Development Journal of Singapore*, 20(2), 8-39.
14. Pillai, A. K., and Singh, A. (2016). Allocating with Style – An Empirical Study on the Psychology of Managers Allocating Costs using the Five Factor Model, *Management Development Journal of Singapore*, 21(1), 9-38.
15. Pillai, A. K., (2017). Allocating with Style – To Allocate or not to allocate: Exploring Manager's intention and behavior towards cost allocation using the theory of planned behavior, *Management Development Journal of Singapore*, 22(2), 1-25.

16. Pillai, A. K., (2019). Modelling Cost Allocation Adoption As An Endogenous Consequence of Senior Executives' Characteristics, *Journal of Business, Sciences and Technology*, 1(1), 1-42.

Forthcoming Issue (2020)

17. Pillai, A.K., Tan, A., & Teo, H. (2020). Key influences on cost allocation adoption: The Role of Managerial Characteristics, Personality Traits, Behavioural Intention and Decision Styles, *Journal of Business, Sciences and Technology*, 2(1), 1-

Projects:

Undertook a Community Development Project with the First Year Students of MBA Batch.

Involved Cleaning the Local Panchayat for a day.

Worked as a Team Member in a Waste Management Project Conducted by SCMS.

Guided the Dissertations of MBA Students.

Giving Research Guidance to degree and masters students

Conducted Research Workshop for Degree and Post-graduate Students

Involved in Water Management Project

Conducted workshops on SPSS (Statistical Package for Social Sciences)

Management Development Programmes

1. General Management Programme for *WIPRO* at SCMS Cochin on May 17, 2007

Took classes on “Accounting for Management” and “Introduction to Financial management”

2. General Management Programme for *Allianz Cornhill* at Technopark, Trivandrum

Took classes on “Ethics & Corporate Social Responsibility” on May 31, 2008.

3. Workshop on “Management and Accounting” at MDIS Tashkent, 2010.

4. Business Talk on “Fraud and Internal Control” at German Talk centre on August 3, 2012.
5. Conducted MBS Excel Workshop at MDIS Singapore on October 2, 2015.
6. Conducted a workshop on Auditing at MDIS Singapore on June 23, 2016.
7. Conducted a Finance Workshop for Korean students for Ilshin Girls’ Commercial High School Students at MDIS Singapore on July 13, 2016.
8. Conducted an interdisciplinary workshop on ‘*Are you left brained or right brained? And why does it matter?*’ at MDIS Singapore on September 20, 2016.
9. SPSS Workshop for Postgraduate students and DBA students at MDIS every June and November.

Faculty Development Programmes

Attended one-day workshop in “Motivating your team” conducted by the British council, Singapore on August 2010.

Attended Academic Quality Assurance Training Workshop conducted by Dr Peter Morgan of UOB (University of Bradford) on August 1-2, 2011.

Completed “Learning and Teaching in Higher Education” conducted by UOB (University of Bradford).

Attended training on “Blackboard 101 Training - Basic Course Delivery & Communication” on 31 July 2012.

Attended ‘GGSB’ – Faculty Development Programme on 4-5 October, 2014.

Attended UOS UK Three Day – ‘Faculty Development Programme’ on February 2-5, 2015.

Attended training on ‘Problem Based Learning: Who, What, Why and How’ at Republic Polytechnic on September 18, 2015.

Attended Lecturers’ CPD and Training workshop at MDIS Singapore on January 16, 2016.

Attended training on 'Riding the Social Media Waves' on October 2016.

Attended 'Teaching and Learning Framework' Training conducted by Dr Sng August 2019 and January 2020.

References

1. Dr Amir Singh
Senior Lecturer-cum-Institute Counselor
Chair, Internal Examinations Board
Lecturer Management Department
Management Development Institute of Singapore
MDIS Campus
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Email id: lectureramirsingh@gmail.com
Web: www.mdiss.edu.sg

2. Ms Tan Teck Swan
18 Happy Avenue Central
Singapore 369910
Email ttswan@singnet.com.sg
Tel: (065) 9781 9895

3. Mr Manek Mukesh
Adjunct Lecturer
Singapore
Email id: onlymanek@gmail.com
Tel: (065) 9727 3978

SHASHI KANT PRASAD CHAUDHARY

CURRICULUM VITAE

TENTATIVE POSITION:

1. PERSONAL INFORMATION:

Full name: SHASHI KANT PRASAD CHAUDHARY (Mr.)
Date of birth: 6th MAY, 1975
Address: VILLAGE: SUPAULI-6, DISTRICT: PARSA, NEPAL
Tel: (00977) 98510-51905
E-mail Add: saw_sea@yahoo.com/saw_sea@outlook.com
Years of working Experience: 15 years
Nationality: NEPALESE

2. MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS:

- Member, South Asian Network for Development and Environmental Economics

3. COMPETENCY:

- Excellent in Research and Data Analysis.
- Strong in operating Statistical software: Eviews, MATLAB, STATA, GRETL, CPro, SPSS, etc.
- Self-initiated Team Leader.

4. EDUCATION:

- **2006** - Master of Arts (M.A.) in **Economics**, Prithvi Narayan Campus, Pokhara (Tribhuvan University), Nepal.
Thesis: **“Role of Remittance in Economic Development of Nepal”**
Concentration: **Mathematical Economics**
- **2004** – Bachelor of Arts (B.A.) in **Economics and Mathematics**, Prithvi Narayan Campus, Pokhara (Tribhuvan University), Nepal.

5. OTHER TRAININGS:

- 8 weeks International Training on **“Business Research Methods and Data Analysis”** (October 29th – December 21st, 2012) held at Entrepreneurship Development Institute of India (Ahmedabad, India), sponsored by Ministry of External Affairs, Government of India.
- 6 days Training on **“Macroeconomic Forecasting Techniques”** (8th – 13th January, 2012) held in Kathmandu, Nepal, Organized by Nepal Rastra Bank, Bankers’ Training Centre, Nepal.
- 11 days International Training on **“Macroeconomic and Monetary Policy Management”** (13th – 23rd November, 2011) held in Kathmandu, Nepal, Organized by South-East Asian Central Banks (SEACEN) Center, Kuala Lumpur, Malaysia in collaboration with Bank of Japan (BOJ).
- 3 days Training on **“National Accounts”** (2nd – 4th May, 2011) held in Kathmandu, Nepal, Organized by Nepal Rastra Bank, Bankers’ Training Centre, Nepal.
- 2 days Training on **“IT Infrastructure of Nepal Rastra Bank and Their Proper Usage in Simple Troubleshooting of Hardware and Software”** (28th – 29th November, 2010) held in Kathmandu, Nepal, Organized by Nepal Rastra Bank, Bankers’ Training Centre, Nepal.
- 5 days International Training on **“Introduction to Quantitative Environmental Economics”** (23rd - 27th January, 2010) held in Pokhara, Nepal, Jointly organized by

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South Asian Network for Development and Environmental Economics (SANDEE) and International Center for Integrated Mountain Development (ICIMOD).

- 3 days Training on “**Case Writing and Case Method of Teaching**” (5th - 7th November, 2009) held in Pokhara, Nepal, Jointly organized by School of Business, Pokhara University and University Grants Commission, Nepal.

6. LANGUAGE & DEGREE OF PROFICIENCY:

Language:	Writing	Speaking	Reading
<u>Nepalese:</u>	<u>Mother Tongue</u>	<u>Mother Tongue</u>	<u>Mother Tongue</u>
English	Excellence	Excellence	Excellence
Hindi	Excellence	Excellence	Excellence

7. EMPLOYMENT RECORD:

- Assistant Director, Nepal Rastra Bank (The Central Bank of Nepal), Kathmandu since March, 2010 – Current.
- Adjunct Faculty, Ace Institute of Management, Kathmandu, Nepal since August 2011 – Current.
- Adjunct Faculty, South Asian Institute of Management, Kathmandu, Nepal since July 2012 – Current.
- Visiting Faculty, Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal since June 2012 – Current.
- Assistant Professor, School of Business, Pokhara University, Pokhara (Nepal) from March, 2008 – March, 2010.
- Visiting Faculty, Institute of Forestry, Pokhara, Nepal (2009) for 2 semesters of Master of Science (M.Sc.) in Forestry.
- High School Teacher, Paramount Public School, Pokhara, Nepal from April, 2004 – April, 2008.
- High School Teacher, Balodaya English Boarding School, Pokhara, Nepal from April, 2002 – April, 2004.
- Lab Technician cum High School Teacher, Lumle Agriculture Research Center, Pokhara, Nepal from July 1997 – April, 2002.

8. DETAILS OF WORK EXPERIENCE:

Time:	August 2012 – Current
Name of Employer:	NEPAL RASTRA BANK (NRB) (The Central Bank of Nepal)
Location:	Kathmandu, Nepal
Position held:	ASSISTANT DIRECTOR, NEPARL RASTRA BANK, CENTRAL OFFICE, RESEARCH DEPARTMENT (5 th Household Budget Survey Project)
Description of Duties:	Since last 7 months, Mr. Chaudhary has been working as Director Assistant of 5 th Household Budget Survey Project. In this project, he is responsible for preparing all materials and arranging and participating in the meeting of 5 th Household Budget Survey Committee (HBSC), which has been led by Senior Deputy Governor and includes Head of NRB Research Department, Head of Central Bureau of Statics, Government of

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Nepal and Head of Department of Statistics, Tribhuvan University and Project Chief in others.

Mr. Chaudhary is a member of expert committee regarding 'Shaping the Sample Design for 5th Household Budget Survey and the Methods of Execution'. He is also involved in the Technical Team for 'Deciding the mode of Online Data Transfer and Data Analysis.'

Time: November 2011 – July 2012

Name of Employer: NEPAL RASTRA BANK (NRB) (The Central Bank of Nepal)

Location: Kathmandu, Nepal

Position held: ASSISTANT DIRECTOR, NEPARL RASTRA BANK
CENTRAL OFFICE, RESEARCH DEPARTMENT
(Price Division)

Description of Duties: Mr. Chaudhary worked in Research Department, Price Division for 9 months, where he was responsible for developing Consumer Price Index (CPI) and Inflation. He was also responsible for *Impact Analysis of Policy Change and Economic Shocks on the Rate of Inflation*. On the basis of changing scenarios within and outside Nepal, he was responsible for 'Projection of Inflation Rates' for official purpose as well as for Monetary Policy.

Time: August 2011 – November 2011

Name of Employer: NEPAL RASTRA BANK (NRB) (The Central Bank of Nepal)

Location: Kathmandu, Nepal

Position held: ASSISTANT DIRECTOR, NEPARL RASTRA BANK
CENTRAL OFFICE, RESEARCH DEPARTMENT
(Economic Development Division)

Description of Duties: Mr. Chaudhary worked in Research Department, Economic Development Division for 4 months, where he took responsibility for updating and analysing the data regarding real sectors that include National Accounts, Manufacturing establishments, Tourism, Foreign Employment and Foreign Direct Investment (FDI). Besides, he successfully completed Quick-Survey Study on '*Impact of Central Bank's Policy on Credit limits in Real Estate Sector*'. He also successfully completed the study entitled '*Share of Kathmandu Valley in the National Economy*', which was the first attempt in Nepal in developing the concept of Regional GDP.

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Time: March 2010 – July 2011

Name of Employer: NEPAL RASTRA BANK (NRB) (The Central Bank of Nepal)

Location: Birgunj, Nepal

Position held: ASSISTANT MANAGER, NEPAL RASTRA BANK, REGIONAL OFFICE, BIRGUNJ.

Description of Duties: Mr. Chaudhary worked in Nepal Rastra Bank, Regional Office Birgunj for 17 months, where he has discharged diversified responsibilities.

- For first 10 months, he worked in **Administration and Currency Management Unit**, where he took charge of Account Section. He was responsible for dealing with all administrative tasks. In regular task, he was responsible for clearing the bills of purchases and travelling orders (TO) of staffs, pensions and taxation. He was also responsible for dealing with customs for clearing purpose.
- For next 7 months, he worked in **Research and Banking Promotion Unit**, where he took responsibility of preparing Balance of Trade (BOT) for all exports and imports of goods through Birgunj Custom and Dry-port Custom. He was also responsible for updating data from various government offices and commercial banks for the purpose of “Recent Economic Activity Report”. Besides, he was also involved in the Probability and Utility Study of Loans for many micro-finance groups and inspection/supervision of commercial banks and money changers.

Time: August 2011 – Current

Name of Employer: ACE INSTITUTE OF MANAGEMENT

Location: Kathmandu, Nepal

Position held: ADJUNCT FACULTY ‘TRADE FINANCE’ & ‘SEMINAR ON E-BANKING AND E-INSURANCE’

Description of Duties: Mr. Chaudhary is associated as Adjunct Faculty with Ace Institute of Management, where he is responsible for delivering classes on **Trade Finance** (Fall Semester) and **Seminar in E-Banking and E-Insurance** (Spring Semester) in BBA-BI Program.

Trade Finance is designed to impart practical aspects of International Trade process to the students. It includes various theories of International Trade, Details process of terms and mode of payment, various guidelines issued by International Chamber of Commerce (ICC) including UCP 600, URDG 758, URC 522, URR 725, Inco terms 2010, ISBP 681 and ISP 98. It also covers various ways of export/import financing.

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Seminar in E-Banking and E-Insurance is designed to expose students to the central issues and problems in current literature, which appear in international journals and business periodicals so that they would understand the research and the developments mainly in the field of banking and insurance.

Time: July 2012 – Current
Name of Employer: SOUTH ASIAN INSTITUTE OF MANAGEMENT (SAIM)
Location: Kathmandu, Nepal
Position held: ADJUNCT FACULTY
'MICROECONOMICS' & 'MACROECONOMICS'
Description of Duties: Mr. Chaudhary is associated as Adjunct Faculty with South Asian Institute of Management, where he is responsible for delivering classes on **Macroeconomics** (Fall Semester) and **Microeconomics** (Spring Semester) in BBA Program.
Both the courses aim to acquaint the students with basic fundamentals of economic theories and tools essential to analyse and make business decisions of firms and other economic organizations.

Time: June 2012 – Current
Name of Employer: CENTRAL DEPARTMENT OF ENVIRONMENTAL SCIENCES, TRIBHUVAN UNIVERSITY
Location: Kathmandu, Nepal
Position held: VISITING FACULTY 'ENVIRONMENTAL ECONOMICS'
Description of Duties: Mr. Chaudhary is responsible for delivering speeches on **various Environmental issues and how economics can help to solve these issues** for the students of Master of Science (M.Sc.) in Environmental Science. This course also intends analysis of various policies implementation and their stories of success or failure.

Time: March 2008 – March 2010
Name of Employer: SCHOOL OF BUSINESS, POKHARA UNIVERSITY
Location: Pokhara, Nepal
Position held: ASSISTANT PROFESSOR OF ECONOMICS
Description of Duties: Mr. Chaudhary was responsible for taking the classes of Economics Courses in MBA and BBA. Besides, he was also responsible for supervising the Theses of MBA and Project Reports of BBA. He was also involved in the designing the courses of MBA Trimester.

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In MBA classes, he took classes on ‘**Economic Analysis of Business**’ and ‘**Macroeconomics and the Global Economy**’.

Economic Analysis of Business is an intensive course that stresses functioning of the market system. The purpose of the course is to investigate and analyze the theoretical and analytical tools of microeconomics, with emphasis upon their application to business decision-making. Topics include demand and supply analysis, decision theory, production and cost theory, market structure and competition, price determination, competitive strategy, economies of scale and scope, employment of factors of production, and profit strategies.

Macroeconomics and the Global Economy is intensive and introduces students to macroeconomic theory and application as they pertain to the business decisions. Topics include measurement of GDP, inflation, monetary and fiscal policy, impact of economic policy on the behavior of individuals and organizations, fluctuations and business cycles, economic growth, employment issues, emerging global economic issues, and nature of the expanding global economy. All topics are discussed with emphasis on real-world application.

Time: June 2009 – February 2010
Name of Employer: DEPARTMENT OF FORESTRY, FORESTRY CAMPUS, TRIBHUVAN UNIVERSITY
Location: Pokhara, Nepal
Position held: VISITING FACULTY URBAN-RURAL ECOSYSTEM STUDIES
Description of Duties: Mr. Chaudhary was responsible for delivering speeches on **impact of Urbanization and Changing Environment on Ecosystem and Green Economics** for the students of Master of Science (M.Sc.) in Forestry.

Time: 2007 – 2009
Name of Employer: LAKE CITY COLLEGE AND RESEARCH CENTER
Location: Pokhara, Nepal
Position held: LECTURER, ECONOMICS
Description of Duties: Teaching **Microeconomics** and **Macroeconomics**

Time: 2004 – 2008
Name of Employer: PARAMOUNT PUBLIC SCHOOL
Location: Pokhara, Nepal

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Position held: HIGH SCHOOL TEACHER
Description of Duties: Teaching Science and Environmental Science in High School

Time: 2002 – 2004

Name of Employer: BALODAYA ENGLISH BOARDING SCHOOL

Location: Pokhara, Nepal

Position held: HIGH SCHOOL TEACHER

Description of Duties: Teaching Science and Population Studies in High School

Time: 1997 – 2002

Name of Employer: LUMLE AGRICULTURE RESEARCH CENTER
(BALMANDIR ENGLISH SCHOOL) (A BRITISH PROJECT)

Location: Pokhara, Nepal

Position held: LAB TECHNICIAN CUM HIGH SCHOOL TEACHER

Description of Duties: Besides working in the laboratory, teaching science in the school run for the children of staff of the project.

9. PUBLICATIONS

Research Articles

1. Co-author with Dr. Min Bahadur Shrestha, “The Impact of Food Inflation on Poverty in Nepal” in *Economic Review* (2012), 24(2): 1-14, Nepal Rastra Bank.
2. Author, “Sensitivity of the Trade Openness in Nepal” in *Economic Review* (2011), 23(2): 52-63, Nepal Rastra Bank.
3. Author “The Impact of Agricultural Performance on Inflation in Nepal” in *PACE, The Journal of Business and Management* (2011), 3(1):p.31-40, School of Business, Pokhara University.
4. Co-author with Dr. Nagendra Lal Srivastava, “Foreign Employment, Remittance and Household Welfare: A Case of Nepal” in *Arthik Sarokar* (2011), 1(3): p.65-73, National Economic Concern Society, Nepal.
5. Author, “Public Expenditure and Economic Growth in Nepal” in *Economic Literature* (2010), IX: p.96-104, Department of Economics, Prithvi Narayan Campus, Pokhara.
6. Author, “Modelling and Forecasting the Inbound Tourism: A Case of Nepal” in *Arthik Sarokar* (2010), 1: p.111-119, National Economic Concern Society, Nepal.
7. Author “On the Role of Remittance and FDI in Economic Development of Nepal” in *PACE, The Journal of Business and Management* (2010), 2(1):p.1-10, School of Business, Pokhara University.
8. Co-author with Dr. Nagendra Lal Srivastava, “Role of Remittance in Economic Development of Nepal” in *The Journal of Nepalese Business Studies* (2007), 4(1): p.27-36, Faculty of Management, Prithvi Narayan Campus, Pokhara.

SHASHI KANT PRASAD CHAUDHARY

General Articles

1. Author, "Increasing Government Expenditure in Nepal: How Effective it is?" in *Mirmire (2011)*, 10(305): p.304-307, Nepal Rastra Bank.
2. Author, "The Climate Change, Food Supply and Inflation in Nepal" in *Nepal Rastra Bank Samachar (2011)*: p.100-103 (English Section), Nepal Rastra Bank.
3. Author, "The New Concern of Inflation in Nepal: Does Environment affect the Supply?" in *Nepal Rastra Bank Samachar (2010)*: p.91-92 (English Section), Nepal Rastra Bank.
4. Author, "The Remittance inflow to Nepal: The Lifeline or Cause of Trade Deficit?" in *Arunodaya (2010)*, 16(14): p.385-388, NRB Employees' Union.
5. About a dozen of articles on macroeconomic concerns and issues of Nepal published in the national newspapers.

10. RESEARCH ACTIVITY INVOLVEMENT

1. Has experience of many Quick surveys and Impact Analysis of Shocks on Nepalese Economy.
2. Member, "Tracing Study on the Pass-out students of School of Business, Pokhara University (2009/10)".
3. Resource person, "7 Days Workshop Program on Research Methodology (2008)" jointly organized by School of Business, Pokhara University and University Grants Commission, Nepal.

11. REFERENCES

1. Shankar Acharya, Ph.D.
Director, Research Department, Nepal Rastra Bank
E-mail: acharyas@nrb.org.np; shankar329@gmail.com
Cell: + 977-985-107-7856
2. Dilli Ram Pokhrel, Ph.D.
Deputy Director, Research Department, Nepal Rastra Bank
E-mail: drpokhrel@nrb.org.np; drpokhrel2001@yahoo.com
Cell: + 977-984-172-6075
3. Prof. Nagendra Lal Srivastava, Ph.D.
Department of Economics, Prithvi Narayan Campus, Pokhara (Tribhuvan University), Nepal
E-mail: kakrahwa@hotmail.com
Cell: +977-984-602-0080

Certification:

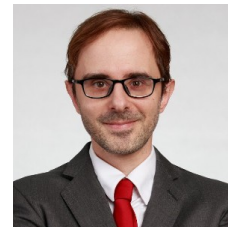
I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience.

Kathmandu, date 22 month 1 year 2013

Shashi Kant Prasad Chaudhary

FRANCESCO MECA

22/03/1980 | Italian (IT, EU) | +84.35.7817970, +39.334.2070254 | Hanoi, Vietnam
francesco.meca@gmail.com



Profile

People manager with 13 years of cross-functional experience in 5 countries

Mindset-crafter, relationship focused inspirational leader and team player. Status-quo challenger. University lecturer, language, IT and management teacher. Corporate-level trainer and consultant. Project manager. Strategy enthusiast. Advocate for disabled people's rights, diversity and inclusion. Deep, sharp storyteller, creative writer and author relentlessly inspiring positive change in people and organizations in a lifelong journey that is worth to be known.

Skills and Fields of Interests



HR Management



Training and Development



Diversity and Inclusion



Inspirational Leadership



Gender Equality and Women Empowerment



Cultural Awareness



Research



Communication



Startups and Innovation



Creative Writing



Relationship Management



Information Technology

Work experience

University Lecturer 11/2018 – present

Greenwich University - FPT Education, Hanoi, Vietnam

- Organizational Behaviors - Human Resources
- Understanding and Leading Change
- Managing a Successful Business Project (Project Management)

University Lecturer and Internationalization Agent 01/2018 – present

Vietnam National University - International School, Hanoi, Vietnam

Department of Social Sciences and Economics:

- Global Supply Chain Management
- Business in Multicultural Environments
- Business Culture

Department of Technology and Management:

- Management Information Systems (with Project Management)
- Decision Support Systems

International Admissions Manager (until 11/2018):

Preparation of a comprehensive action plan covering corporate culture change management

- Data mapping for integration of existing systems, ensuring data security and integrity
- Requirement gathering, stakeholders interview and business process mapping
- Creation and management of internal documentation
- Relationship management and partnership development
- Development of new workflows and solutions

General Manager - HR Development Manager 07/2017 – 01/2018

Toravy, Hanoi, Vietnam

- Driven sustained increase on social media engagement, customer retention, and revenues. HR Management: leadership and soft skills training provided for all admin staff; Operations and business development supervisor; communication coordinator, strategic management consulting.

Work experience

Lecturer (for people with disability) 01/2017 – 03/2017

Mente Libera, Brindisi, Italy

- Lecturer of Computer Science and Information Management for Mente Libera association - at the Brindisi Campus of the University of Bari
- Project: Disabled People's Rights: Training and Knowledge Sharing (I diritti dei disabili: formazione ed informazione)
- In collaboration with ASL Office - Regional Health Department - Ministry of Health
- Coordination with different professionals (Lawyer, Psychiatrist, University Executives)

English Teacher 06/2016 – 12/2016

Freelance, Brindisi, Italy

- Teaching English in individual sessions or classes for small groups (5-15)

Apple Online Store Order Process Specialist (SAP) & Partner Relations Advisor 02/2015 – 05/2016

Apple, Cork, Ireland

- Apple Online Store cross-functional order administration (Operations, Logistics)
- Perform routines to generate and test reports - Data extraction from SAP and Data Analysis on Excel, compiling, cleaning and processing data, data manipulation
- Assistance in long-term cross-functional project planning and implementation
- Working collaboratively with IT staff to test new solutions, writing documentation
- Sales / Post Sales - Managing Vendor Relationship - Customer Support - CRM
- Information Systems: SAP modules - Sales and Distribution / Logistic Execution
- Escalations - Business cases creation and presentations
- Process mapping and development of procedures to address complex issues
- KPIs and SLA monitoring, professionally conducted training of new admin staff
- Relationship management - Multichannel communications, Developers, AppleCare

Content Marketing Associate 09/2014 – 10/2014

Teech.io, United Kingdom

- Content creation on Education Technology topics (Gamification, Massive Open Online Courses, Technology adoption and impact) - Product testing

MBA - Management Consultant 03/2014 – 07/2014

Bsafe - City Enjoyers (Startups), Italy

- MBA class activities, for the PHD+ Program - Management consulting for startups
- Strategic advisory - Creation of the business plan - Marketing strategy and planning - Mobile application design - Financial planning - Organizational requirements gathering and analysis - IT (process mapping, procedure creation, infrastructure) - Business development - Risk assessment - Keynote pitching to potential investors

Online Community Board Administrator and Content Author 05/2008 – 02/2009

Gameforge, Germany

- Team leader (interviewing and training, assignments, supervision)
- implementation of new features, troubleshoot issues and support users post implementation
- Creation of procedures and regulations for the use of the discussion board
- Act as Portal Admin for end users
- Customer-facing reference point, Investigations of issues on terms of use violations, methods to improve user experience - Escalations
- Creative writing (author of 30+ storylines)

Translator - Localization - English Teacher 01/2008 – 11/2010

Freelance, Forlì, Italy

- Localization and translations, proofreading, language related services for professionals - Teaching English

IT Solutions Consultant 12/2007 – 12/2013

Freelance, Brindisi / Forlì, Italy

- Assembling Personal Computer systems - Analysis of customer's needs - customer retention 100%

Work experience

Creative Writer and Author 09/2007 – 02/2008

Schegge Magazine - Associazione Koinè, Forlì, Italy

- Published articles about Philosophy, Artificial Intelligence and social inclusion of people with disabilities

Support for integration of Refugees 07/2005 – 07/2007

Solidarietà e Rinnovamento, Brindisi, Italy

- SPRAR Centre: Service of Protection for Refugees and Asylum Seeker - Ostuni (BR)

Education

University of Pisa, Italy - 2014/2015

- **MBA - Master of Business Administration** (*Excellent - 93/100*)

Bocconi University, Milan, Italy - 2012 - Awarded Scholarship

- **Master in Project and Information Management** (*103/110*)

University of Bologna, Forlì, Italy - 2007/2011

- **Bachelor degree in Economics and Business Management**

University of Salento, Lecce, Italy - 1999/2007 - Awarded Erasmus scholarship

- Industrial Engineering - Mechanical Engineering - (*Erasmus, Universität Karlsruhe, Germany - 2004/2005*)

Certifications

- **TEFL 140hrs Level 5** (Teaching English as a Foreign Language), *TEFL Cambridge* - 09/2017
- **Digital Marketing Excellence, Google**, *Interactive Advertising Bureau Europe* - 01/2017
- **International Leadership and Organizational Behavior**, *Bocconi University (on Coursera)* - 12/2015
- **Managing Fashion and Luxury Companies**, *Bocconi University (on Coursera)* - 11/2014
- **TOEIC** (Test of English for International Communication), *ETS Global* - 02/2013

Language Skills

Italian (native)

English (TOEIC: 965/990)

French

Spanish



References

Prof. Dr. Giuseppe LATINI, MD

European Union Scientific Committee on Emerging, Newly-Identified Health Risks; National Research Council of Italy, Clinical Physiology Institute, (Personal and Professional Reference), giuseppe.latini.1949@gmail.com

Markus GUSTAVSSON

Westpac, Wellington, New Zealand; Former Apple Order Support Supervisor, (Professional Reference), markusgustavsson21@gmail.com

Prof. Dr. PHAM Thi Lien, PhD

Vietnam National University - International School; Head - Department of Social Sciences, Economics and Management, (Professional Reference), lienpt@isvnu.vn

LE Thi Tuyet Mai

HMM Vietnam; General Manager, (Professional Reference), huonglee.mai@gmail.com

CHRISTOPHER DAVID JEFFERY

292 Lauderdale Tower
The Barbican, London EC2Y 8BY
Home: +44(0)20-7638-8920 Mobile: +44(0)7527395109

Date of Birth: 6th August 1968

EMPLOYMENT:

- 2003-
1998-2003 **Senior University Lecturer**, Cass Business School, London
University Teaching Fellow, City University Business School. Duties included:
Admissions and Recruitment/International Director Cass MBA Programmes (2008-)
- Review and Implementation of recruitment and admissions processes for MBA
 - Interviewing over 200 candidates per year
 - Attending and running recruitment events in UK and Overseas
- Director of Executive MBA (2002 -2008, 2009-)**
Director Executive MBA (Dubai) (2007 -2008)
- Ranked 2nd UK and 21st World (FT)
 - Overseeing and implementing strategic Review and launching reviewed course
 - Developed new modular offering and beat initial target for recruitment
 - Hiring and discipline of both academic and professional staff
 - Introduced Emerging Consultancy Course (Poland, Argentina, Vietnam and Russia)
 - Achieved funding for and organising Cass China Symposium (6th year over 120 students attending from London)
 - Introduced International elective programme
 - Ran recruitment and beat targets in 4 years raising numbers from 55 per year to 160
 - Increased income from £1,500,000 to £5,500,000
 - Full budget responsibility for £5.5 million course
 - Introduced strategic sponsorship tool to the School for closer corporate links
 - Spearheaded Recruitment and Alumni operations across the MBA programmes, conversion rates from interview to enrolment 75%.
 - School alumni champion
 - Extensive media work, including television
 - Teaching Scores in excess of 4.5 out of 5
- University Teacher (1998-2003)**
- Teaching of tutorials, modules and courses including Accountancy, Business Games, Case Studies, Systems Thinking, Management Thinking, Strategy, Computing and Customer Loyalty.
 - Occasional Student Tutor, in charge of recruiting and tutoring predominately American students taking a semester or more within the department and the school.
 - Developed courses in Entrepreneurship and European Union.
 - 2nd Year, Year Out Placement and Personal tutor to 32 students.
 - Admissions Tutor for all except BSc Actuarial Science undergraduate students into the School.
 - Introduced 'Added Value' elements for students of Department.
- 1997-1998 **Part-time Computing Courses Co-ordinator**, Department of Continuing Education, City University. Duties included:
- Responsibility for the hiring of lecturers.
 - Development of new courses.
 - Administration, publicity and recruitment to a set of courses with a turnover in excess of £250,000 per annum.
 - Membership of Board of Studies and Policy and Finance committees.
 - Membership of Working Group on new course development from conceptual stage through to Senate approval.
- 1995- **Visiting Lecturer**, City University, School of Engineering, Accountancy; School of Informatics, Accountancy and Accountancy Information Systems; Business School, Introduction to Management, Business Games, Management Problem Solving
Lecture sizes ranged from 15 - 200

- 1994-1997 **Research and Production**, BBC Television, including:
- General Election Programme: Assistant Producer, Outside Broadcast Results
 - Election Call: Calls Co-ordinator
 - Live Political Programmes: Assistant on programmes including 'Westminster-on-line', Party Conferences 1994, 1995 and 1996, Local and European elections
 - Political Research Unit: Researcher, working for David Dimbleby's team compiling information on constituencies, policies and candidates.
- 1991-1992 **Clerical Officer**, Department of Employment, Frome, Somerset. Duties included dealing with enquiries and processing claims.
- 1989-1991 **Liberal Democrats Whips Office**, The House of Commons, London SW1. Work involved assisting in the running of the office, researching policy, speech writing, press liaison, campaigning and organisation of a national tour by members of the parliamentary party.
- 1987-1989 **National Secretary of the Student Liberal Democrats**. Work involved liaising with the national and parliamentary party, organisation of speaker tours, policy research and organisation of conferences and membership drives.

EDUCATION:

- 1995- **Ph.D. Faculty of Management, City University Business School, London.**
 "Creation of a Measurement System of Customer Loyalty in Dynamic Marketplaces".
 Presently: Staff Candidate
- Research Focus:**
 Research focusing on case study organisations operating in competitive markets. Each company has an actual or potential transient customer base and allocates large levels of resources in attaining and maintaining a relationship with customers. The case studies focus on the following sectors:
- International Air Transport
 - Hotel and Leisure
 - Financial Services
 - Utility Provision
- The research involved the use of structured interviews with senior executives, operational managers, staff and customers, as well as the development, sampling, piloting and analysis of questionnaires, both case study specific and general business. The study also included the use of focus groups and desk research.
- The research aim was to create a better corporate understanding of the importance of customer loyalty, as well as the segmentation of customers. It developed a simple learning tool for managers to map out their customer base, differentiating potentially and actually loyal profitable customers who are net contributors to profitability.
- 1992-1995 **B.Sc. (Hons) Management and Systems Science, Department of Systems Science, City University, London.**
 2:1 and Professors' Prize for Outstanding Project "Whitbread Beer Company: A New Measurement Framework for Customer Satisfaction".
- Dissertation:**
 A consultancy study with the Marketing Department of Whitbread Beer Company, reviewing the present qualitative customer service monitors and designing a new framework using systemic measurement systems across all the company's business units.
- Member of Board of Studies: Department of Systems Science (student representative)
 1993-1995
- 1981-1987 **A-Levels:**
 Accountancy, Geography, Economics.
- O-Levels:**
 Economics, Accountancy, Maths, Geography, Physics, Biology, French, English Language, English Literature, Chemistry.

Curriculum Vitae

João Fialho, PhD

Personal information

First name(s) / Surname(s)	João Manuel Ferrão Fialho
Address	Street 212, Block 1, Building 803 Egaila Kuwait
Mobile	+ 351 964367131(Portugal) / + 965 609 777 05 (Kuwait)
E-mail	jfzero@gmail.com
Website	https://sites.google.com/site/joaofialhosmpt/
Nationality	Portugal
Date of birth	11 July 1979

Work experience

Dates	September 2015 up to present date
Occupation or position held	Assistant Professor of Mathematics
Main activities and responsibilities	Assistant Professor of Mathematics. <u>Courses lectured</u> Calculus I Multivariate Calculus <u>Courses acting as coordinator</u> Multivariate Calculus
Name and address of employer	American University of the Middle East, Kuwait
Type of business or sector	Higher Education/Research
Dates	August 2012 up to September 2015
Occupation or position held	Head of the Mathematics Department
Main activities and responsibilities	Assistant Professor in Mathematics. <u>Courses acting as coordinator</u> Real Analysis I, Real Analysis II, Differential Equations, Advanced Differential Equations, Advanced Calculus, Calculus I and C++ Technical Programming <u>Courses lectured</u> Real Analysis I, Real Analysis II, Differential Equations, Advanced Differential Equations, Finite Mathematics, Advanced Calculus, Calculus I, C++ Technical Programming, Basic College Mathematics and Precalculus - Algebra. <u>Committees and other duties</u> Member of the Research Advisory Board in the academic year 2013-2014 Coordinator and organizer for the "Lecture series" in 2012, 2013 and 2014 – research seminar series in the School of Mathematics, Physics and Technology.
Name and address of employer	College of the Bahamas, Nassau, Bahamas
Type of business or sector	Higher Education/Research
Dates	March 2007 up to present date
Occupation or position held	Researcher
Main activities and responsibilities	Part-time position as researcher (percentage variable over years – average 60% over whole period) in the field of Differential Equations
Name and address of employer	CIMA-UE (Research Centre in Mathematics and Applications – University of Évora), Évora, Portugal
Type of business or sector	Higher Education/Research

Dates	June 2011 up to July 2012
Occupation or position held	Pricing & Business Analyst
Main activities and responsibilities	Responsibilities for creating and implementing forecasting and pricing models.
Name and address of employer	Teleperformance, Lisbon, Portugal
Type of business or sector	Communications/Workforce management
Dates	November 2008 up to September 2010
Occupation or position held	Actuarial analyst
Main activities and responsibilities	Responsibilities in providing Actuarial valuations, training in actuarial topics, conducting research and software testing in Assets and Liability modelling.
Name and address of employer	Towers Watson, Lisbon, Portugal
Type of business or sector	Financial/Insurance
Dates	February 2004 up to February 2011 (excluding time in Towers Watson)
Occupation or position held	Teacher for Mathematics and Computer Science
Main activities and responsibilities	Teacher in the subjects: Computer Science and Mathematics (over 8000 hours). Levels range from High School level up to Pre- College level. Courses lectured – Computer sciences, Mathematics, Applied Mathematics, Mathematics and Statistics
Name and address of employer	Several
Type of business or sector	Education/Training
Dates	February 2005 - September 2005
Occupation or position held	Assistant Professor in Mathematics
Main activities and responsibilities	Assistant Professor at the University of Évora Courses lectured – Linear Algebra and Calculus
Name and address of employer	University of Évora
Type of business or sector	Higher Education/Research

Education and training

Dates	March 2007 up to May 2012
Title of qualification awarded	PhD in Mathematics
Principal subjects	Mathematics; Differential Equations, Functional Analysis
Name of organisation	University of Évora
Level in international classification	A
Dates	September 2004 up to September 2005
Title of qualification awarded	Curricular part of Master Degree in Mathematics and Applications
Principal subjects	Applied Mathematics, Statistics
Name of organisation	University of Évora
Level in national classification	18 (in a 0 to 20 scale)
Dates	September 1997 – September 2004
Title of qualification awarded	Degree in Applied Mathematics Note – The degree in Applied Mathematics is Pre-Bologna agreement in Europe, which means that it compares nowadays with the Masters in Mathematics.
Principal subjects	Applied Mathematics
Name of organisation	University of Évora
Level in national classification	14 (in a 0 to 20 scale)

Personal skills and competences

Mother tongue	Portuguese
Other languages	English (fluent), Spanish (experienced), French (intermediate)

Organisational and social skills	<ul style="list-style-type: none"> • Co-founder of a youth association (Associação de Jovens de São Bartolomeu do Outeiro), where I occupied the position of bursar from 1998 to 2003. • Member of NEMATUE (Núcleo de Estudantes de Matemática da Universidade de Évora – Nucleus of Mathematics Students of the University of Évora) from 2000 to 2003, where I occupied the position of “Coordenador de Órgãos Dinamizadores”.
Computer skills and certifications	<p>Advanced user in:</p> <p>Excel, Access, Maple, LaTeX (text editor), C++, IBM SPSS Modeler, IBM SPSS Statistics</p> <p>Intermediate user in:</p> <p>Mathematica, R and SQL</p>

Publications

Monographies

- “*Métodos Topológicos em Problemas Não Lineares com Valores na Fronteira*”, Universidade de Évora, 2004, degree thesis, final classification of 19 (0 to 20 scale).
- *Existence, localization and multiplicity results for nonlinear and functional high order boundary value problems*, PhD thesis, University of Évora, final grade A, classification of 19 (0 to 20 scale).

Books

- J. Fialho, Feliz Minhós, *High order Boundary Value Problems: Existence, localization and multiplicity results*, 2014, Nova Publishers, NY, USA, ISBN: 978-1-63117-707-1

Papers

1. Feliz Minhós, J. Fialho, *On the solvability of some fourth-order equations with functional boundary conditions*, Discrete Contin. Dyn. Syst., 2009, suppl., 564–573.
2. Feliz Minhós, J. Fialho, *Ambrosetti-Prodi type results to fourth order nonlinear fully differential equations*, Proceedings of Dynamic Systems and Applications, Vol. 5, 325-332, Dynamic Publishers, Inc., USA, 2008. MR2468162
3. J. Fialho, Feliz Minhós, *Existence and location results for hinged beams with unbounded nonlinearities*, Nonlinear Anal., 71 (2009) e1519-e1525
4. J. Graef, L. Kong, F. Minhós and J. Fialho, *On lower and upper solutions method for higher order functional boundary value problems*, Appl. Anal. Discrete Math. 5 (2011), 133-146
5. A. Cabada, J. Fialho, Feliz Minhós, *Non ordered lower and upper solutions to fourth order functional BVP*, Discrete Contin. Dyn. Syst., Supplements Volume 2011, (2011) 209—218
6. J. Fialho, F. Minhós, *On higher order fully periodic boundary value problems*, J. Math. Anal. Appl. 395 (2012) 616–625
7. J. Fialho, F. Minhós, *The role of lower and upper solutions in the generalization of Lidstone problems*, Discrete Contin. Dyn. Syst., Supplements Volume 2011, (2013), 217-226
8. F. Minhós, J. Fialho, *Existence and multiplicity of solutions in fourth order BVPs with unbounded nonlinearities*, Discrete Contin. Dyn. Syst., Supplements Volume 2011, (2013), 555-564
9. Fialho, J., Minhos, F., *Higher order functional boundary value problems without monotone assumptions*, Boundary Value Problems 2013, 2013:81
10. J. Fialho, Feliz Minhós, *Multiplicity and locations results for second order functional boundary value problems*, Dynamic Systems and Applications 22, 2013
11. A. Cabada, J. Fialho, Feliz Minhós, *Extremal solutions to fourth order discontinuous functional boundary value problems*, Mathematische Nachrichten, 2013
12. J. Fialho, Feliz Minhós, *Fourth order impulsive periodic boundary value problems*, Differential Equations and Dynamical Systems, 2013, DOI - 10.1007/s12591-013-0186-2
13. J. Fialho, Feliz Minhós *High order periodic impulsive problems*, , Differential Equations and Dynamical Systems, 2015
14. W. Arriagada, J. Fialho, *Parametric rigidity of germs of analytic unfoldings with a Hopf bifurcation*, Portugaliae Mathematicae, 2016
15. J. Fialho, F. Minhos, H. Carrasco, *Singular and regular second order phi-Laplacian equations on the half-line with functional boundary conditions*, Electronic Journal of Qualitative Theory of Differential Equations, 2017

Submitted

Papers

- J. Fialho, F. Minhós, *Functional first order coupled systems and application to the thyroid-pituitary homeostatic mechanism* (Submitted to Journal of Dynamics and Differential Equations)
- Cabada, J. Fialho, Feliz Minhós, *Fourth order periodic problems with mixed impulsive conditions*.
- J. Fialho, *A biomechanical model for the idiopathic scoliosis using spinal traction devices*, (submitted to XXVI Congress of the International Society of Biomechanics, ISB 2017, Brisbane, Australia)

Activities as referee/Editorial Board:

- Reviewer for Boundary Value Problems, Springer
- Reviewer for Journal of Function Spaces and Applications, Hindawi
- Reviewer for Mathematical Reviews, AIMS
- Reviewer for Journal of Mathematics Research from the Canadian Center of Science and Education
- Reviewer for Abstract and Applied Analysis, Hindawi
- Reviewer for Advances in Difference Equations
- Reviewer for International Journal of Differential Equations

Conferences as invited speaker

- **CIMA-UE Seminars, at University of Évora**, Évora, Portugal, with the presentation entitled, "Multiplicidade de solução para equações não lineares de 4ª ordem completas "
- **Fourth International Conference of Applied Mathematics and Computing, Plovdiv, Bulgaria, 2007** with the presentation entitled , "Multiplicity and location results for some beam-equations with asymmetric growth"
- **Fifth World Congress of Nonlinear Analysts, Orlando, USA, 2008** with the presentation entitled: "Multiplicity results for nonlinear fully fourth order equations with Lidstone boundary conditions".
- **"i-Math Intensive School on Nonlinear Differential equations with Singularities"**, University of Santiago de Compostela, Spain, April 2011 with the following talks:
 - High order periodic problems
 - Functional Boundary value problems
 - Lower and upper solution method for systems of boundary value problems
- **Ninth World Congress of Nonlinear Analysts, Orlando, USA, 2012** with the presentation entitled: "Generalized upper and lower solutions".
- **Research Edge Symposium at the College of the Bahamas, Bahamas, 2014**, with the presentation entitled: "The lower and upper solutions method: recent high order results and applications".
- **Tenth AIMS Conference on Dynamical Systems, Differential Equations and Applications, July, 2014, Madrid, Spain**, with the presentation entitled "High order periodic impulsive problems"

Conferences as organizer

- **CMMSE 2017: Proceedings of the 17th International Conference on Mathematical Methods in Science and Engineering** – organizing the special session, **New Trends on Boundary Value Problems**, Almería , Spain, July 2017
- **International Workshop on Boundary Value Problems: New Trends and Applications**, Evora, Portugal, July 2014
- **Mathematical Games National Championships** - Grand Final, Évora, Portugal, 2007
- **"I Encontro Nacional de Estudantes de Matemática"** (First National Meeting of Mathematics Students), Evora, Portugal, 2003.

Scientific grants and awards

- Researcher member of CIMA-UE since 2007 (Research Centre in Mathematics and Applications of University of Évora, Portugal) in the field of Differential Equations
- Admitted to the PhD program under the clause of Scientific Excellence
- Research grants from **CIMA-UE**:
 - Research project "Multiplicity results for nonlinear fully fourth order equations", 2010
 - Research project "Functional Boundary value problems", 2011
 - Research project "Generalized upper and lower solutions", 2012
 - Research project "High order periodic problems", 2014
 - Research project "High order Boundary Value Problems: Existence, localization and multiplicity results" – book edition, 2014
- Grant awarded by **Fundação Calouste Gulbenkian** in 2008, for project "*Multiplicity results for nonlinear fully fourth order equations with Lidstone boundary conditions*"
- PhD grant awarded by **Fundação Eugénio de Almeida** in 2007 and 2008
- Research grants from **College of the Bahamas**:
 - Research project "Lower and upper solution in fully functional boundary value problems", 2012
 - Research project "High order periodic impulsive problems", 2014

Study periods abroad

- "*i-Math Intensive School on Nonlinear Differential equations with Singularities*", University of Santiago de Compostela, Spain from 1/04/2011 to 29/04/2011. Research topics included: High order periodic problems, Functional Boundary value problems, Lower and upper solution method for systems of boundary value problems

Student supervision – Senior Projects

- Rickert Fraser - "**Modelling the Human Spine**" - Project won the Student Research Symposium for the academic year 2013-2014, College of the Bahamas, Bahamas
- Lenny Fleurena - "**Black - Scholes models using upper and lower solution**" academic year 2014-2015 College of the Bahamas, Bahamas
- Muneera AlRefaei, Ashjan Baqer, Hawraa Alsafar, Alaa Khalaf, Esraa AlAbasie – "**Modelling the scoliotic human spine with the robotic ATT**" – academic year 2016-2017, American University of the Middle East, Kuwait
- Fatemah Al-Failkawi, Amirah Abdul Al Rahman, Fatima Abdullah, Fatemah Hassan, Jenan Bin-Ali – "**Modelling the front wing of a Formula One race car – wing bending and lift**" – academic year 2016-2017, American University of the Middle East, Kuwait

PhD Students jury examination committees

- Hugo Carrasco, PhD examination, University of Evora, Portugal – main examiner

Scientific projects with private/government sector

Most of these projects are based on statistical analysis, forecasting and testing.

- **Companhia Propria** – "Training in Business analytics in actuarial valuations" – Training series directed for mid-management in Actuarial sciences
- **SFORI** – "Implementation of business analytics in social sciences – scoring"
- Joint work with Denise Santos, PhD – "QALY in Portuguese patients with breast cancer" – bio pharmaceutical study
- **Ministry of Environment (Bahamas)** – "Sustainability and impact of renewable energies – solar panels"

Dr. Jyotsna Ghildiyal Bijalwan
Email Id: jyotsnaghildiyal@gmail.com
Mobile: +251 0983793791/+91-8171005513

SUMMARY:

University Professor with a wide range of knowledge and experience looking to become an asset to prestigious university in need.

KEY SKILLS:

- Experience in teaching a wide range of subjects.
 - Personable nature with students while maintaining professional relationships with colleagues.
 - Excellent communication skills both oral and written
 - Extremely organized in all planning of class material.
 - Efficient in time management.
 - Willingness to put in the extra time it takes to endeavor qualitative teaching learning environment and research.
 - Capable of writing and developing curriculum for all levels of courses
-

PROFESSIONAL EXPERIENCE: 14 Years

Organization:

College of Business and Economics
Arba Minch University
Ministry of Science and Higher Education (MOSHE)
Under United Nation Development Program (UNDP)
Ethiopia Ethiopia, Africa

Designation: Assistant professor

Duration: Oct'2017 – Till date

Roles and Responsibilities:

- Teaching the assigned subjects to students as per the stipulated syllabus by the university. (PG/PhD)
- Preparing the lectures, presentations, reading material and other resources for the subject to be shared with the students.
- Delivering the lectures to the students by means of presentations, book study, videos, case studies, discussions or using innovative teaching techniques.
- Mentoring and counselling students with their respective research projects and dissertations.
- Advising the students on academics and employment matters and helping them to take the right career decision depending upon their talents.

- Conducting research work in areas of interest for self – development and getting them published in scholarly journals or books.
- Representing the institution in various conferences, seminars, workshops, forums as a speaker and presenter.
- Reviewing the search projects of the department.
- Taking the training session and faculty development program for colleges and teachers from the other department
- Delivering the community services

SN	Organization	Designation	Duration.
1	Graphic Era University, Dehradun	Assistant professor	Jan'2016 – Oct'2017
2	Selaqui Higher Education, Dehradun	Assistant professor	Aug'2013 – Oct'2015
3	Quantum Global Campus, Roorkee	Assistant Professor	July 2011 to Feb 2014
4	College of Engineering Roorkee (COER)	Assistant Professor	Aug2010 to July'11
5	Nimbus Academy of Management	Lecturer	Nov 2008 to July'10

AREA OF INTEREST

Financial Management, Investment Analysis and Portfolio Management, Advance Financial Accounting, Working Capital Management, Corporate Governance and business Ethics, Strategic Management and Analytics, Digital Marketing

A . RESEARCH WORK

I. BOOKS

1. “**Strategic Management and Business Policy**”. **Paragon International** Publication, New Delhi (INDIA), 2009.
ISBN : 978-81-89253-49-3
2. “**Business Ethics and Corporate Governance**”, **McGraw Hill** publication United States of America (USA), 2019.
ISBN: Print 978-93-5316-841-4 , Online 978 - 93 - 5316 - 842 -1.
3. “**Sustainable strategies for the business in 21st century**” under the process of proof reading for publication by **Taylor and Francis** (CRC publication) United Kingdom (UK). *Expected in 2022.*

II. JOURNALS PUBLICATIONS

1. Bijalwan J.G., Bijalwan A. (2021), “Multivariate Analysis for Overcoming Complexities of Corporate Governance and Managerial Dilemma using Data Mining Techniques” In pipeline **(SCI INDEXED)**
2. Bijalwan J.G.. Malhotra R.K (2020) .“Corporate Governance Policies and Practices : With Special Reference to Private Sector Firms in Ethiopia”, *Shodh Sarita* , Vol 7(28). pp.191-197. **(LISTED IN UGC CARE)**
3. Bijalwan J.G., Desalew G.Y. (2020) ,“A nexus between corporate governance capital category and firm potency”, *International Journal of Management*, Vol.11 (11), pp. 1003-1013. **(SCOPUS INDEXED)**

4. Awal G., Khanna R., Bijalwan J.G.(2019), “The Effect of socio economic factors on consumers online buying behaviour : A study with reference to Garhwal division of Uttarakhand”, Journal of Critical Reviews , Vol. 6(5), pp.416-425. **(SCOPUS INDEXED)**
- 5.. Malhotra R.K., Bijalwan J.G, Thapliyal B.L. (2020),“Corporate governance in emerging economies : An Indian Insight”. International Journal of Management, Vol. 11 (09), pp. 663-670 .**(SCOPUS INDEXED)**
6. Bijalwan J.G., Bijalwan A., Amare L. (2019), “An Exploratory Analysis of Corporate Governance using Supervised Data Mining Learning”, International Journal of Recent Technology and Engineering , Vol. 8(3). **(SCOPUS INDEXED)**
7. Bijalwan, G.J.and Madan, P. (2013), “Board Composition, Ownership Structure and Firm Performance”, Research Journal of Economics and Business Studies, Volume II, Number VI, 86-101. **[International scholarly peer reviewed; Publication - National Library, Singapore]**
8. Bijalwan, G.J.and Madan, P. (2013),“Corporate Governance Practices, Transparency and Firm Performance of Indian Companies”, Journal of Corporate Governance, Issue XII, Vol.3,45-79.**[International scholarly peer reviewed; Included in Cabell’s Directory, EBSCO]**
9. Bijalwan, G.J. (2012), “Corporate Governance System in India”, International Journal of Management (IJM), Volume 3, Issue 2, pp. 260-269 . **(SCOPUS INDEXED) Journal Impact Factor (2012): 3.5420**
10. Bijalwan, G.J.and Shah, P. (2012), “Corporate Governance Failure in India: Satyam Fiasco - A Case Study”, International Journal of Management Sciences, Vol. 10, Issue 02. **[International scholarly peer reviewed]**
11. Bijalwan, G.J.and Shah, P. (2012), “Corporate Governance - Developments and Stumbling Blocks in India”, International Journal of Scientific and Research Publications, Volume 2, Issue 9. [ISSN 2250 3153 **[International scholarly peer reviewed]**]

B. Community Service

1. Delivered community service Training program on “Investment Risk Management” organized by the Community Service Coordination Office, College of Business and Economics, Chamo campus as on 7th May 2021.

C. Training and Consultancy

1. Delivered training session in Birla College, Mumbai University for “Technical Analysis” on 22 /10/2019 on Security Analysis and Portfolio Management.
2. Provided Consultancy on *stress management* to the Community service project on “Designing temporary & fast paced treatment center for Covid 19.

D. Miscellaneous

1. Worked on Getting the ISSN no for the Arba Minch University Journal “Ethiopian Journal of Business and Social Sciences” (EJBSS)
2. Working for getting DOI number for the Area Minch University Journal “Ethiopian Journal of Business and Social Sciences” (EJBSS).
3. Conducted a self-funded “Digital Covid Awareness Certification Program” for spreading awareness about the pandemic and the risk mitigation.
4. Member of curriculum development committee (for post graduate and PhD program)
5. Member of Departmental Graduating Committee (DGC)

EDUCATIONAL QUALIFICATIONS:

Uttarakhand Technical University
Ph.D. in Management, 2013

Uttarakhand Technical University
Master in Business Administration (Finance & Marketing), 2008

Mumbai University
Bachelors in Commerce, 2004

DECLARATION:

I hereby declare that the facts given in my resume are correct to the best of my knowledge and belief

Date: 2nd Feb 2022

Place: Arba Minch

Dr. Jyotsna Ghildiyal Bijalwan

KONSTANTINOS TSONTOS

16 Aeropou I. Chalkia str., Chalandri, 152 32, Athens, Greece
+306945597007 • +302107488690 • kbctsonotos@yahoo.com Skype No : kostistsontos
LinkedIN: <http://gr.linkedin.com/pub/konstantinos-tsonotos/21/309/292>

Personal Statement

Human Resources professional, with extensive Managerial experience, being in parallel free-lance Business consultant / Trainer and Lecturer. In depth knowledge of Education, Learning & Development, implementation of full Training cycle, Performance Appraisal & Reward systems (development and application). During the last three years, I am working as University Lecturer in Asia. My career objective is to utilize my multinational / multicultural experience continuing working abroad within Higher Education sector.

Key Skills

- Certified Trainer (International Board of Certified Trainers)
 - Certified Lead Quality Assurance Auditor for ISO9001/2000
 - Certified Economist (Greek Economic Chamber)
 - Strong analytical skills, Organized and methodical
 - Motivating with excellent presentation skills
 - Hard working and task oriented, High level of customer care awareness
 - Human Resources consulting skills
-

Work Experience

LECTURER, MANAGEMENT DEVELOPMENT INSTITUTE OF SINGAPORE IN TASHKENT, UZBEKISTAN (hired from Singapore)
(January 2015 – current)

Teaching subjects (for the total period): Contemporary Debates in Business (Year1 – University of Sunderland), Management of Technology (Year3 – University of Wales), Business Modeling for Decision Making (Year3 – University of Sunderland). Career Development Prospects (Year2 – University of Sunderland), Human Resource Management (Year3 – Bangor University), Communication Skills (Foundation year), Learning & Development (Year 3 – University of Sunderland), Human Resources Management for Tourism & Hospitality Industry (Year 3 – Bangor University)

Tutoring : Understanding Business (Year1 – University of Sunderland), Corporate Responsibility (Year2 – University of Sunderland) and in all Teaching subjects.

Main achievements: For second year I was evaluated as one of the best lecturers, also with high rate of exam success. Approved article upon Consumer Behavior and relevant speech at the International Marketing Conference / Tashkent, organized by MDIS (published)

REGIONAL TRAINING OFFICER, MEDECINS SANS FRONTIERES /Operational Center Amsterdam, UZBEKISTAN & TAJIKISTAN
(January 2014 to September 2014)

Responsible for organizing and coordinating overall Medical training program for both countries in accordance with agreed guidelines of Ministries of Health. Develop policies and strategic plans for training per location. Implement full training cycle (needs analysis, planning, implementation, evaluation, monitoring, follow up) and responsible for MSF's Medical staff Train of Trainers course.

Main achievements: Restructure of the existing theoretical Doctor's basic certificate period. Also, development of the Training Strategy for Tajikistan mission. Job Evaluation guidelines.

**HEAD OF HUMAN RESOURCES DEVELOPMENT AND ADMINISTRATIVE SUPPORT
DEPARTMENT, EMPLOYMENT OBSERVATORY - RESEARCH - INFORMATICS S.A.,
ATHENS – GREECE**

(May 2004 to January 2014)

Personnel & Training Manager duties (personal files, leaves, labour legislation, transportation expenses, collective agreement implementation, salary scales & allowances) and training for all personnel (Note: since 2012 the body was merged to National Institute of Labour and Human Resources – and is under restructuring. During transformation period I was transferred to the Research department dealing mostly with Employment policies and EU funded projects).

Main achievements: Developed and proposed the **Performance Appraisal and Reward System** (that was accepted by the board of directors and a special training was designed and implemented). Developed the “Staff Regulation - Personnel Rules Manual” (accepted by the board of directors) and concluded the Collective Agreement for the salary grades.

During the period May 2004 – May 2006 I was seconded to office of the Deputy Minister of Labour Mr. Gerasimos Giakoumatos (Main duties : Assist the Deputy Minister on issues of Employment policies, **Vocational Training** and Human Resources Development. Also, team member for the National Action Plan of Employment 2004 and for the National Strategic Plan for Development 2007 – 2013. Member of the “Uniform Registration of Referees” - Directory 1803 for evaluating H.R. Actions). **Also, during 2008 I was seconded as a General Manager of National Center for Vocational Orientation (Strategy for career advisors).**

During the period 2005 – 2010 I was also **external Lecturer at the National School for Public Administration**. National School of Public Administration is an Official **Educational Body** providing high level post-graduate courses for students (that enrol to the course if successful after challenging exams and can join, after graduation, the “fast track” public service scheme). My duties include the development of educational material (that also contains chapters in English), Instructing, proposing team studies or dissertations and supervising them (In most cases information and bibliography / data bases from E.U. sources), developing the final exam test (and supervising the exam), marking the tests and participating in teams evaluating final dissertations. English language is broadly used.

**TRAINING AND QUALITY ASSURANCE DIRECTOR, EUROPEAN RELIANCE
INSURANCE S.A., ATHENS - GREECE**

(March 2001 to April 2004)

Full responsibility for the training of internal Personnel, insurance intermediaries and Agency Managers. Planning of the overall training program for all levels of Sales Force. Organizing and supervising the Training Services, Scheduling training programs in co-operation with Sales Director. Organizing and implementing seminars for the internal personnel. Fully responsible for the technical training for all persons within “Sales Force” upon their duties, their specific job requirements and upon general company’s issues. Reporting to the Managing Director upon the “knowledge level” of personnel (internal & external).

Main achievements: Establish a certified “Insurance Training Center” and an e-learning application. Quality Assurance: Introduced and managed via the ISO 9001/2000 model.

MANAGING DIRECTOR / PARTNER, HUMAN FORCE S.A., ATHENS - GREECE

(July 1999 to January 2001)

Establish the Company (Certified by the Ministry of labor as “private office of employment services”), create its profile and develop all Human Resources and Administrative activities, such as : visits to potential clients, staff needs analysis, desirable position’s job description and requirements, proposal for undertaking the search and selection process, contract preparation (and signing of the agreement) advertisements at press, interviews schedule and implementation, selection of the “final list”, proposing the successful candidates to the client and hiring. Also, we provided “search and selection” services for “short – term” contract jobs and in parallel we were organizing training programs.

HUMAN RESOURCES DEVELOPMENT AND EU PROJECTS SUPERVISOR, TVX HELLAS S.A., GREECE / (February 1996 to June 1999)

H.R. Development & Training for “white collar ” personnel (600) and co-ordination of funding applications through E.U. Programs or other National sources.

As one of the first persons hired by this multinational industrial company (considered one of the largest investors in Greece at the time) i was involved in all recruitment phases : job description, advertisement in press, schedule and implementation of interviews (and of the relevant tests where applicable), assessment of candidates and proposing the final list to the relevant department head and Managing Director.

I was responsible for the development and implementation of HAY’s performance appraisal system and the overall training strategy (training needs analysis – organize training events using external consultants; develop of a special induction program for the new hires and for students /trainees). Also, other administrative activities (such as visits to international bodies – i.e. DG V, schedule of procurement for consulting and training services, control of the process of funds approval through Development Law). Main achievements: approval of two major EU programs under ADAPT and “Article 6 DG V”.

PERSONNEL MANAGER, ASPIS PRONOIA INSURANCE S.A., ATHENS - GREECE (March 1992 to October 1995)

Responsible for H.R. activities i.e. Recruitment, Employment Law requirements, personnel records, providing input to payroll (i.e. leaves, sicknesses, absentees, overtime etc), composing and circulating internal “official memos” upon company’s H.R. decisions or events, performing other general administrative duties (such as procurement of H.R. and “work safety” – related material i.e. pharmacy, fire extinguishers), full training cycle for the internal personnel and performance appraisals. Recruitment in this company was an extremely busy activity: on my employment, the company had 120 staff and on my leave the number of staff had risen to about 320. It was a period of substantial expansion for the company, hiring of 5 persons per month on average and all the process was fully implemented by me. Apart from H.R, duties I was involved in E.U. funded programs.

Main achievements: the approval of two studies under the funded program “Co-operation between Universities and Industry” as: 1. Research upon Customer Satisfaction (published) and 2. “Salary policy study” and statistical analysis of the results.

H.R. CONSULTANT, KBC BUSINESS CONSULTING (personal company) / FREE LANCE, ATHENS - GREECE

(May 1991 to May 2011)

In parallel with my “salaried full time” positions I owned my personal consulting company, undertaking projects in the fields of Human Resources, Training, Quality assurance, participating at E.U. funded programs and various consulting activities.

- ❑ **External Evaluator to the Ministry of Education** for the “Student on-the job training program - EPEAEK”
- ❑ **External Evaluator at the ministry of Employment**
- ❑ External co-operator to M.O.D. (Unit of Economic Administration of the European Community Frame) upon H.R. aspects.

Indicative projects:

1. Seminar instructor – Athens Innovation Centre (06/91)
2. Training for graduates – Thessaloniki Innovation Centre (06/92)
3. Team member at the project “tele-work for young disable people” under E.U. program “STAR” (12/92)
4. Researcher in project of “Hellenic Productivity Center” (02/93)
5. Co-coordinator of seminars under the E.U. funded program “cooperation between Universities and Industry” – Aspis Pronoia (10/93)
6. Seminar Instructor – Synergy Certified Training Center (12/95)
7. Seminar “Personal skills development” at “Pharmanel” (03/98)

8. Evaluator of the training program "maintenance techniques" at Synergy Certified Training Centre (11/99)
9. Consulting services (training needs analysis and seminar program schedule) – E.E.O. Group – under ADAPT II (02/01)
10. Training needs analysis & planning (plastic industry & furniture Sector "Elkede Technology & planning center" (08/01)
11. Quality Assurance Consulting services -ISO for ALKYON Hotel (05/05)
12. Training for insurance brokers (introductory: preparation for their certification exams) and for Managers – "Neos Poseidon S.A." (12/08)

I was also minor partner at Euromanager – L. Tafekis Joint Co – a business consulting firm (1995 – 2007) where I was involved in many supportive/ administrative activities of the company and in various projects. More specifically : **Educational Director & Trainer** at the seminar "Basic Management, Personnel management and Office Administration" organized for administrative staff of the Greek Red Cross (15/03/99 – 21/06/99).

As H.R. development consultant – responsible for "stage / on the job training programs" for young people (21/07/00 – 15/03/01).

Main achievement: the preparation of the application, in order to obtain funds through European Initiative "EQUAL" (2005) under the project : Di.P.O.Net. (Disable People Operating Network). The consortium (co-operation of Universities, Training bodies etc) proved to be very successful and all project objectives were met.

I was also actively involved in the first phase of the project by interviewing around 100 disable persons (performing a personality analysis as well) in order to select the most suitable to participate in scheduled training programs.

PUBLICATIONS (indicative) :

1. While being a Personnel Manager of Aspis Pronoia S.A. I had personally achieved an EU grant (in co-operation with "Piraeus University") for the project: "Customer service and satisfaction of insurance products" . The project was so successful that was published as case study at the University book of Dr. G. Siomkos "Marketing strategy and consumer behavior" (1994)
2. Greek press – "Eleftheros typos" – Job Market section" – Article: "Competences for your career" as H.R. Development consultant (21/11/00)
3. "Insurance magazine" – Article: "The benefit for insurance companies by introducing and applying Quality Assurance Systems" (April 2002)
4. Greek press – "Eleftheros typos – Job Market section" – Article: "The importance of flexibility for the employee" (02/03/04)
5. "Naval chronics" magazine – Article: "European programs, a source of business and developmental bodies support" (October 1998)
6. "Naval chronics" magazine – Article: "Armenia / investment opportunities in a country with development prospects" (January 1999)
7. "Naval chronics" magazine – Article : "The new development Law" (December 1998)

Education

UNIVERSITY OF BIRMINGHAM, BIRMINGHAM / U.K.

September 1987 to June 1989

M.Sc. Operational Research (Department of Engineering Production).

Principal subjects:

Advanced Mathematics, Statistics, Dynamic Programming, Management Accounting, Optimization techniques.

NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, ATHENS - GREECE

November 1982 to July 1987

B.Sc. Economics – First Class Degree (Merit mark 8.5 / 10)

Principal subjects:

Micro & Macro Economics, Advanced Mathematics, Operational Research, Political theory, Business Management, Investment Appraisal, Statistics

FILOTHEI HIGH SCHOOL, ATHENS - GREECE

September 1979 to June 1982

High School Graduation – Distinction (mark 18.75 / 20)

Hobbies & Interests

The areas “Education & Training” and Human Resources are my major interests. I visit relevant conferences, exhibitions nationally and internationally and I participate - as a speaker in some events i.e.

1. Speaker at conference organized by the Career Centre of National and Kapodistrian University of Athens on 24/11/97 with subject: “Human Resources Development within co-operative networks between universities and businesses”
2. Speaker at the conference of international student union AIESEC “Education as a mean for multicultural understanding” (1993)
3. European Reliance S.A. Company event: Speech upon establishing a “learning organization” (Ref. “Insurance Market” magazine -Sept 2001)
4. Greek Press – business sector: Speaker upon implementation of e-learning (July 2002)
5. European Reliance S.A. Company event: Speech upon team building - establishing a “common culture organization” (Ref. “Insurance Market” magazine /Apr 2003)
6. LIONS conference: “the labor prospects within a globalized labor market”. Speaker: “Modern career planning techniques as a tool of employees’ adaptation in a competitive labor market”
7. Speaker at International Marketing Conference – MDIS 2015 – Tashkent “The dynamic nature of consumer and environment” – A marketing approach for Uzbekistan (published)

International training activity (June 2013) - I was instructor for: "Adult non-formal education environment", "Games in Adult education" and "Experiential learning techniques" in a project funded through the EU program Grundtvig, Titled "Creative Seeds for adult training" - implemented by the NGO "CIVISPLUS". Participants where experienced teachers from 6 EU countries and the course was held in English.

Finally, for my continuing professional development I travel almost every year abroad for professional reasons (i.e. at the International Conference and Exhibition fair “**Education Training and Personnel Development**” at Birmingham National Exhibition Centre, to Brussels for European Programs presentations or relevant activities, official invitation to Armenia for investigating business co-operation possibilities).

Hobbies: Playing the guitar / Cooking / Thai oil massage (certified)

References

References are available on request.



CURRICULUM VITAE

Mr. Richard Child (richard-child@outlook.com)

53 To Ngọc Vân, Quảng An, Tây Hồ, Hà Nội, Vietnam.

T: (+84) 163 806 2763 (VN)

T: (+44) 0755 321 6301 (UK)

CURRENT POSITION

Senior Lecturer and Course Leader – HND Graphic Design

London College for Design and Fashion, Hanoi –

I am currently a Senior Lecturer at The London College for Design and Fashion (Hanoi).

LCDF is an international college offering design studies based on a broadly UK curriculum and teaching ethos. Originally a fashion school, LCDF over a twelve-year period has developed a reputation as key provider of fashion design talent within Vietnam. Since 2015, the college has begun the process of expanding its course provision into Graphic Design and Interior 3D studies. I was recruited in 2016 to support the continued development of a new HND graphics programme.

Since taking on the role, the course has undergone its first external review, which I oversaw in April 2017, and the first students will graduate the programme in fall 2017.

My remit when taking on the position at LCDF was to instill students with creative intuition. In essence I was asked to establish a UK style ‘studio culture’ that supported the students individual creative ambitions.

Start: 10/2016 End: ongoing

WORK HISTORY

Senior Teaching Fellow – BA (Hon) Graphic Arts

University of Southampton, Winchester School of Art – International School of Education,
(Dalian Campus, China)

During my time in Dalian I worked extensively across the studio based modules to establish teaching methods to support international students in their transition to a UK styled design education. Studio based teaching strategies included the introduction of supported approaches to journal based design development and the understanding of strong design processes amongst the international students. These approaches placed an emphasis on critical and reflective practices where language and communication based activities supported and extended the development of an English based design vocabulary. Many of these initiatives became well-established practices used widely across the programme.

Part two of the programme successfully introduced design content and workshop activities that provided students with skills in typographic practice, manual art-working techniques, portfolio production, and photographic art direction. These dramatically increased student's ability to resolve projects in innovative ways and as a result students within the programme cohort were more able to see their working practice within the context of an international design industry.

Start: 10/2012 End: 09/2016

Lecturer and L4 Course Leader - BA Graphic Design

University Centre (Doncaster College) – High Melton, Doncaster, U.K

As Lecturer in Graphic Design I had a key role in the delivery of teaching, assessment and learning across the BA (Hon) Graphic Design course at University Centre Doncaster. I was responsible for the co-ordination and organisation at level 4 of the BA course, and through close collaborative working with the programme leader the course was able to develop significantly. Improvements included increased emphasis on conceptual approaches and the beginnings of a strong typographic identity for the course. This progress was implemented through the creation of new typographic modules, and moves towards a greater external recognition through membership and endorsement with external bodies such as ISTD and CSD.

Start: 10/2010 End: 09/2012

Curriculum Director for Visual Arts – Vocational Programmes, Levels 1–3

Birmingham Metropolitan College (BMETC), Birmingham, U.K.

In the role of Curriculum Director I supported students and staff in the delivery of innovative learning and teaching across (levels 1-3) Art and Design provision. This role was undertaken in addition to my continued undergraduate lecturing role. Key responsibilities of my management role included the implementation of the colleges QA process and improvement strategy – an essential requirement executed through regular monitoring of data reports to ensure high levels of student success, retention and achievement.

Courses managed at this time included – L1 Introductory Diploma, L2 First Diploma – General Art and Design, and L3 National Diplomas in – Art & Design, Graphic Design, and Photography.

Start: 07/2006 End: 09/2010

Programme Leader – Higher National Diploma in Graphic Design

Birmingham Metropolitan College (BMETC), Litchfield Road, Sutton Coldfield, UK.

As HND Programme Leader I was responsible for providing a leading role in the delivery of BMETC's (formerly Sutton Coldfield College) undergraduate graphic design curriculum. During my tenure I was able to restructure the course and improve the delivery through wider design experimentation (at level 4), and combining increased professional practice and employability (at levels 5 and 6).

I worked closely with the Programme Director on a daily basis to implement the college's quality assurance processes – through close liaison with external examiners and partner institutions (Birmingham City University) the programme underwent a successful rewrite and revalidation in 2005.

Start: 09/2003 End: 07/2006

Visiting Lecturer in Graphic Design, Visual Communication, and Photography

Hereward College – Coventry, CV4 9SW, U.K

Delivering graphic design, visual communication and photography classes to students with a wide range of physical and cognitive learning support needs. Courses included; GCSE Art and Graphics, Foundation Diploma in Art and Design and OCN courses. "Hereward College is a general FE College in Coventry providing both day and residential places... welcoming all students including those with diverse and complex support requirements".

Start: 09/2001 End: 07/2003

ADDITIONAL WORK HISTORY

Intern Branding Designer

Third Eye Broadcast – Birmingham, B18 6NF, U.K.

Concept development, design and production of graphic materials for the Third Eye brand (voluntary position)

Start: 01/2001

After Effects Workshops and Animation Events

Metapod – Expo 2000 (The Lighthouse Media Centre) Wolverhampton, WV1 1HT, U.K

Delivery of technical workshops and software training sessions. The workshops provided an introduction to the compositing and graphic potential of AfterEffects software.

Start: 10/2000

EDUCATION

I am currently preparing for a fellowship application to the HEA (UK); there is the possibility that I will postpone this application in order to gain fellowship at the higher senior level. I hope that a successful appointment will support my final fellowship application.

PGCE Certificate in Education — University of Wolverhampton, UK

Start: 09/2004 End: 06/2006

MA Visual Communication — Birmingham Institute of Art & Design (BCU) Birmingham, UK.

Start: 09/1997 End: 02/1999

BA (Hon) Visual Art — De Montfort University Leicester, UK

Start: 09/1992 End: 06/1995

REFERENCES

Mr. Olivier Blanc (o.b.blanc@soton.ac.uk)

Programme Leader – BA (Hon) Fashion Design

University of Southampton, Winchester School of Art – International School of Education,
(Dalian Campus, China)

Mr. Stuart Gluth (stuart.gluth@westnet.com.au)

Former Studio Head of BA (Hon) Graphic Design, University of South Australia

32 Mills Park, Clarence Park, South Australia, 5034

ADDITIONAL INFORMATION

Although I do not currently hold a PHD qualification the following qualifications and experience are relevant to my application:

Academic and Curriculum management – including responsibilities for programmes with collaborative links to partner UK organisations (2003–2010)

Postgraduate Certificate in Education (2004)

Freelance design experience (1999–2003)

RESEARCH INTERESTS

I hold the following research interests and would hope to develop these (proposals) significantly in my future roles:

1) The Sketchbook Book: an archive of independent learning —

The project seeks to define the sketchbook as a documentary archive that evidences creative thinking and ideas development. Whilst this definition suggests traditional physical formats, the project intends to investigate possibilities that go beyond this initial and simplistic definition.

The project intends to cover the specialist fields of visual communication, fashion and textiles, with a focus on the use of sketchbooks and journals within various international design and educational contexts. It is intended that the final research outcomes will create a visual archive and a series of practical learning resources to be utilised by international design students.

2) Design China: the development of a contemporary craft aesthetic —

These themes underpin my teaching and work as a module convener for studio based modules across the Dalian programme. It is hoped that this work can be extended to more substantial programme of research that informs a clearer identity for the graphics arts programme.

3) Contemporary Dialogues: Vernacular Typography (Asia) —

This currently underpins my teaching and my work as module convener on the Research Skills module. It is hoped that work can be developed into a more substantial programme of research and publication where student's work is published alongside staff contributions.

A top-performing General Manager / Multisite Manager with extensive experience in hospitality management. Highly skilled in evaluating existing operations to identify inefficiencies and redundancies, innovating strategic process improvements to optimize workflow and maximize profitability. Proven ability in developing and cultivating strategic partnerships, fostering continuous growth and revenue generation. Recognized for effectively directing internal teams to ensure adherence to overarching policies and procedures, providing clients with cohesive experiences to facilitate improved satisfaction and retention.

Areas of Expertise include:

- Operations Director
- Business Development
- Strategic Planning & Analysis
- Systems Development
- Team Leadership & Development
- Customer Service
- Revenue Management
- New Openings
- Revenue & Profit Growth
- Project Management
- Problem Resolution
- Rebranding

Professional Experience

British University Vietnam • Hanoi, Vietnam • October 2018 – Current

Lecturer in Hospitality Management, Travel and Tourism and Business Studies

Since joining the university I have repositioned the hospitality training facilities, which includes a full bar with a dining area and a 5* star standard hotel bedroom, to become industry leading in Vietnam. Whilst I teach on different disciplines, hospitality management is my preferred focus, as it compliments my background.

I'm fully versed in all areas of curriculum design and delivery, practical and theoretical.

Reliable English School • Hanoi, Vietnam • October 2018 – Current (Part Time)

IELTS Teacher

I rejoined RES after completing a 6-month contract with Safestay as the UK Operations Director. This role allowed me to focus on my master's degree in Management and Strategic Leadership, completed through the London Metropolitan University.

Safestay PLC • London, UK • Mar 2018 – Sep 2018

OPERATIONS DIRECTOR

Oversee operations for four sites in London, York, and Edinburgh, with a projected turnover of up to £10M, a GOP of 56% and an EBITDA of 48%. Identify and cultivate new revenue streams and business development opportunities to foster continuous growth. Develop and implement trail operations, including those for contactless vending payment and reduced waste and emissions across all operations. This was a 6-month contract with an option to re-engage in the summer of 2019.

Key Accomplishments:

- Achieved; Total Revenue Growth of 3% (£149,468), GOP of 16% (£375,570) and EBITDA by 14% (£305,672) vs. 2017.
- Operating costs decreased by 9% (£108,873) YOY, whilst Profit Before Tax was marginally down by 1.4% (£17,513) largely due to the extension at one of the sites and reconfiguration of another.
- Awarded a Half Year Trust You score of 80%.
- Projected turnover of £10 million pounds.

Darius Postma

Reliable English School • Hanoi, Vietnam • Sep 2017 – Feb 2018

IETLS Teacher

Throughout my career in hospitality I focused on the training and development of my teams. There is nothing quite like coaching someone to become better at what they do. Seeing people achieve their potential is hugely fulfilling. I always wanted to teach and as I was in-between roles it gave me the perfect opportunity to pursue same. I completed a TEFL and joined RES. I was recognized as one of the teachers of the year for 2017/18.

HG HOLDINGS • Hanoi, Vietnam • Jun 2016 – Aug 2017

HG FOUNDATION DIRECTOR

Developed and implemented strategic plans and designs for all structures to ensure the successful launch and integration of the HG Foundation; developing and operating CSR projects for the organization, including subsidiaries: ASIA DMC, Bhaya Group, Sens Asia, Gotadi, and HG Aviation.

Key Accomplishments:

- Effectively centralized the CSR function to provide cohesive operations and ensure adherence to policies and procedures.
- Overhauled the corporate identity, positioning the brands as responsible service providers.
- Delivered Travelife Sustainability Accreditation for both Asia DMC (B2B) and Sens Asia (B2C).

5TH LUXURY (BHAYA GROUP) • Ha Long, Vietnam • Sep 2015 – Jun 2016

AU CO CRUISE DIRECTOR

Directed cruise operations for a vessel comprised of 28 cabins and four suites providing a boutique experience in the iconic Ha Long Bay. Provided personalized service to clients, ensuring streamlined and high quality service through communication and collaboration with cross-functional teams. Standardized training and development procedures for various teams to implement operating procedures, policies, and best practices, driving quality and excellence.

Key Accomplishments:

- Increased Annual Revenue in all areas, ARR \$550.
- Established a new Guest Feedback report in accordance with international reporting standards.
- Curated systems for quality control monitoring specific to cruises, identifying inefficiencies and redundancies, as well as issues to mitigate risks and maximize satisfaction for continuous business retention.

MECURE LONDON GREENWICH • London, UK • Mar 2015 – Aug 2015

MANAGEMENT SUPPORT

Acted as subject matter expertise, providing key insights on operational matters for a franchised boutique hotel. Evaluated the business to identify inefficiencies and redundancies, innovating operating strategies and business objectives to maximize continuous success.

Key Accomplishments:

- Created new guest-centric standard operating procedures, communicating with internal teams to optimize quality service.
- Developed a quality control audit procedure to ensure continuous compliance.
- Innovated a new menu to rejuvenate restaurant operations and create buzz.

Darius Postma

PREMIER INN CROYDON / WIMBLEDON • London, UK • Oct 2012 – Oct 2014

CLUSTER GENERAL MANAGER

Oversaw 9 hotels with 698 rooms in the greater London area. This was a very strategic role, as in both Epsom and Croydon we had 3 hotels in the same market place. The risk of cannibalization was extremely high, especially with the addition of the 168-bedroom hotel in Croydon. Led the successful opening and integration of said hotel into the region.

Key Accomplishments:

- Improved ADR by £1.08, vs. budget and, RevPAR by £3.57.
- Achieved a Guest Satisfaction increase of 11% on previous year.
- Though key account management and new business development grew sales by 6%.
- Turnover of £15.3 million pounds.

PREMIER INN BRIGHTON / HASTINGS • South East, UK • Sep 2011 – Sep 2012

CLUSTER GENERAL MANAGER

Responsible for 6 hotels with 440 rooms on the South East Coast of England. The area was prone to seasonal fluctuations so revenue management and Sales and Marketing was absolutely key to successful delivery. Prime locations were used to divert occupancy to peripheral locations through a combination of rate and length of stay restrictions, to ensure maximum yield at all sites.

Key Accomplishments:

- Improved ADR by £2.05 vs. budget and, RevPAR by £2.21.
- Achieved a Guest Satisfaction increase of 9% on previous year.
- Grew sales by 3%.
- Turnover of £8.4 million pounds.

PREMIER INN HAMMERSMITH • London, UK • Apr 2009 – Aug 2011

GENERAL MANAGER

The hotel had 119 rooms. It was a groups led business driven by slightly lower rates than the central zone one locations (zone 2). It required a compete repositioning and relaunch due to being severely run down and mismanaged. In order to rejuvenate operational capability, I had to secure support for a full scale refurbishment to re-establish as the preferred accommodation choice in the area.

Key Accomplishments:

- Improved ADR by £2.37 vs. budget and, RevPAR by £6.93
- Achieved a Guest Satisfaction increase of 22% on previous year.
- Grew sales by 9%.
- Turnover of £3.4 million pounds.

PREMIER INN SOUTHWARK • London, UK • May 2007 – Mar 2009

GENERAL MANAGER

The hotel had 59 rooms and was situated in one of the most visited locations on the river Thames' Southbank. Enjoying an exceptional level of demand, I was able to identify that an 'off model' approach was required to revenue management as our system was not able to 'read' the demand accurately, which impacted profitability. This led to the hotel being excluded from the company revenue management system, producing a record breaking performance in the process.

Key Accomplishments:

- Improved ADR by £10.75 vs. budget and, RevPAR by £9.69.
- Achieved a Guest Satisfaction increase of 7% on the previous year.

Darius Postma

- Grew sales by 8%.
- Turnover of £1.8 million pounds.

Education & Training

MBA in Strategic Management and Leadership
London Metropolitan University - Passed with Merit | 2018

Edexcel L7 (Postgraduate) Extended Diploma in Strategic Management and Leadership
Brighton School of Business and Management – Passed with Distinction | 2014

Customer Relationship Management, REED, 2010

Personal License Holder, 2009

Professional Affiliations

Chartered Institute of Personnel Development (CIPD)

Institute of Directors

Chartered Management Institute

Awards & Honors

Teacher of the Year, RES, 2018/19

Nominated, National HR & Training Award, 2018 (Safestay)

Teacher of the Year, RES, 2017/18

Environmental Protection and Educational Award, Ha Long Bay, 2016 (HG Holdings)

Highest Sales Growth (8,4%), London, 2014 (Hammersmith)

Southern Premier Inn's Platinum Award for Quality Control, 2012

Runner Up. UK Premier Inns hotel of the Year, 2011/2012 (Burgess Hill)

Winner, UK Premier Inns Hotel of the Year, 2008/2009 & 2009/2010 (Southwark)

Runner Up, UK Premier Inns Best Financial Performance. 2008/2009 (Southwark)

Winner, Continuous Improvement, 2006/2007 (Cobham)

Education

M.A. **University of Western Ontario**, London Canada. Sociology (Specialization: Migration and Ethnic Relations). 2013.

B.A. (Hons). **Lakehead University**, Thunder Bay, Canada. Sociology (Minor in Psychology). 2009.

Diploma. **Confederation College**, Thunder Bay, Canada. Business Arts Administration. 1992.

TEFL Master Course. **CPD Coaching House**, London, Canada. 2015.

Experience

- Wellspring International School. Hanoi. Secondary English Teacher. 2017 – 2019
- Singapore International School. Hanoi. Secondary English, GAC Business Teacher. 2014 – 2017
- Western University. London. Lecturer, Sociology, Introductory Statistics. 2013 – 2014
- Viet Nam National University, Hanoi. Dean's Assistant Internship. 2009
- BC Parks, Victoria. Guide, Park Manager. 1994 – 2001

Awards

- Junior Teacher of the Year, University of Western Ontario. Awarded by Senior Faculty and Students, 2011.
- International Research Award, University of Western Ontario, Awarded by the Dept. of Social Science, 2010.
- Outstanding Merit: Honours Thesis, Sociology Dept., Lakehead University, 2009.

Interests

- Keen mountain bike enthusiast. Currently developing a trail system in Ecopark/Hung Yen
- Avid, yet frustratingly bad golfer.
- Active in many social groups advocating for equality and social fairness.

Referees

- Joe King, Program Coordinator, Edison School. Hanoi. +84 869 014 076
- Hoa Pham, International Liaison/Coordinator. CIEM. Hanoi. +84 944 633 421
- Tran Duc Thanh, Dean (Retired), Sociology Dept. Viet Nam National University. +84 988 793 489

Jose ROJAS, PhD

Email: jose.rojasr@gmail.com

Mobile: +86-138-1504-8085 (China)

DOB: 19 October 1973

5 years' experience in China teaching English for Academic Purposes, Interaction Design, and Innovation & Entrepreneurship. Have considerable multi-cultural experience in China, Singapore, the UK, Japan, and South Korea. Well-read and self-taught in a variety of topics. Have experience in curriculum development at university level for EAP, computer science and business subjects. Have provided guidance and mentorship to startups and young entrepreneurs. Excellent communication skills are core strength.

Key Skills:

- Logical/Analytical
- Experience teaching STEM subjects in English in China
- Experience developing curriculum for STEM subjects
- Experience developing curriculum for EAP
- Seasoned communicator
- Experience in multi-cultural settings
- Self-starter/Hands-on
- Independent
- Team integrator
- Experience organizing student events
- Experience conducting qualitative research
- Experience with public speaking

Software Skills: Proficient in Microsoft Office, Windows and Mac

EDUCATION

University of Glasgow, UK

2005-2011

PhD Computer Science (Human-Computer Interaction)

University of Sussex, UK

2003-2004

MSc Computer Science (Human-Centred Computer Systems)

Scholarships & Awards

- **2008:** Ubicomp Grand Challenge Early Career Exchange Award
- **2008:** The Great Britain Sasakawa Foundation (Award)
- **2005:** Full Scholarship CONACYT (Mexico) for PhD Degree studies
- **2004:** MSc Distinction, University of Sussex, UK
- **2003:** Full Scholarship CONACYT (Mexico) for PhD Degree studies

EMPLOYMENT HISTORY

CHANGZHOU UNIVERSITY, CHANGZHOU, JIANGSU, CHINA 2016 – CURRENT

Lecturer in English for Academic Purposes, Interaction Design, Innovation & Entrepreneurship, and Spanish

NATIONAL UNIVERSITY OF SINGAPORE, INDUSTRY LIAISON OFFICE 2011 - 2016

Manager of IP & Commercialisation

ZHONGTIAN HIGH SCHOOL, DONGYANG, ZHEJIANG, CHINA 2011

English teacher

NATIONAL UNIVERSITY OF SINGAPORE
Research Fellow Interaction Design

2009-2010

UNIVERSITY OF GLASGOW, UK
Lecturer & Demonstrator Human-Computer Interaction

2006, 2007

VOLUNTEER WORK

2017	Changzhou University, Changzhou, Jiangsu, China	Spanish Corner
2016	Changzhou University, Changzhou, Jiangsu, China	Running Group Coach
2013	National University of Singapore, N-House	Spanish Language Instructor
2013	National University of Singapore, N-House	Running Group Coach
2010	Youth Olympic Games 2010, Singapore	Language Volunteer
2009	Intergenerational IT Bootcamp, Singapore	Software Instructor
2009	HCI International 2009 Conference, San Diego, USA	Student Volunteer
2008	Ubicomp 2008 Conference, Seoul, South Korea	Student Volunteer
2005 - 2008	University of Glasgow, UK	International Society
2004	CyberSeniors, Brighton, UK	Software Instructor

PERSONAL ATTRIBUTES

- ✓ **Willing to Learn:** Voracious reader of a multitude of topics and interests. Have learned to use multiple software applications independently. Currently learning Mandarin and Japanese.
- ✓ **Effective Communication Skills:** Articulate communicator verbally and in writing. Capable of explaining difficult concepts to a wide spectrum of audiences. Have presented personal research to small and large audiences.
- ✓ **Flexible:** Comfortable with changing environments and situations. Can cope with limited resources and evolving priorities.
- ✓ **Team Player Skills:** Can seek and receive assistance when needed and spontaneously. Pleasant personality when facing group challenges. Can take initiative to coordinate, distribute work and consolidate if necessary.

REFERENCES

Dr. Esteban Zottele

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Changzhou University


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Georgina Olivé Figuerola

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+86-13815015023
Changzhou University

Dr Maren Viol, FHEA

✉ mareniol@gmail.com ☎ +44 (0) 7570544182  [linkedin.com/in/dr-maren-viol-434b4243/](https://www.linkedin.com/in/dr-maren-viol-434b4243/)

EDUCATION

2011 – 2016	Doctor of Philosophy (PhD) Edinburgh Napier University, Edinburgh, UK
2012 – 2013	PGCert Teaching and Learning in Higher Education Edinburgh Napier University, Edinburgh, UK
2010 – 2011	MSc Tourism and Events University of Sunderland, Sunderland, UK
2006 – 2010	BBA International Hospitality Management Stenden University of Applied Sciences, Leeuwarden, Netherlands

TEACHING EXPERIENCE

08/2020 – present	Lecturer Glasgow Caledonian University, Glasgow, UK <ul style="list-style-type: none">• Modules led: Event Planning and Management (postgraduate), Critical Events Studies (final year undergraduate), Critical Issues in Tourism (final year undergraduate), Event Delivery and Management (year 2 undergraduate), Introduction to Tourism and Events Studies (year 1 undergraduate)• Modules taught: Applied Professional Practice (postgraduate), Business Research Methods and Skills (year 3 undergraduate)• Postgraduate and undergraduate dissertation supervision• Personal tutoring
05/2016 – 09/2019	Senior Lecturer British University Vietnam, Hanoi, Vietnam <ul style="list-style-type: none">• Modules led: Tourism Management Project (final year undergraduate), Contemporary Issues in Tourism and Events (final year undergraduate), New Media Marketing for Tourism and Events (year 2 undergraduate), Tourism and Events Service Operations Management (year 2 undergraduate), Managing Mass and Direct Marketing Communications (year 2 undergraduate), Tourism Theories and Perspectives (year 1 undergraduate), Introduction to Tourism and Events (year 1 undergraduate), Introduction to Hospitality (year 1 undergraduate), Human Resource Management (year 1 undergraduate), Managing the Visitor Experience (year 1 undergraduate), Managing Practices for Today's Global Economy (pre-university foundation)• Undergraduate dissertation supervision• Personal tutoring
11/2011 – 03/2016	Graduate Teaching Assistant/Hourly Paid Lecturer Edinburgh Napier University, Edinburgh, UK <ul style="list-style-type: none">• Modules taught: Experience Design and Management for Tourism, Hospitality and Events (postgraduate), The Impacts of Festivals and Events (year 2 undergraduate), Conference Management (year 2 undergraduate), Event Management (year 2 undergraduate), Introduction to Hospitality, Tourism, Festivals and Events (year 1 undergraduate), The Business of Festivals and Events (year 1 undergraduate)• Postgraduate and undergraduate dissertation supervision

LEADERSHIP EXPERIENCE

- 09/2021 – present **Programme Leader**, MSc International Tourism and Events Management
Glasgow Caledonian University, Glasgow, UK
- Responsible for the overall coherence, planning, evaluation and enhancement of the degree
 - Day-to-day programme administration and student support
 - Development of the student experience (organising of induction, employability and study skills programmes, field trips and industry guest speakers)
- 09/2016 – 09/2019 **Programme Leader**, BA (Hons) Tourism Management & BA (Hons) Events Management
British University Vietnam, Hanoi, Vietnam
- Involvement in quality assurance processes to ensure delivery as per Staffordshire University standards
 - Development of the student experience (organising of domestic and international field trips, industry guest speakers)

RESEARCH EXPERIENCE

- Ongoing
- Collaborative research project**
- Conceptual work exploring the implications of Western-centrism in tourism on internationalisation of UK tourism education in Southeast Asia
 - Co-researcher: Carol Southall
- Small-scale internally funded research project**
- Empirical research investigating post-COVID recovery in the context of community-based festivals in Scotland
 - Co-researchers: Dr Nick Davies, Daniel Baxter
- Small-scale internally funded research project**
- Empirical research investigating the impact of working at COP26 on students' understanding of climate change and sustainable development
 - Co-researchers: Dr Nick Davies, Daniel Baxter
- 2011- 2016
- Doctoral Research**
- Qualitative research based on in-depth interviews and semiotic analysis that explored how narratives of collective memory and identity emerge at commemorative events of the fall of the Berlin Wall in the major anniversary years of 2009 and 2014
 - Supervisors: Dr Eleni Theodoraki, Dr Constantia Anastasiadou, Dr Louise Todd
- 2016
- Research Assistant**
- Assistant for a research project entitled: 'Imaging the 'Festival City': exploring the symbolic contribution of Edinburgh's festivals to the city's brand image and consumers' brand relationships'
 - Responsibilities included literature search and writing of literature review
 - Lead researcher: Dr Louise Todd
- 2013
- Final Project, PGCert Teaching and Learning in Higher Education**
- Applied research based on questionnaires that explored the use of wikis as support for collaborative working and their influence on students' learning experience
 - Supervisor: Dr Karen Aitchison
- 2011
- Research Assistant**
- Assistant for a project that studied the impacts of large scale outdoor music events at the Stadium of Light in Sunderland
 - Responsibilities included conducting qualitative data analysis and co-authoring the final report
 - Lead researcher: Dr Teresa Leopold

- 2011 **Postgraduate Dissertation**
- Qualitative research based on focus groups and in-depth interviews that explored place marketing, place identity and residents' attitudes in Nordhorn, Germany
 - Supervisor: Dr Teresa Leopold

FURTHER RELEVANT EXPERIENCE AND SKILLS

- IT Skills** Collaborate Ultra, MS Teams, Zoom, Padlet, Moodle, Blackboard, wikis, podcasts and similar for blended or remote teaching
 Profound knowledge of MS Office (Outlook, Word, Excel, PowerPoint)
 Basic knowledge of QSR NVivo 10 for qualitative data analysis
- Languages** German (native tongue)
 Fluent written and spoken English
- Co-organiser** of the conference 'Vietnam Tourism in the 21st Century', successfully held in December 2019 at British University Vietnam
- Advisory board member** for the student project 'Viet Youth on Sustainable Tourism', 2017-2019
- Reviewer** for the journals 'Tourism Management', 'Event Management', 'e-Review of Tourism Research', 'International Journal of Tourism Policy', 'Equality, Diversity and Inclusion'

HONOURS AND AWARDS

- 2015 **Final Year Research Student Prize for Research Excellence**
 Edinburgh Napier University
- 2014 **Interim Research Student Prize for Research Excellence**
 Edinburgh Napier University
- 2012 **First Year Research Student Prize for Research Excellence**
 Edinburgh Napier University
- 2011 **Best Postgraduate Student**
 Association for Tourism in Higher Education (ATHE)

PROFESSIONAL MEMBERSHIPS

Fellow of the Higher Education Academy (Advance HE)

PUBLICATIONS AND RESEARCH OUTPUT

Journal articles:

- Viol, M. & Southall, C.** (2021) 'A conceptual framework for understanding Western-centrism in transnational education in tourism', *Current Issues in Tourism* (ABDC: A)
- Viol, M., Todd, L., Theodoraki, E. & Anastasiadou, C.** (2018) 'The role of iconic-historic commemorative events in event tourism: Insights from the 20th and 25th anniversaries of the fall of the Berlin Wall', *Tourism Management*, 69C, 246-262. (ABDC: A*)
- Viol, M.** (2015) 'The use of wikis within the virtual learning environment to support collaborative working and their influence on students' learning experience', *Journal of Perspectives in Applied Academic Practice*, 3 (2), 50-57.

Book chapters:

- Nguyen, B. L. & Viol, M.** (forthcoming) 'Factors influencing decision-making of millennial travellers participating in community-based rural tourism experiences in South-East Asia', accepted for inclusion in Kim, S. & Styliadis, D. (eds.) *Tourism Marketing in East and South-East Asia*, Egham: CABI.

Publications in progress:

- Working title: 'Deconstructing commemorative narratives', to be submitted to *Annals of Tourism Research* (ABDC: A*)
- Working title: 'Semiotic analysis for deconstructing event design and meaning', to be submitted to *Tourism Management* (ABDC: A*)
- Working title: 'The economic potential of non-monetary activities at business events', to be submitted to *Event Management* (ABDC: A)

Peer-reviewed conference presentations:

- Nguyen, B. L. & Viol, M. (2019) 'Factors influencing decision-making of millennial travellers consuming community-based rural tourism', presented at: *Vietnam Tourism in the 21st Century*, Hanoi, Vietnam, December 5th – 6th, 2019.
- Nguyen, B. L. & Viol, M. (2019) 'Factors influencing decision-making of millennial travellers consuming community-based rural tourism', presented at: *Sustainable Niche Tourism: 10th International Conference*, Danang, Vietnam, June 26th – 28th, 2019.
- Viol, M. & Southall, C. (2018) 'Western-centrism in internationalised tourism higher education curricula: Perspectives from Vietnam', presented at: *Critical Tourism Studies Asia Pacific Inaugural Biennial Conference: Recentering Critical Tourism Studies*, Yogyakarta, Indonesia, March 3rd - 6th, 2018.
- Viol, M. & Southall, C. (2017) 'Western-centrism in internationalised tourism higher education curricula: Perspectives from Vietnam', presented at: *International Conference on Tourism: Place and the Tourist Experience: Heritage, Sustainability and Economy*, Chiang Mai, Thailand, June 28th – July 1st, 2017.
- Viol, M., Theodoraki, E., Anastasiadou, C. & Todd, L. (2014) 'Researching narratives of collective memory and identity: The case of the commemorative events of the fall of the Berlin Wall', presented at: *International Conference on Remembering in a Globalizing World: The Play and Interplay of Tourism, Memory, and Place*, Le Chambon sur Lignon, France, September 8th - 10th, 2014.
- Viol, M., Theodoraki, E. & Anastasiadou, C. (2013) 'The impact of commemorative events of the fall of the Berlin Wall on collective memory (re)constructions', presented at: *Post Conflict, Cultural Heritage and Regional Development: An International Conference*, Wageningen, Netherlands, October 9th - 11th, 2013.
- Viol, M., Theodoraki, E. & Anastasiadou, C. (2012) 'Constructing social memory: A critical investigation of reconstructions of the past and governance at commemorative events', presented at: *Current Issues and (Im)possible Solutions: an interdisciplinary dialogue in tourism and leisure*, GLTRG PhD Colloquium, University of Surrey, UK, September 6th - 7th, 2012.
- Viol, M., Theodoraki, E. & Anastasiadou, C. (2012) 'Constructing social memory: A critical investigation of cultural governance and narratives of the past at commemorative events', presented at: *Global Events Congress V: Advances in Event Management Research & Practice*, Stavanger, Norway, June 13th - 15th, 2012.
- Viol, M., Theodoraki, E. & Anastasiadou, C. (2012) 'Constructing social memory: A critical investigation of cultural governance and narratives of the past through festivals and events', presented at: *Innovative Approaches to Tourism Marketing and Management Research*, PhD Colloquium, Exeter, UK, April 2nd - 4th, 2012.

Invited speeches, seminars and workshops:

- Viol, M. (2018) 'Introduction to sustainable tourism', key note speech delivered at seminar: *Young leaders towards sustainable tourism*, Vietnam National University - University of Social Sciences and Humanities, Hanoi, Vietnam, April 2018.
- Viol, M., Theodoraki, E., Anastasiadou, C. & Todd, L. (2016) 'Event tourism and the Berlin Wall commemorative events in 2009 and 2014', research seminar delivered at Edinburgh Napier University, Edinburgh, UK, February 2016.
- Viol, M., Theodoraki, E., Anastasiadou, C. & Todd, L. (2015) 'Collective memory and identity in commemoration of the fall of the Berlin Wall: Narratives of the 2009 and 2014 anniversary events', research seminar delivered at Edinburgh Napier University, Edinburgh, UK, May 2015.

Other:

- Leopold, T. & Viol, M. (2011) 'Large-scale music concerts in Sunderland: The impact of Take That and Kings of Leon', unpublished report based on research funded by the Centre of the Experience Economy, University of Sunderland.

REFERENCES

Available on request

Pham Thuy Duong

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Education

2018 - 2019

Royal College of Art, London, United Kingdom

Master of Research in Visual Communication Design

2012 - 2015

Raffles College of Higher Education, Singapore

Bachelor of Design in Multimedia Design

2010 - 2012

Singapore International School, Hanoi, Vietnam

Work Experiences

2020 - 2021

Shopee Pte. Ltd, Vietnam

Multimedia Designer - Design & Production Team

- Create, conceptualised and manage livestream shows and utilise livestream as a marketing tool
- Content development: define topics, research, consolidate information, livestream/video script, host.
- Proactively utilize social trends in creating content & design

2018 - 2019

JYSK Pte. Ltd, Singapore

Freelance Graphic Designer

- Conceptualise and execute marketing collaterals; flyers and products catalogue
- Work with account manager and copywriter to create daily social media content and website banner

2016 - 2018

DSTNCT Pte. Ltd, Singapore

Junior Art Director

- Creating visual concepts in response to client's brief across all media platforms; digital communications, website, applications, television, press and print adverts.
- Head up online and offline campaigns.
- Work with graphic designers, copywriters, illustrator to develop new ideas.
- Plan, propose and manage social media strategies and fanpages.
- Generating original visual executions that are both exciting and creatively attractive with the utmost quality.

Work Experiences (cont.)

2015

DSTNCT Pte. Ltd, Singapore

Graphic Designer - Internship

- Conceptualise and execute day-to-day social media content across various accounts and clients.
- Work with account manager and copywriter to plan and propose social media strategies on various accounts and clients.

2015

Raffles College of Higher Education, Singapore

Lead Animator

- Conceptualise and execute animation an sequence for Raffles 25th Anniversary video.

2014

J Shoes, Singapore

Freelance Editor + Animator

- Conceptualise, edit and plan an animation sequence for JShoes's Summer/Fall 2014 Men's Shoes collection promotional video.

2013

The Barnett Group Pte. Ltd, Singapore

Graphic Designer - Internship

- Execute day-to-day social media content and collateral on various accounts.
- Plan and create influencer marketing content.

Skills

Content Creation

Digital Marketing

Social Media Marketing

Presentation Skills

Adobe Creative Suites

Language

Vietnamese - Native

English - Fluent

DAVID VANHOVE

Hanoi, Vietnam

+84 343854101

davidrjvanhove@gmail.com

EXECUTIVE SUMMARY

A dedicated, results-driven and seasoned Hospitality Industry Professional with invaluable experience gained in high turnover resorts and city hotel operations. Passion for training and develop others. Customer focused with diverse skills and an analytical mind, possessing strong leadership, effective training methods, communication abilities and Sales & Marketing skills.

Has a reputation of unwavering accuracy, credibility and integrity with an aptitude to perform above expectations.

A resourceful team player and trainer who can work with and lead highly organized multicultural employees to achieve operational excellence, while demonstrating creative problem solving and analytical skills with a common-sense approach. Highly adaptable and resilient, thriving on challenges.

Innovative, resourceful and adaptable; generates optimal results with a positive work ethic, energy and desire to continually build on success.

CORE COMPETENCIES

- Proven team player as well as an effective team leader
- Skilled in handling multiple projects concurrently
- Possesses excellent organizational, multi-tasking skills
- Multi-level training program developer with 101 manuals
- Planning and time management skills
- Target driven with a positive 'can-do' attitude
- Event Management and Food and Beverage expertise
- Efficient handling guest complaints and excellent customer service
- Cost & Stock Control/Inventories
- Marketing Management
- Effective interpersonal and communication skills, able to liaise confidently at all levels
- Keen to take initiative to implement and manage improvements, processes and procedures
- Possesses strong attention to detail and high levels of customer service expertise
- Develop strategies for revenue increase in Rooms and F&B Divisions

CAREER ACHIEVEMENTS

Hanoi Daewoo Hotel

2017: Successfully reduced beverage costs from 25% to 20%, and increased beverage sales in one year by \$100,000 by intense training for improving customer satisfaction.

Daloc Wine and Spirits

2016: Spearheaded and repositioned Company into top 3 Distributor in Vietnam by signing a one year contract with hotel chain using key contacts, and exceeded sales budget of 10% within one year from \$1.8M to \$2M.

Ritz-Carlton Hotel Central Park

2009: Awarded “Best Department Employee” for achieving 90% in Engagement Survey in Union Environment in South

Moevenpick Hotel Hanoi

2014: Best hotel results of the South East Asia region

EMPLOYMENT HISTORY

Ong Tay, Hanoi, Feb 2020-Present
Owner
Marketing, operations of home delivery services

FLC Beach Resort, Hotel, Golf and Safari, Quy Nhon, Vietnam June 2019- Jan 2020
Complex Executive Assistant Manager

Key responsibilities:

- Focus on F&B Division with over 200 staff members
- Develop training program for leadership development
- Taking lead of the green strategy with energy saving
- Revisiting company standards to meet 5-star international standards
- Involved with pre-opening plan of Coastal Hill project of 1000+ keys
- Increasing revenue via specific sales program

Cassia Cottage, Phu Quoc, Vietnam Sep 2018- May 2019
Resort Manager

Key responsibilities:

- In charge of daily operations of a resort
- Developing Sales Strategy to increase brand awareness and occupancy
- Full overview of P&L statement and budget making
- Establishing core standards for service efficiency and higher productivity

Time Coffee, Hanoi, Vietnam Nov 2017- Sep 2018
Restaurant Owner

Key Responsibilities:

- Leading front and back of the house team of popular restaurant/ premium lounge
- Menu concept and cost control
- Marketing plan and P&L statement accountability

Hanoi Daewoo Hotel 5*, Hanoi, Vietnam
Director of Food and Beverage

Aug 2016 to Nov 2017

Key Responsibilities:

- Responsible for all F&B operations for more 120 employees and managers and delivered 5-star service for all hotel entertainment (live music performances, show for holidays and band audition)
- Trained and motivated staff to highest standards and increased beverage revenue by 20%
- Developing and e-creating a-la-carte and Room service menus based on menu engineering, market trends and team skills

City Smart/ CHM Hanoi
Sessional Lecturer

Sep 2015 to July 2016

- Lecture Higher National Certificate Hospitality Management to a class of 20 students
- Develop learning skills activities with hotel visits

Daloc Wines and Spirits, Hanoi, Vietnam
Horeca Country Director

Dec 2014 to July 2016

Key Responsibilities:

- Built up marketing strategy and became the preferred partner for special wine events
- Achieved \$2million national sales exceeding budget
- Wine training WSET certified

Moevenpick Hotels and Resorts 5*
Executive Assistant Manager, Hanoi

Feb 2013 to Nov 2014

Key Responsibilities:

- Effectively supported General Manager and oversaw all F&B and Rooms divisions operation of a 5 Star service Boutique hotel for more than 60 employees
- Sustained and managed guest satisfaction program with record of high results via customized quality meetings and training
- Build training 101 F&B basics
- Monitored all aspects of F&B and Rooms divisions costs and achieved budgeted goals and lead marketing plan for F&B and Rooms divisions via monthly promotions, market trend initiatives and compliance to company policy and objectives

Shangri-La Hotels and Resorts 5*
Assistant Director of Food and Beverage
Villingili, Maldives (Jan 2012- Feb 2013)

Mar 2011 to Feb 2013

Key Responsibilities:

- Managed all five outlets plus In-Villa Dining in Luxury Resort on a large size island with a team of 110 colleagues
- Focused on guest interaction, recognition and satisfaction
- Oversaw beverage program, supervising Head Sommelier and Bar Operations Manager
- Enforced and implemented effective food, beverage and labor costs controls

Assistant Director of Food and Beverage,
Shanghai, China (Mar 2011- Jan 2012)

Key Responsibilities:

- Led a team of 40 employees for four outlets, plus In-Room dining in high volume hotel
- Increased sales revenue of unique Gourmet shop via sales call, marketing plan and innovative product selection
- Developed an effective training plan in order to increase performance monitor results

Ritz-Carlton Hotels and Resorts 5*

Jun 2006 to Aug 2010

Food and Beverage Manager, Washington, DC (Apr 2010- Aug 2010) (Task Force)

Key Responsibilities:

- Oversaw Club Lounge, In-Room Dining, Café and Lobby Bar/Lounge
- Specialized in beverage promotion for all bars/ lounge and Celebrity Chef Restaurant
- Maintained and developed profitable operations and high-quality products and service levels

Director of Banquets, Lake Las Vegas, NV (closed but re-converted to a Hilton) (Apr 2009 - April 2010)

Key Responsibilities:

- Successfully managed a team consisting of 60 employees in 60,000 sq ft banquet space specialized in outdoor events
- Responsible for food and beverage staff training, liquor cost reduction, Gallup scores increase, monthly F&B promotions and labor cost reduction
- Member of closing team and removal of Hotel Brand

Director of Banquets, New York Central Park, NY (Jun 2006 - Mar 2009)

Key Responsibilities:

- Responsible for leading banquet team in Union environment
- Implemented cost control program for food & beverage department
- Participated in manager training in leadership skills
- Accomplished best Employee Survey score in Division via intensive training, development and supportive management style
- Specialized in Movie release market and Middle Eastern delegation

Four Seasons Hotels and Resorts 5*

Aug 2002 to Apr 2006

Lounge and Bar Manager, Chicago, IL (Nov 2004 - Apr 2006)

Key Responsibilities:

- Supervised lounge/bar team of 40 employees and focused on maintaining standards of 5 Star 5 Diamond Hotel
- Emphasis on high tea service, lunch buffet, cocktail and cigar bar service
- Launched new tea lounge via upgraded service style, product and environment
- Implemented bi-monthly promotion to increase bar revenue and average check

EDUCATION

- 1998: **F&B Management Bachelor's Degree**, University of Culinary Learning (UTECH)
- 2020: **EMBA**, RMIT
- 2020: **120-Hour TESOL/TEFL Certificate**

TRAINING

- Certified Shangri-La Trainer Skills 1 and 2
- Certified Shangri-La Supervisory Excellence course
- Certified Safety Food Management System
- Micros/ POS skills knowledge
- Microsoft office efficiency
- Wine Spirit Education Trust Level 2

PROFESSIONAL MEMBERSHIPS

The Food & Beverage Association of America

TECHNICAL SKILLS

MS Office Applications; Word, Excel Outlook & PowerPoint

Edward Anthony Summers

MBA

Personal Information	Royal City Hanoi Vietnam +84 125 8617007 tony.summers@hotmail.co.uk
Nationality	British (Living and working in Vietnam)
Marital Status	Single
Professional	(former) Member Association of MBA's (former) Member Chartered Institute of Marketing (UK) (former) Member Institute of Directors (UK)
International employment experience	USA, Seychelles (Indian Ocean), South Africa, India, Kuwait, Vietnam
Education	MBA School of Business and Law Kingston University - London UK 2001 - 2003 BA (Hons) Business Studies 2:1 Classification Brighton Business School – University of Brighton UK 1995 -2000 Dip HE Business Studies Brighton Business School – University of Brighton UK 1993-1994
Professional Courses	Cert IV in Training & Assessment, Box Hill College, 2011 5 Day Course SIM Competency Based Training, 2007 Experiential Development 5 Day course, Brathay, 2005
Experience Summary	Innovative and successful Deputy Dean, Programme Leader and Business Lecturer with wide international experience Formerly Staffordshire University Programme Leader Experienced in delivering and assessing modules at Certificate, Diploma, Undergraduate and Postgraduate level Former extensive career in Marketing and General Management in ICT, HR Consultancy, Management Development and International Property sectors

British University Vietnam (BUV)

December 2011 to current

<http://www.buv.edu.vn/>

Organisation Profile: British University Vietnam is a city centre University campus in Hanoi Vietnam. BUV offers degree programmes in conjunction with the University of London, London School of Economics and University of Staffordshire. Degrees offered include BA Banking and Finance, BA Marketing Management and BA International Business.

Deputy Dean (BUV)

1 September 2015 to current

- **Deputy Dean** of the University responsible for operational management of all undergraduate programmes of Staffordshire University, University of London and British University Vietnam Dual Degrees.
- Support and lead the team of Programme Leaders, Quality Leader, Teaching & Learning Lead and Head of Pre-University & Student Experience to achieve excellence in academic results, student progression, academic rigour, student-centric learning, student discipline and student engagement.
- Work closely with the Academic Support Manager and her team to ensure accurate and effective systems in student management, timetabling, and assessment and grade management.
- Work closely with and develop the relationships with our key academic partners Staffordshire University and University of London.
- Support the University Dean in project management of various administrative initiatives to ready University systems and procedures for the expansion from out city centre location to our new campus location in early 2018.

Lecturer and Staffordshire University Programme Leader (BUV)

December 2011 to 31 August 2015

- **Programme Leader for all British University Vietnam (BUV) Staffordshire University undergraduate programmes** BA International Business Management, BA Marketing Management, BA Accounting and Finance and BA Accounting and Business. These programmes represent 95% of the student population at British University Vietnam.
- Work closely with the University Dean and Head of Teaching and Quality to coordinate and manage all (Franchised and QA'd) Staffordshire Programme activities including Module Leader's Schemes of Work, Assessments and Assessment Results, Teaching Methodologies and student performance issues.
- Monitor and control student attendance.
- Delivery specialism in Marketing, Management, International Business, Globalisation and Strategic Management.
- Deliver Marketing, Management, International Business and associated modules on the Staffordshire University undergraduate degree programmes. (See separate 'courses delivered' document.)
- Design, prepare and grade course assessments to undergraduate level.
- Courses delivered in 2011, 2012, 2013 and 2014 include International Business, Marketing Principles, Marketing in Practice, International Marketing, Strategic Management, Learning Knowledge and Effective Performance, Critical Thinking, Critical Reasoning, Advertising and PR, Globalisation and International institutions and Introduction to Business Management (Foundation) courses
- Supervise final year student research projects.
- Support and mentor BUV Lecturers in all aspects of course delivery and assessment. Team teach International Business and Critical Reasoning modules to support lecturers.
- Assist the Dean in faculty recruitment and selection.

- Assist in validation process with Staffordshire University for 11 new BUV Masters and Undergraduate degrees
- Designed and introduced Academic Probation system, Attendance management system and Student Management System (database) for all BUV degrees
- Assist BUV Marketing and PR department with events, open days, demonstration lectures, public speaking engagements, liaison with external organisations such as high schools and potential internship providers
- Liaise with external companies and organisations to provide guest speakers, student projects and 'simulated consultancy engagements'
- Chair and Member of Staff-Student Liaison Committee.
- Chair and Member of Faculty Academic Misconduct Panel.
- Chair and Member of Extenuating Circumstances Panel
- Act as a Personal Tutor for nominated students to provide academic and pastoral support.
BUV Contract details:
 - Offered 2 year contract extension from December 2012
 - Offered 2 year contract extension from December 2014
 - Offered 2 year contract extension from December 2016
 - Current contract ends 18 December 2018 (with a 3 month notice period).

Box Hill College Kuwait

Business Teacher

September 2010 to November 2011

***Organisation Profile:** Box Hill College Kuwait is an educational establishment for girls delivering Management, Marketing and Design courses at Certificate and Diploma level. www.bhck.edu.kw*

- Develop course outlines and assessments at Certificate and Diploma level
- Delivered **International Business, Marketing Practice** and **Credit Practices** courses
- Member of the committee developing undergraduate degree programmes for BHCK
- Member of the committee developing business processes for the Business Studies department

Sharda University, Uttar Pradesh, India

Asst. Professor of Marketing and Strategic Management

June 2009 to August 2010

***Organisation Profile:** Sharda Group of Institutions is the largest private educational group in Northern India with 15,000 current students. Sharda has been operating for 15 years and, in 2009, was granted full University status by the government of Uttar Pradesh. www.sharda.ac.in*

- Develop module descriptors, curricula, course material and lecture on **Strategic Management** and **Marketing** to Sharda PGDM, BBA and MBA students.
- Part of the 20 strong Global faculty, holding the position of Asst. Professor within the faculty
- Collaborate with foreign faculty colleagues to improve lecturing and teaching methodologies within the whole faculty to deliver a student-centric, interactive, behavioural/competency based approach to learning
- Team Leader of module development for Management, Strategic Management and Marketing
- Visiting lectures: **Innovation within the context of Strategic Management** at Academic Institutions within the state of Uttar Pradesh, India

Seeff Offshore, Johannesburg, South Africa

Business Development Manager

September 2008 to December 2008

Organisation Profile: *Seeff Offshore is the newly formed offshore property division of Seeff Properties, the nationwide South African estate agency.*

- Startup Seeff Offshore as an offshore property division of Seeff Properties.
- Sell the company's portfolio of investment and lifestyle properties in the UK, Mauritius and Australia to South African nationals wishing to invest abroad and/or emigrate.
- Creating and developing an intermediary and referral channel of Seeff Properties branches, IFA's and Emigration Consultants.
- Working with and developing the offerings of product and services partners in UK, Australia and Mauritius.

Grosvenor International Property Services, Johannesburg, South Africa

Business Development Manager

January 2008 to August 2008

Organisation Profile: *Grosvenor International Property Services are a niche services company of property traders, supplying off-plan residential property in the UK to clients in Southern Africa*

- Act in a senior business development and sales capacity to recruit, develop and motivate an extensive intermediary channel of Financial Services and Estate Agents throughout South Africa to sell the company's portfolio of properties in the UK
- Sell the company's investment properties in the UK direct to high net worth South African clients

Seychelles Institute of Management, Seychelles (Indian Ocean)

Senior Project Manager (Senior Lecturer)

July 2006 to January 2008

Organisation Profile: *Seychelles Institute of Management provides consultancy, training interventions and developmental courses to individuals and organisations within the Republic of Seychelles*

- Design, develop and deliver Management Development and Organisational Development training interventions.
- The role involved designing and delivering interventions using facilitative and competency-based approaches. Also recruitment, selection and management of a team of visiting lecturers from industry. Developmental interventions include SIM classroom-based courses, client in-house training and 'outdoors-experiential'; team-building interventions.
- Personal delivery of courses includes: Chartered Institute of Marketing (Marketing Communications - 100% student pass rate), ACCA (F1 Accountant in Business – 90% student pass rate), Managing People, Change Management, Sales and Marketing, Personal Selling, Certificate in General Management.
- Group facilitation has included work with 'Five Factor' personality psychometrics and Kirton Innovation Index psychometric.
- Member of SIM Academic Board

Selectia Overseas Property Network, Alicante Spain

UK Regional Manager

2005 – 2006

Organisation Profile: *Selectia Overseas Property Network was a start up company based in Alicante. The company acted as marketing partners to property developers on the Spanish Coast.*

- Providing sales and marketing professional services to help Selectia devise and develop their UK go-to-market strategy
- Select and recruit channel agents in the UK, typically Estate Agents, Solicitors and Financial Services Intermediaries. Developing joint marketing with authorised dealers

Brathay Hall Trust, English Lake District, UK

Business Development

2004 – 2005

Organisation Profile: *Brathay is a people development consultancy that enables people in organisations to embrace change. Brathay delivers performance improvement for organisations seeking to manage change through developing their people.*

- Brathay was hugely inspiring and energizing, as significant in learning terms as the recently completed MBA
- A classic consultative-sales role, helping Brathay with sales, marketing and business development whilst learning about Brathay's intervention style within the fields of leadership, team-development, change-management and senior management development
- Successfully closed early 'quick-win' new-name business with significant clients including UK National Health Service, Bradford and Bingley PLC, Vodafone, Airbus PLC, Jarvis PLC, Bechtel Corporation, Network Rail and the UK Learning & Skills Council

School of Business and Law - Kingston University London

MBA Postgraduate Student

2001 – 2003

Astro Communications, London UK

Managing Director

2000 – 2002

Company Profile: *Astro are a specialist communications company providing solutions to clients' requirements in the areas of: IT infrastructure - including LAN & WAN infrastructure products, structured cabling, wireless LAN, network management software, Videoconferencing; and Advanced IP Telephony. <http://www.astro.co.uk/>*

- Responsible for all aspects of sales, marketing, and business development
- Appointed to lead development of business plans & revenue generation
- Focused business development activities on key account customers
- Monitored revenues, business planning, costs & general profitability
- Led re-alignment of product portfolios to increase market share
- Successfully doubled sales turnover performance in 1 year & boosted profitability
- Promoted from Sales and Marketing Manager to Managing Director with full strategy and P&L responsibilities
- Developed formalised HR policies, employment contracts & support tools
- Championed rationalisation of a team of 30 staff & transformed revenues

Intercept Telecom, London UK
Sales and Marketing Manager
1998 – 1999

Company Profile: *Intercept Telecom are ICT infrastructure designers and installers*

- Responsible for all aspects of sales & marketing business management activities
- Appointed to create a new sales department & corporate brand identity
- Created & managed a telesales operation using customised CRM tools
- Successfully developed alliance programmes with leading intermediaries

Prescient Systems Inc. Philadelphia USA & Sussex UK (Covering EMEA)
Director of Sales European Operations
1996 – 1998

Company Profile: *Prescient Systems, formerly Lucas Bear & Associates Inc., are world-class specialists in mid-market supply-chain logistics software. Prescient's consultancy, software, and implementation services are sold into the FMCG markets, particularly CPG, direct and via partners*

- Responsible for all aspects of P&L sales, operations & business management
- Appointed as 'Country Manager EMEA' for a US supply-chain software house
- Reported directly to the President based in Philadelphia, USA
- Successfully re-sized company in European markets, after US MBO process
- Championed European alliance partnership with GE Information Services
- Won new business with General Domestic Appliances (Hotpoint), Nestle & Co-Op Italia

SHL Technology Solutions, Surrey UK
Senior Account Manager
1995 -1996

Company Profile: *SHL Technology Solutions were the UK "technology deployment" division of Systems-House Inc., a \$1.3Bn computer services company. Later acquired by MCI/WorldCom. SHL carried IBM, Compaq, Toshiba & Microsoft authorisations and provided high level technical services through a team of some 50 Microsoft Systems Engineers*

- Responsible for all aspects of new business & corporate account management
- Appointed to lead sales for a Tier 1 hardware, infrastructure & services provider
- Negotiation of new business clients & key account relationships
- Managed a team comprising of SHL's GlobalServe, Compaq & Microsoft
- Led the team to win UK-wide £3m+ supply contract for a French multi-national

Datapro Computers, Sussex UK
Senior Account Manager
1993 – 1995

Company Profile: *IBM RISC System/6000 Unix VARS, HP & DG Resellers, Also Apple, Apricot, Compaq PC authorisations. Vitesse ERP software, Wallchart Resource Management Software*

- Responsible for all aspects of business development & sales management
- Appointed to lead solution sales of accounting / ERP products to clients
- Development of relationships with key corporate accounts
- Handled revenue budgets, account forecasts & general profitability schedules
- Successfully won maintenance & services revenue from Unilever subsidiaries

Early Career Includes	MICABuild	Product Sales Manager	IBM Unix VARS & software house
	IPM International	Senior Sales Executive	IBM AS/400 Agents & ERP software house
	Practica Plc	Senior Sales Executive	IBM Unix VARS & ERP software house
	Microtechnology	Senior Sales Executive	IBM PC Dealers & business software
	Modata	Senior Systems Consultant	Computer showroom
	Praxis	Senior Sales executive	Microcomputer dealers and software house

Available Documents

- Statement of Teaching Philosophy
- Courses Delivered
- MBA, BA (Hons) & Dip HE Certificates
- Cert IV Certificate in Training and Assessment
- References

Hamza Mutaher Abdu Alshameri

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hamzmutaher.rs@manuu.edu.in
☎ 0091-9730082515
📍 Hyderabad, India



Personal:

Gender : Male
DoB : 18/07/1991
Nationality : Yemeni
Marital Status : Bachelor
Corresponding Address : 12-2-790/135 Ayodhya Nagar Colony, Mehdipatnam, Hyderabad, India. Pin: 500028.
Permanent Address : Wadi Alqadi, Taiz, Yemen.

Qualification:

Ph.D. in Software Defined Network security	MAULANA AZAD NATIONAL URDU UNIVERSITY Hyderabad, India	Submitted Waiting for Final Viva	2016-2021
M.Sc. Masters of Computer Science/Computer Network	SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, Nanded, India	A Grade	2013 - 2015
BCA BACHELOR OF COMPUTER APPLICATION	OSMANIA UNIVERSITY Hyderabad, India	First Division	2010 - 2013

Research Publications:

1. Mutaher, H., & Kumar, P. (2021, March). ZKPAUTH: An Authentication Scheme Based Zero-Knowledge Proof for Software Defined Network. In *International Conference on Artificial Intelligence and Sustainable Computing* (pp. 105-120). Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-82322-1_8 (Scopus Indexed Conference Processing).
2. Mutaher, H., & Kumar, P. (2021, January). Security-Enhanced SDN Controller Based Kerberos Authentication Protocol. In *2021 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence)* (pp. 672-677). IEEE. DOI: <https://10.1109/Confluence51648.2021.937704> (Scopus Indexed Conference Processing).
3. Alshameri, H. M., & Kumar, P. (2019). An efficient zero-knowledge Proof based identification scheme for securing software defined network. *Scalable Computing: Practice and Experience*, 20(1), 181-189. DOI: <https://doi.org/10.12694/scpe.v20i1.1473> (ESCI & Scopus Indexed Journal).
4. Mutaher, H., Kumar, P., & Wahid, A. (2018). OPENFLOW CONTROLLER-BASED SDN: SECURITY ISSUES AND COUNTERMEASURES. *International Journal of Advanced Research in Computer Science*, 9(1). DOI: <https://doi.org/10.26483/ijarcs.v9i1.5498> (Journal)

Conferences Participations:

1. "Unauthorized Access Prevention Between Hosts and Controller in Software Defined Network Based Key Agreement Technique", National Conference on Computational Methods, Data Science and Applications, MANUU, Hyderabad, India. 24th-25th May, 2021. (National Conference)
2. "ZKPAUTH: An Authentication Scheme Based Zero-Knowledge Proof for Software Defined Network" Artificial Intelligence and Sustainable Computing for Smart Cities (AIS2C2) Gautam Buddha University, Noida, India 22nd-23rd

March, 2021. (International Conference)

3. Security-Enhanced SDN Controller Based Kerberos Authentication Protocol. 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence) Amity University, Noida, India. 28th-29th January, 2021. (International Conference)
4. "Kerberos based Authentication Framework for SDN" International Conference on Computational Intelligence and Data Analytics ICCID. GIFT, Bhubaneswar, India. 26th-27th October, 2018. (International Conference)
5. "Authentication Framework for SDN using Kerberos Authentication protocol" National Conference on Emerging Trends and Issues in Information Technology and Communication ETIIC-18, MANUU, Hyderabad, India. 17th-18th March, 2018. (National Conference)

Book Chapters:

1. Mutaheer, H., & Hodeish, M. E. (2021). Sakai-Kasahara IBE. In *Functional Encryption* (pp. 171-185). Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-60890-3_10 (Scopus Indexed).
2. Mutaheer, H., & Kumar, P. (2019). Entity Authentication. In *Emerging Security Algorithms and Techniques* (pp. 213-224). Chapman and Hall/CRC. DOI: <https://doi.org/10.1201/9781351021708> (Taylor and Francis).

Communicated Papers:

1. "An Authentic Secret Sharing Scheme Based Key Management Technique for Securing Multi-Controllers Communication in Software Defined Network" *Multimedia Tools and Applications, Springer (SCIE and Scopus indexed Journal)*.

Workshops:

1. *Information Security and Ethical Hacking*, Innobuzz Knowledge Solutions, Nanded, India, 8th Dec, 2013.
2. *National Workshop on MATLAB Software and its applications*, SRTM University, Nanded, India. 28th Jan, 2014.
3. *Cloud Computing, an International Workshop*, Technophilia Systems, SRTM University, Nanded, India 19th Sep, 2014.
4. *Digital Image Processing Using MATLAB*, SRTM University, Nanded, India, 16th Jan, 2015.
5. *Cisco Network Design and Implementation*, Mahatma Gandhi Mission's COE, Nanded, India, 17th -18th Feb, 2015
6. *National Symposium on Data Mining and Pattern Recognition*, SRTM University, Nanded, India. 27th -28th Feb, 2015.
7. *Cyber Security and Malware Analysis*, Maulana Azad National Urdu University, Hyderabad, India, 2nd Nov 2016.
8. *Script Writing*, Maulana Azad National Urdu University, Hyderabad, India, 13th-18th Mar, 2017.
9. *Topics in Linear Algebra and Machine Learning*, University of Hyderabad, Hyderabad India, 12th – 13th Oct, 2017.
10. *Lecture on Cloud Computing*, G. Narayanamma Institute of Technology, Hyderabad, India, 26th Oct, 2017.
11. *Software Based Networks: SDN and Integration of Virtualization in Networks*, NITK Suratkal, India, 19th-23rd Dec, 2017.
12. *Research Methodology*, Maulana Azad National Urdu University, Hyderabad, India, 23rd-29th Mar, 2018.
13. *National Workshop on Cryptology*, University of Hyderabad, Hyderabad, India 5th-7th Sep, 2018.
14. *Evaluating Network with Mathematical and Simulation Modelling: SDN Approach*, Chandubhai S. Institute of Technology Anand, India, 17th-22nd Dec, 2018.
15. *Cyber Security and Forensic*, Maulana Azad National Urdu University, Hyderabad, India, 17th-18th Feb, 2020
16. *LaTeX, AI labs, IEEE Education Society Chapter*, University of Hyderabad, Hyderabad, India, 29th Feb, 2020.

Taught Subjects:

Fundamentals of Information Technology (FIT), Computer Network, Network Security, Information Security and Operating System.

Online Courses:

Mastering Python Networking	Udemy	3.5 hours	July, 2021
SDN Crush Course (OpenFlow, Mininet, Ryu) Practical Handson	Udemy	11 hours	December, 2020
Learn Netconf, Yang, SDN, OpenDaylight Netconf with Practical	Udemy	3 hours	April, 2020
GNS3, Docker, Open vSwitch, SDN, OpenDaylight and OpenFlow	Udemy	2 hours	July, 2019
Introduction to SDN and OpenFlow	Udemy	3.5 hours	July, 2019

Training Courses:

EMC SAN	KernelSphaere Technologies Pvt.Ltd. Hyderabad, India	July, 2015
VMware	KernelSphaere Technologies Pvt.Ltd. Hyderabad, India	June, 2015
Linux Redhat 6 Admin	Sun Marss Technologies Pvt.Ltd. Hyderabad, India	July, 2013
Microsoft Exchange server2012	Sun Marss Technologies Pvt.Ltd. Hyderabad, India	June, 2013
CCNA Security	Net Expert IT Pvt.Ltd, Hyderabad, India	May, 2013
CCNP Routing & switching	Zoom Technologies Pvt.Ltd. Hyderabad, India	January, 2013
CCNA Routing & switching	Zoom Technologies Pvt.Ltd. Hyderabad, India	October, 2012
Microsoft ExchangeServer2007	Zoom Technologies Pvt.Ltd. Hyderabad, India	October, 2012
Firewall	Zoom Technologies Pvt.Ltd. Hyderabad, India	October, 2012
Linux Centos 6 Admin	Zoom Technologies Pvt.Ltd. Hyderabad, India	October, 2012
MCITP Server 2008	Zoom Technologies Pvt.Ltd. Hyderabad, India	September, 2012
Hardware& Networking	Zoom Technologies Pvt.Ltd. Hyderabad, India	September, 2012

Programming/Simulation Skills:

- Python, Java, C#, C++, C, HTML, ASP.net, Java Script, Jison, CSS, SQL and SQL server.
- Mininet, MATLAB, AVISPA, NS3, GNS3, Packet Tracer, Ryu controller and OpenDaylight controller.

Languages:

- Arabic: Native Language
- English: Full professional proficiency
- Urdu: Intermediate
- Spanish: Beginner

Work Experience:

- Research Scholar at Department of Computer Science & Information Technology, Maulana Azad National Urdu University, Hyderabad, India. 2016-2021.
- Teacher Assistance at Department of Computer Science & Information Technology, Maulana Azad National Urdu University, Hyderabad, India. 2017-2019.
- System administrator at ALM Interactive Sol Pvt Ltd, Hyderabad, India April 2015- June 2017.

JAMES MCGAUGHRAN, MA

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James.mg@buv.edu.vn



I have spent over 12 years in academia including 10 plus years in attaining 3 degrees which are a BA in Political Science, a BA in Environmental Studies and a Masters in Strategic Leadership and Communication as well as nearly 2 years of teaching at British University Vietnam (BUV). I am currently searching for an Online PhD program in the United States and look forward to working at BUV while I attain it.

My academic experience and expertise are in the areas of business, marketing, communication, leadership, political science, environmental studies, sustainability, public speaking, life-coaching, among others. I enjoy learning and currently take in epic works of science, history and philosophy through audio books as well as perusing the world wide web for useful and relevant information. In addition, I seek out in-depth conversations with my colleagues on academic topics and life mastery.

My career objectives include lecturing as a university professor and publishing groundbreaking research. I am qualified to work in many areas of business but find my calling in educating and enlightening young adults in deeper levels of knowledge, expertise, and understanding. I am also profoundly interested in gamifying education and making it more interactive with the professional world.

EXPERIENCE

British University Vietnam

University Course Tutorials for Lectures
Creating and Implementing Marketing Campaigns,
Experiential Marketing, Entrepreneurial Marketing,
Professional Toolkit, Adv Professional Toolkit
IELTS Teacher (Speaking and Writing)

Hanoi, Vietnam
2021-Present

2020- 2021

RES

IELTS Senior Teacher (Speaking, Listening, Writing, Reading)
IELTS Writing Task 1 and Task 2 (Producing Band 9 Model Essays)

Hanoi, Vietnam
2016- Present

Advanced English in topics ranging from the environment, AI, nutrition,
Technological advance, communication techniques, business skills and more
RES Livestream Mock Speaking Tests
Received Outstanding Teacher of the Year Award 4 Times
Co-hosted RES Recruitment Events for 4 years (Ended with Covid)

MML

New Delhi & Gurgaon, India

MML English Language Department

2012-2015

MML, a company offshoot from the Sona Group, who manufacture various
automotive components and more through their family of companies.

I learned and absorbed their systems and processes all the while teaching Business English
to their management, marketing, and sales teams.

Basic, Intermediate, and Advanced English, Business English, Written English, Conversational English,
Strategic negotiations and assisted in English translation in international sales and marketing.

Taught via Skype and experienced in both live classrooms and virtual classrooms.

Travel and Volunteering

2010-2012

Traveled to several countries in Asia and Europe

Volunteered:

Hope Language Center in Dharamsala India

Shamrock School in Pokhara, Nepal

New Light School in Auroville, India

University of Colorado

Boulder, Colorado

Computer Lab Advisor

2006-2010

Troubleshooter, coached, and trained students with questions on computers, technology, and research

Pikes Peak Community College Computer Lab

Colorado Springs, CO

Computer Lab Advisor

2005-2006

Troubleshooter, coached, and trained students with questions on computers, technology, and research

Organic Earth Café Restaurant-Bar-Community Events,

Manitou Springs, CO

Co-owner, General Manager, Marketing, Service, Sales, Host, MC, Buyer/Negotiator,

2000-2005

Marketing Campaigns included Online, Offline, Billboard, Commercials,

Supermarket receipt coupons, monthly newsletter and more

Guitar Center Music Superstore,

Hollywood, California

Flagship Store on Legendary Sunset Avenue with the Rock Walk

1998-2000

Keyboard/Hi Tech Sales

Hi Tech Sales, Support, Service and Trouble Shooting

Customer Service and Support

Taught Classes on Hard Disk Recording/Mixing/FX

Certified C, B, and A Level

The Top Seller consistently in my department (Gross Profit and Sales)

Left to open the Organic Earth Café-Restaurant-Bar-Event Center

Omega Psychology Center,

Boca Raton, Florida

Office Manager

1993-1998

Duties included Setting appointments, billing clients, marketing campaigns,
Consulted with insurance providers, insurance acceptance and verifications

EDUCATION

Stephens College **Columbia, Missouri**
Masters of Strategic Leadership & Communication
GPA: 4.0/4.0
Received: December, 2015

LinguaEdge, LLC. **Beverly Hills, CA**
TESOL Certification 150 hours
Grade A Pass with Distinction
Received: April, 2015

University of Colorado **Boulder, Colorado**
Bachelor of Arts in Political Science
Bachelor of Arts in Environmental Studies
Received: June, 2010

SKILLS AND ATTRIBUTES

- Communication
- Humanities
- Social Science
- Business
- Marketing
- Research
- Problem solving
- Purchasing/Negotiating
- Political Science
- Political Psychology
- Organizational Leadership
- Public Speaking
- Innovator & Idea Generator
- Creative/Resourceful
- Natively understand both Eastern & Western Thought, Philosophy and Religion
- Environmental Studies/Policy
- Sustainability and Green Living
- Analyzing and Upgrading Social Systems
- Scientific based management and governance
- Adaptable
- Flexible
- Knowledgeable in Nutrition and Health
- Life Coach
- Avid Learner
- Integrating additional pertinent knowledge into curriculum
- Simplifying Complex Concepts
- Technology Enthusiast
- High level of Stamina/Endurance
- Managerial Expertise

ACTIVITIES AND ORGANIZATIONS

Honors and Awards

Honors for Masters of Strategic Leadership and Communication

2015

Organizations

Model United Nations (University of Colorado Boulder)

2006-2010

Intramural Sports League: Basketball, Football, Ultimate Frisbee, Volleyball,, Table Tennis

2006-2010

**JONATHAN A. NEALE, M.B.A., B.P.E. 4211 Richmond Place
Jon.Neale5913@yahoo.ca Tel: (306) 543-2161**

Professional Experience

CEO, Prime Numbers: Regina, SK **2012 –Present**
Economic, Financial and Market Research for Small and Medium businesses

Senior Lecturer: Economics, Higher Colleges of Technology, Abu Dhabi, UAE **2009 - 2010**

Highest rated teacher in the business program; encouraging and inspiring students
Elevated academic standards, Developed ISO9001 Quality program for Business School
Taught subjects include:

- Macro/Micro Economics
- Economics for Engineering
- Corporate Finance
- Investment Banking
- Investment Management

Consultant and Educator: Regina, SK **2007- 2009**

Economic development policy planning; housing provision and business development
Freelance consulting primarily in corporate restructuring and turnaround management
Developed comprehensive strategic and financial plans:

- Critical analysis of performance factors
- Strategy Implementation based upon measurable targets and executable goals
- Tutoring in corporate strategy, finance

Senior Lecturer: York St. John University, York **2002 - 2007**

A popular and respected professional appreciated for his thorough and practical insights and approachable character; brings a wide range of experience and an ability to see to “the heart of the problem” to both business and classroom; challenging and supportive as well as a major contributor to team accomplishments

Taught subjects include:

- International Business/Marketing
- Macro and Micro Economics
- Managerial Economics/Accounting
- Financial Accounting and Analysis
- Project Management
- Corporate Finance

Research Interests:

- Total Factor Productivity as a measure of firm performance
- Foreign Direct Investment and Strategic Choice
- International economic development

Achievements:

- Led largest staff development workshop in college history
- Developed new web-based open learning materials
- Developed new modules and Finance specialism within the degree
- Presented “Foreign Direct Investment into Central and Eastern Europe: Determinants of strategic choice” to EUNIP 2006
- Published *Teaching for Critical Thinking*
- Improved standards, retention & pass rates
- Impacted significantly on the award of higher class degrees
- Served on several committees: Research, Academic Planning & Resources, Widening Participation

Managing Partner: Corporate Performance Consultants, Regina **1996 - 2002**

Transferable skills acquired through restoring over 27 businesses to financial stability based on comprehensive analysis, redesign and strategic planning; improved productivity and financial performance within budget

Achievements:

- Created and implemented cost control and reporting systems for three different manufacturing companies (names withheld by confidentiality agreements)
- Organized improved cash management on both expenditure and collection for many organizations in private and non-profit sectors (names withheld by confidentiality agreements)
- Initiated new marketing plans for several retail firms and non-profit institutions (names withheld by confidentiality agreements)

Youth Worker: House of Concord/Salvation Army, Regina **1992 - 1994**

Provided counseling and guidance to residents (young offenders)
Developed and supervised physical education programs including aquatics, weight-training and team sports

Achievements:

- Program results were substantially beyond expectations

Director of Fitness Programs: Family YMCA of Regina, Regina **1989 - 1992**

Developed and supervised all fitness and health programs; prepared budgets, developed training curricula; acquired financing and developed marketing strategies at both project and organisation level; recruited and motivated 40 staff, both paid and volunteer

Achievements:

- Founded Sir George Williams Memorial Foundation; (a fund-raising organisation that provided capital investment to the YMCA)
- Successfully promoted the YMCA through improved advertising
- Developed public relations initiatives
- Expanded the range of services
- Race Director for the Provincial Championship Triathlon (delivered the program in 50% under budget)
- Created very successful PR materials for Regina FitWeek Committee
- Highly regarded presenter at Board of Education Teachers' Institute

Education

PhD (formerly enrolled) **University of York** **2011 - 2012**

PhD (formerly enrolled) **University of Leeds CIBL** **2006**

Post-Graduate Certificate in Academic Practice **2005**

City and Guilds Further and Higher Education Teacher's Certificate Stage 1 **2004**

Master of Business Administration, Heriot-Watt University, Scotland **1994 - 1996**

one of the world's top 20 business schools and the UK's largest (Economist Intelligence Unit)

- Extensive practical work experience in the public, private and higher education sectors
- Highly praised dissertation
- Outstanding GMAT marks: 67th percentile in quantitative, 95th percentile in verbal, 88th percentile overall

Bachelor of Physical Education (Kinesiology), Dalhousie University, Canada

1982 – 1985

(a leading university with an international reputation in several fields)

- As a top student at Dalhousie, was chosen to participate in a year long, one-time only exchange program at Carnegie Institute at Leeds Polytechnic, Leeds, England

Volunteer Activities

- Family YMCA of Regina: 19 years; numerous service citations
- Royal Life Saving Society of Canada: 15 years; M. G. Griffith Certificate for Bravery Honorary Associate Certificate for Service, 3 lifeguard championships
- Regina Volunteer Centre, former board member

References

Dr. Jack Boan, Prof. Emeritus, University of Regina
jack.boan@uregina.ca, Tel: (306) 585 4190

Dr. Stephen Sapp, Richard Ivey School of Business, University of Western Ontario, ssapp@ivey.uwo.ca,
Tel: (591) 661 3006

Dr. Chris Elias, Head of Business Management, York St John University
c.elias@yorks.ac.uk, 01904 876840

Dr. Steve Watson, Principal Lecturer, Business Management, Marketing, York St John University,
s.watson@yorks.ac.uk, Tel: 01904 624624

Dr. Simon Sweeney, Senior Lecturer In International Business And Governance, University of York,
Heslington, York, UK; (0) 7 828 56 16 59, simon.sweeney@york.ac.uk.

Dr Elsbeth Caswell, Dean of Advertising Management, Bournemouth University (Talbot Campus)
Email: ejcaswell@bournemouth.ac.uk

Dr. Michael Mulnix, Head of Graduate Management Programs
Higher Colleges of technology, Abu Dhabi, UAE
(cell) +971 2 404 8753, michael.mulnix@yahoo.com

Dr. Shasha Yu Senior Lecturer in International Business and Strategy, University of Plymouth
shashayu612@gmail.com

Mr. K G Mock, Senior Recruiting Consultant, Saskatchewan Health, Canada
kmock@health.gov.sk.ca, Tel: (306) 787 3127

Mr. Steven Carney, Managing Director/CEO, Origin Energy
219 West Offices, Station Rise, York, UK, YO1 6HT
steve@originenergy.org, Telephone 01904 659642

Dr. Ben Schelew, Queen Elizabeth II Hospital and Dalhousie Faculty of Medicine; Department
of Anesthesia, benschelew@hotmail.com, 43 Melwood Ave, Halifax, NS B3N 1E4, Tel: (902)
422-1230

Lee McMillan

6 Pho Cuc, Ecopark, Hanoi **Mobile:** 0167 872 1417 **Email:** leeinhanoi@outlook.com

PROFILE

Working in a variety of commercial situations has allowed me to develop a versatile, self-motivated, outgoing, determined, enthusiastic, persistent approach. I work effectively both as an individual and as part of a dynamic team; with a friendly, polite and positive attitude.

These experiences have provided a platform to achieve: communication and people skills, independence within the working environment, the ability to rise to a challenge, creativity, commercial acumen, high levels of energy and commitment.

EXPERIENCE

July 2015 - present

Reliable English School, Hanoi

- Advanced Level IELTS
- Reading
- Writing
- Speaking
- Listening
- Creating engaging lesson plans
- Examining
- Assessing new students

Feb 2013 - May 2015

Skiplex Indoor Ski Centres, Berkshire, Hampshire, London

Position Held:

Event & Sales Manager

- Successfully generating new and profitable business for the centres
- Delivering sales presentations to high-level executives
- Providing monthly budget and forecasting for Sales
- Director
- Excelling at face to face business with high profile customers
- Organising and managing corporate events
- Proactively marketing promotions and customer incentive schemes

Feb 2011 - Jan 2013

Cameron House and The Carrick on Loch Lomond, Devere Group

Position Held:

Corporate Golf Sales Manager

- Ongoing development and growth of golf course sales, profit & reputation
- Winning new business within Glasgow's corporate markets
- Creating, promoting and selling of all themed Open Competitions
- Converting and co-ordinating all golf related business

Jan 2009 – Jan 2011	Blue Mountain Golf & Conference Centre , Crown Golf, Berkshire <i>(Europe's Largest Owner/Operator of Golf Courses)</i>
Position Held:	Business Development Manager – Awarded Shining Star of 2010
	<ul style="list-style-type: none"> • Organising and managing conferences, functions and corporate events • Achievements – successfully grew corporate business by 26% in an economic down turn through increased outbound activity (60 completed calls a day, outreach programmes and networking) • Delivered £200,000 worth of revenue through gaining exclusivity for all of the John Lewis Partnership corporate events held in Berkshire/Surrey
Jan – Dec 2008	Kiss FM , Algarve Portugal
Position Held:	Broadcast Journalist
Oct - Dec 2007	Radio Clyde , Glasgow
Position Held:	Reporter
Sep 2007	Royal Navy , Loch Ewe
Held:	TV Anchor, TV Reporter & Radio Host
Jan 2003 – Aug 2006	Europe 2 & Radio Tignes, La Plagne, Les Arcs and Briancon , France
Position Held:	Broadcast Journalist – Head of English Transmission
Freelance:	BBC Radio 2 , Jeremy Vine Show: Producer & Researcher: (2005)
Jun 2000 - Jan 2003	Ian McLauchlan Associates / ORB International , Glasgow
Position Held:	Account, Event & Hospitality Manager

EDUCATION AND QUALIFICATIONS

May 2015:	140hr TEFL Course (classroom & online), London
1996 - 2000	University of Glasgow MA Historical Studies
	<ul style="list-style-type: none"> • Public presentation: chairing tutorials and giving presentations • Interpersonal skills: liaising with fellow students and tutors • Time management: prioritising work/drawing up schedules to meet deadlines
1995 - 1996	Annie'sland College , Glasgow HNC Communications



LM

LTM MAREDI (MAREDI)

BUSINESS LECTURER

DA KAO, DISTRICT 1, HO CHI MINH CITY VN

OBJECTIVE

After spending the last decade in Education, I aim to use my education and research background to empower young people in developing countries.

SKILLS

Critical thinking • Leadership • Problem solving • Planning and monitoring • Lecturing • Corporate Finance • Management Accounting • Research • International Business • Soft Skills Training • Auditing and Governance

EXPERIENCE

ACTING ACADEMIC MANAGER • GIA DINH UNIVERSITY • MAY 2021 – CURRENTLY

Liaison with the University of Greenwich (UK) on academic matters. • Maintaining student discipline. • Tracking student progress and performance. • Monitoring teaching plans. • Scheduling and staffing.

LECTURER • UNIVERSITY OF GREENWICH – VN PARTNER INSTITUTION • OCT 2020 – CURRENTLY

University of Greenwich modules lectured: Business Dissertation (BUSI 0011) • Corporate Finance (FINA 1095) • Career and Professional Practice (BUSI 1334) • Management in Critical Context (BUSI 1475) • International Business Management (BUSI 1700)
Other modules: Business Innovation

LECTURER • UNIVERSITY OF PRETORIA AND UNIVERSITY OF JOHANNESBURG • JAN 2010 – DEC 2018

Modules lectured – Management Accounting • Corporate Finance • Finance for non-financial managers • Finance for Public Health. Served in Appointments Committee (UP). Chaired Decolonization Committee (UJ)

AUDIT SENIOR • DELOITTE • JAN 2006 – DEC 2009

Auditing and governance per International Standards of Auditing. Large Clients: South African Airways • L'Oréal Manufacturing • Pangborne Properties • RTT Logistics •



MAREDIMTM@ICLOUD.COM



+84582533553



LM

LTM MAREDI (MAREDI)

BUSINESS LECTURER

DA KAO, DISTRICT 1, HO CHI MINH CITY VN

EDUCATION

MASTER IN FINANCIAL MANAGEMENT • APR 2015 • UNIVERSITY OF PRETORIA

BACHELOR OF ACCOUNTING (HONOURS) • APR 2007 • UNIVERSITY OF JOHANNESBURG

REFERENCES

Dr Hai Ngo Minh – Dean Gia Dinh University

hainm@giadinh.edu.vn

More available upon request

DISSERTATION SUPERVISION

- Master in Finance – Three students – University of Johannesburg
- Master in Business Administration – One student – Gordon Institute of Business Studies (GIBS)
- Bachelor of Arts in Business Management – 21 students – University of Greenwich (/Gia Dinh University)



MAREDIMTM@ICLOUD.COM



+84582533553

Mark Harris B.Sc. (Econ.) Hons., M.Phil. (Econ.)

Address: 7 Dole Street
Thornton
Bradford
West Yorkshire BD13 3LL
e-mail: harris1703@gmail.com
Phone: 01274 500498



Age: 53
Nationality: British
Date of Birth: 17 March 1962
Marital Status: Divorced

Career History**Singapore Institute of Management, Singapore****August 2007 – September 2014**

Senior Lecturer: Subjects taught: Introduction to Economics, Microeconomics. Lecture groups sized: 180 – 500. Academic Adviser to Diploma in Economics students.

Institute of Technology & Management, India.**October 2006 – June 2007**

Academic Head In charge of academic matters relating to the University of London's Degree and Diploma programmes. In charge of all academic planning, timetabling, etc. Subjects taught: Introduction to Economics, Managerial Economics.

Stansfield College, Singapore.**December 2003 – July 2006**

Academic Director: In charge of all academic matters relating to the University of London's Degree and Diploma programmes. In charge of all academic planning, timetabling, etc. - 144 subjects spread across 23 different Degree/Diploma programmes, involving 2,500 students. Managing 30 fulltime and 12 parttime lecturers, as well as 20 administrative members of staff. In charge of staff training, teacher development, etc. Subject taught: Introduction to Economics, Managerial Economics, Microeconomics, Industrial Economics.

Singapore Institute of Commerce, Singapore.**March 2003 – December 2003**

Academic Director: In charge of all academic matters relating to the University of London's Degree and Diploma programmes, as well as all matters relating to the Charles Sturt University programmes. In charge of all academic planning, timetabling, etc. Managing 10 fulltime and 20 part-time lecturers, as well as 5 administrative members of staff. In charge of staff training, teacher development, etc. Subjects taught: Introduction to Economics, Fundamentals of Economics, Managerial Economics.

Stansfield School of Business, Singapore**June 1999 – March 2003**

Deputy Director of Studies - Helped to manage 25 fulltime and 18 parttime lecturers, as well as 3 administrative members of staff. I am in charge of all time-tabling matters – 140 subjects spread across 23 different Degree/ Diploma programmes, involving ±2700 students

Senior Economics Lecturer on the University of London's External Degree programme.

In the Stansfield Lecturer Evaluation programme, I consistently ranked top or second-top amongst all lecturers.

Subjects taught: • Introduction to Economics • Managerial Economics • Industrial Economics • Analysis of Strategic Management

[The Singapore Institute of Commerce was taken over by Stansfield School of Business in December 1998]

Singapore Institute of Commerce, Singapore.**May 1997 – June 1999**

Assistant Academic Director: May 1997 – June 1999. In charge of all academic matters relating to the University of London's Degree and Diploma programmes.

Singapore Institute of Commerce, Singapore.**May 1994 – April 1997**

B.Sc. Course Manager: March 1995 – April 1997. Involved managing academic and administrative staff and matters relating to the 1,000 B.Sc. Students registered at S.I.C.

Senior Economics Lecturer on the University of London's External Degree programme.

Subjects taught: • Introduction to Economics • Analysis of Strategic Management • Microeconomics • Managerial Economics

Bostrom plc, Northampton, UK.**April 1993 - April 1994**

Manager, Finance Department: Reporting to the Finance Director, responsibilities included:

- production of monthly consolidated accounts and financial reports
- treasury operations on currency markets
- production of the monthly Cost Monitor and Quality Cost reports
- control of the group's capital expenditure
- managing a department of 15.

KPMG Peat Marwick, Milton Keynes, UK.**August 1990 - March 1993**

Trainee Chartered Accountant: Received a thorough grounding in financial and management accounting techniques, and financial reporting standards

- audited large clients including Mercedes-Benz, Virgin Atlantic and Plysu
- devised computer worksheets for audit purposes
- designed confidential spreadsheets/graphics for the firm's partners

University of Buckingham, Buckingham, UK.**January 1985 - August 1990****Economics Lecturer:**

Subjects taught:

- Principles of Economics
- Intermediate Microeconomics
- International Economics
- Statistics & Probability
- Intermediate Macroeconomics
- Money & Banking

Research interests:

- Economic Sanctions (M.Phil. thesis)
- EEC Effective Protection
- The Economics of Philately
- Macroeconomic Stabilisation
- Import Substitution

Career progression: Employed as a Tutorial Assistant, 1985. Promoted to Tutor, 1986; to Teaching Fellow, 1987; and to Lecturer, 1989.

Education

- 1992 Institute of Chartered Accountants in England and Wales
Professional Examination 1
- 1991 ATC Chart, Cranfield Institute of Technology
Graduate Conversion Course
- 1990 University of Buckingham
Masters of Philosophy in Development Economics Thesis examined the imposition of economic sanctions upon Rhodesia between 1965 and 1979.
- 1984 University of Buckingham
Bachelor of Science in Economics, Upper Second Class Honour Final examination results:

Money and Banking	1	International Economics	2.1
Operations Research	1	Advanced Economic Theory	2.2
Modelling and Forecasting	1	History of Economic Thought	2.2
- 1980 Harare Polytechnic, Zimbabwe
3 'A' Levels [Done in 6 months]: Accounting A, History C, Economics E.
- 1979 Vainona High School, Harare.
4 'M' Levels Mathematics, Geography, History, Art
- 1978 Vainona High School, Harare.
9 'O' Levels Mathematics, English Language, English Literature, Physics, Chemistry, History, Geography, Latin, French.

Skills

- Computing** Competent in the use of PCs for accounting, financial and economic modelling, budgeting and forecasting. Proficient with Excel, Lotus 123, MS Word, WordPerfect, PowerPoint, Hypercard, Minitab, etc. I adore computing, and am able to adapt to any software. I enjoy programming, and can produce bespoke solutions to business problems. Familiar with Macintosh and UNIX systems, as well as IBM from basic DOS through Windows ME.
In the Early 90s I gave all my lectures at S.I.C. using a laptop via an LCD OHP panel - the only person at the institution to do so. I am very keen to incorporate computing into all facets of teaching.
- Languages** French-reasonable German-basic.
- Communication** A devoted thespian and public speaker at school and university, while lecturing I address groups varying in size from 6 to 250 with clear diction, ease of delivery and few nerves. Without a strong regional English accent, Asians find my phraseology and speech easy to comprehend.
- Presentation** Artistic flair and strong skills with the presentation of PC generated documents and graphics.
- Interpersonal** Ease of communication with all people, from shopfloor to senior management. While lecturing at Buckingham, I was a "Personal Tutor" for 5 years - a role between counselor and confidante. I like people and I like communicating with them.

References:

- Dr Stephen McKenna** Academic/ Personal
Professor of Management
York University, Toronto, Canada I have known Steve for 18 years, and was his Deputy between March 2001 and April 2002.

e-mail:
 Steve.McKenna@mail.atkins.on.yorku.ca
- Sylvia Yeo** Academic/ Personal
Director – Higher Education
Singapore Inst. of Management I have known Sylvia for 18 years, and she is familiar with all my activities since being involved with the University of London.

e-mail: sylviayeo@im.edu.sg
- Rosemary Gosling** Academic/ Personal
Director – External Programme
London School of Economics
University of London I have known Rosie for 21 years, and she is familiar with all my activities since being involved with the University of London.

e-mail: r.gosling@lse.ac.uk

MICHAEL LOMAX

22 Rowes Mews, Newcastle, NE61TX, United Kingdom · +447947750763
mlomax8@gmail.com · www.linkedin.com/in/lomaxmicky

- Experienced Marketing Manager with an MSc in Mass Communication Management, and BA Hons in Advertising and Media. Highly skilled and accomplished in a range of marketing sectors including: Digital Marketing, Advertising, Brand Management, Social Media Management, Client Relationship Management, Website Development and Music Event Management.
- Incredibly ambitious and dedicated individual who embraces teamwork, but also enjoys working independently. Outstanding interpersonal and communication skills with a strong capacity to manage multiple projects at once, adhering to strict deadlines.

EXPERIENCE

JULY 2017 – PRESENT

MARKETING & COMMUNICATIONS MANAGER, PARMLEY GRAHAM LTD.

- Implemented the first successful Digital Marketing and Communications strategy adhering to key objectives and budget.
- Set and communicated various Digital Marketing KPIs, aligned with the core business goals and agreed with the key stakeholders in the company.
- Delivered numerous multi-channel campaigns, attributing to company growth of £15 million over 2 years and achieved consistent ROI.
- Successfully established Parmley Graham across key b2b social media platforms, achieving higher engagement rates and organic follower growth than all industry competitors.
- Continue to critically analyse marketing performance in order to accurately report trends and results to Regional Managers and Directors.

Additional Responsibilities:

- Lead creative and professional copy writing for b2b sector.
- Set Objectives/KPIs for marketing and sales team.
- Establish and maintain strong relationships with external manufacturers / suppliers and internal stakeholders / press and media relationships.
- Content Marketing: Management and creation across all digital platforms.
- Management of: Google Ads, PPC, SEO, Social Media Advertising
- Website development.
- Competitor Research and Analysis
- Management of large-scale exhibitions, trade shows, customer workshops
- Email marketing strategy and design.
- Co-ordinate all marketing communications with distribution partners / suppliers

SEP 2012 – JULY 2017

MARKETING & EVENTS MANAGER, APE-X MUSIC EVENTS LTD

- Established the most successful independent music events company in the North East, generating the highest recorded footfall throughout multiple venues / spaces.

- Delivered a tailored marketing plan adhering to a strict promotional budget for all music events ranging from £5000 - £50,000.
- Successfully managed and developed a loyal team of brand ambassadors / sales and events reps comprising of 150+ university / college students with high staff retention rate.
- Managed and delivered all marketing activities, including strategy analysis for digital campaigns and social media output.
- Content Marketing: Managed a team of 8 student copy writers and graphic designers.
- Operated and delivered 3 market leading weekly events & 4 larger scale monthly events on rotation throughout a 5-year period, attributing to £250,000 annual turnover.

Additional Responsibilities:

- Management and upkeep of multiple brand websites / blogs.
- Producing regular email campaigns, analysing results.
- Maintaining brand identity and developing specific tone of voice.
- Management and upkeep of multiple brand websites / blogs.
- Logistics coordinator: Responsible of booking artist travel, accommodation and pre-performance dinners.
- Liaising and coordinating briefs with national and internationally based design agencies / freelance designers
- Competitor Research and Analysis
- PR/Media coordinator for all scheduled events, to bolster specific marketing campaigns.
- Managed and negotiated with venues, suppliers and music agents within set budget.

EDUCATION AND QUALIFICATIONS

DECEMBER 2013

MASS COMMUNICATIONS MANAGEMENT (MASTERS DEGREE)

NORTHUMBRIA UNIVERSITY, NEWCASTLE UPON TYNE, UK

JULY 2012

ADVERTISING & MEDIA (BACHELORS DEGREE)

NORTHUMBRIA UNIVERSITY, NEWCASTLE UPON TYNE, UK

JULY 2009

A LEVELS – ENGLISH LANGUAGE, PSYCHOLOGY, MEDIA STUDIES, FILM STUDIES FRANKLIN SIXTH FORM COLLEGE, GRIMSBY, UK

ACTIVITIES & INTERESTS

- Sports which include football, cycling, running and golf.
- Attending and organising electronic music events / concerts.

QUALIFICATIONS

The University of York, Ph.D. Management **2009-2013**

Thesis title: **“Public Confidence Modelling: A Locally Based Approach to Police Performance Management”**

Supervisors: *Prof. Kiran Fernandes, Dr Ignazio Cabras*

Synopsis: Ensuring that local residents have confidence in the police is a critical issue for the police forces of England and Wales. Despite this, the underlying issues as to why people feel the way they do about the police are not fully understood, especially in smaller urban areas. This thesis takes a holistic approach in modelling potential factors influencing public confidence in the police of York, with the aim of adjusting operational policing policy to improve public confidence.

The University of York, BSc (Hons) 2:1. Management **2005-2008**

ACADEMIC TEACHING EXPERIENCE

Quality Leader, British University Vietnam, Hanoi **2015-present**

As the Quality Leader for British University Vietnam I provide academic leadership to ensure that the quality standards relating to assessments, marking and moderation are met by all faculty at the University, and have developed our internal systems to increase the speed and quality of assessment creation, release and marking. I recently oversaw the introduction of a compulsory English and academic skills examination for all BUV students in order to provide a benchmark piece of work when investigating cases of potential plagiarism.

My duties include:

- Overall responsibility for the assessment procedures and adherence to policy
- Working with faculty to ensure all timetables for assessments are met and that assessments are appropriate and meets partner requirements
- Management and development of the assessment/exam process
- Monitoring of attendance and discipline procedures
- Panel member for academic misconduct and extenuating circumstances decisions

Senior Lecturer in Management, British University Vietnam, Hanoi **2016-present**
Lecturer in Management, British University Vietnam, Hanoi **2013-2016**

Senior Lecturer on the Staffordshire University and University of London programmes delivered by British University Vietnam at both foundation and undergraduate levels. The modules I have delivered include:

- Introduction to Quantitative Techniques, People and Organisations, Managing Practices, Business Enterprise (*Foundation/Pre-University*)
- Operations and Supply Chain Management, Entrepreneurial Marketing (*1st year*)
- Operations Management, Asian Development, Project Management (*2nd year*)
- Management: International Comparative Perspectives, Strategic Management, Student Projects, Research Methods, Business Ethics, Applied Business Research (*3rd year*)

I consistently achieve excellent student and peer teaching evaluations which are available on request.

- Ran seminars and demonstrations, and first-marked various undergraduate and post-graduate modules: Supply Chain Management (3rd year), Business Information Systems (PG), Project and Operations Management (PG).
- Co-designed and ran the Supply Chain Management module in conjunction with the module leader. This module was the first of its kind in the School, involving industrial partners in all stages of the module delivery and assessment. The module received the highest feedback score out of any module that year.
- Mentored summer school students and co-supervised an undergraduate dissertation project.
- Nominated for the University of York Vice-Chancellor's Teaching Award (2011).

- Successfully completed the Preparing Future Academics course involving the completion of a portfolio of evidence demonstrating a commitment to enhancing learning and teaching in a higher education environment.
- The course required the production of detailed session plans, reflexive teaching logs and peer assessments in addition to compulsory workshops structured towards developing academic teaching skills.
- Compulsory workshops completed included: Structuring and Designing Sessions, Evaluation and Quality Enhancement, Effective Lecturing, Giving Feedback on Student Work and Planning Assessment Methods for Student Work.

PUBLICATIONS AND CONFERENCES ATTENDED

Publications

Perkins, M. (in press). Different communities, different approaches: Avoiding a 'one size fits all' approach to neighborhood policing strategies. In Bruns, D. (Ed.). *Global Perspective on Crime Prevention and Community Resilience*. Taylor & Francis

Perkins, M., Cotrel-Gibbons, L. (in press). The Vietnamese police response to domestic violence against women: The family unit under pressure. In Bruns, D. & Schroder, S. (Ed.). *International Perspectives on Domestic Violence*. Routledge

Perkins, M. (2016). Modelling public confidence of the police: how perceptions of the police differ between neighborhoods in a city. *Police Practice and Research: An International Journal*, 17(1) 113-125

Perkins, M., Grey, A., Remmers, H. (2014). What do we really mean by "Balanced Scorecard"? *International Journal of Productivity and Performance Management*, 63(2), 148-169

Perkins, M. (2013). Public Confidence Modelling: A Locally Based Approach to Police Performance Management. York: The University of York (Published commercial report)

Fernandes, K. and Perkins, M. (2010) Geographical Information Systems: The North Yorkshire Police GIS Strategy & Implementation Roadmap. York: The University of York. (Published commercial report)

Perkins, M. (2008) A report to Oakdale (Contracts) Ltd Regarding the Utilisation of Discrete Event Simulation and the Analytic Hierarchy Process in Aiding Storage Facility Design. York: The University of York (Published commercial report)

Conferences attended

26th International Police Executive Symposium

Pattaya, Thailand, 8th-12th August 2015

Oral Presentation: Retaining order and legitimacy: Improving policing through an understanding of public confidence factors

25th International Police Executive Symposium

Sofia, Bulgaria, 27th-31st July 2014

Oral Presentation and conference paper: *Public Confidence Modelling: A Locally Based Approach to Police Performance Management*

4th Annual PhD Criminology Conference

University of Sheffield, 29th-30th August 2012

Oral Presentation: Public Confidence in Policing: insights from a Citywide survey

RESEARCH SKILLS

- Current research interests include: public confidence in policing, Gender, and performance management systems
- Skilled in running large-scale surveys including experimental design, questionnaire development and quantitative analysis of large data sets using SPSS and AMOS.
- Considerable experience of interdisciplinary research through membership of the York Centre for Complex Systems Analysis (YCCSA); a diverse international community of researchers from different departments working together in communal research space.

ADMINISTRATIVE EXPERIENCE

- Organised a Hanoi based youth event focusing on Anti-corruption and Business Integrity in conjunction with a wide number of different organisations.
- Reviewer for the International Journal of Productivity and Performance Management (IJPPM) *and Police Practice and Research: An International Journal*
- Experienced in the recruitment and selection of both students and faculty.
- Organised several national and international doctoral conferences invited by the Institute for Small Business and Enterprise (ISBE) to co-organise the doctoral day of the ISBE 2011 (Sheffield) conference
- Assisted in guest editing for a Special Edition of the International Journal of Business Environment (IJBE, 2010 Vol. 3, No. 2).

PUBLIC ENGAGEMENT

- Experienced public speaker; regularly involved in student recruitment and marketing activities at schools throughout Hanoi and Hai Phong. This has included being interviewed on Vietnamese national news as a representative of British University Vietnam.
- Member of the Governance & Integrity working group for the Vietnam Business Forum, with responsibilities for promoting transparency and anti-corruption amongst the international business communities within Vietnam.
- Committed to producing research with impact, proven by the widespread publication of my PhD work in the UK media (University of York, York Press, The Yorker, BBC Radio York, Crime Reduction Partnership News).
- Media and Public Engagement trained.
- Past academic expert on policing issues for BBC Radio York.

ACADEMIC AWARDS AND FUNDING

- Awarded full scholarship and fee-waiver from The York Management School for PhD studies.
- North Yorkshire Police made an additional ESRC CASE styled contribution to the scholarship to focus the doctoral research towards the North Yorkshire Police (*Project Sponsor: Deputy Chief Constable Tim Madgwick*).
- Winner of the Vitae Yorkshire & North East Hub Public Engagement Competition 2012 providing me with the opportunity to present my work to the public at the Sheffield Children's Festival.
- Placed second in the University of York's "Thesis in three minutes" competition (2012)
- Honourable Mention in the York Management School Research Poster Competition (2012).

MEMBERSHIP OF PROFESSIONAL BODIES

- Associate Fellow of the Higher Education Academy
- Member of the Society for Evidence Based Policing

OTHER EXPERIENCE

College Tutor, Goodricke College /Halifax College, The University of York **2010-2012**

- Resident senior student responsible for acting as first point of contact for students with any welfare issues or concerns, as well as dealing with minor disciplinary issues and grievances within the College.
- Member of the College Welfare Team and College Council responsible both for the overall running of the college and fostering college spirit.
- Member of both the Graduate and Senior Common Room Committees with responsibility for arranging college events and widening participation of SCR and GCR members.

Consultant/Proprietor, Perkins Consulting **2008-2011**

- Independent consultant in the manufacturing and public sectors. Projects in the manufacturing sector included performing market assessments and assisting in new product development. Projects with the public sector consisted of strategic road mapping of new technologies in order to improve the efficiency of operations and bridge the gap between the different layers of the organisation.

CURRICULUM VITAE

PRABU MOHAN
A6-12,PANGSAPURI VISTA SERDANG
JALAN KASTURI, BUKIT SERDANG
SERI KEMBANGAN 43300
MALAYSIA
E-MAIL: prabuprab@gmail.com
MOBILE: 010 5040160

OBJECTIVE:

Seeking a position to utilize my skills and abilities in an institution that offers me security and professional growth while being resourceful, innovative, flexible and hard working.

PERSONAL SKILLS:

Comprehensive problem solving abilities, self motivated, excellent verbal and written communication skills, ability to deal with people diplomatically, willingness to learn, team facilitator and a good leadership quality.

EDUCATIONAL QUALIFICATION:

COURSE	INSTITUTION	YEAR OF PASSING	% OF MARKS
M. Phil. MATHEMATICS	ST. XAVIER'S COLLEGE, PALAYAMKOTTAI, INDIA	2004	73.19
M. Sc. MATHEMATICS	ST. XAVIER'S COLLEGE, PALAYAMKOTTAI, INDIA	2003	80.30
B.Sc. MATHEMATICS	ST. XAVIER'S COLLEGE, PALAYAMKOTTAI,INDIA	2001	62.43
H.Sc.	ST. XAVIER'S HR. SEC. SCHOOL, PALAYAMKOTTAI, INDIA	1998	76.6
S.S.L.C.	ST. XAVIER'S HR. SEC. SCHOOL, PALAYAMKOTTAI, INDIA	1996	88.4

TITLE OF M.PHIL. THESIS:

“CLUSTERING ANALYSIS”

EXPERIENCE:

SL. NO.	NAME OF INSTITUTION & PLACE	DURATION			DESIGNATION
		FROM	TO	YRS	
1.	SCAD COLLEGE OF ENGINEERING AND TECHNOLOGY, INDIA	08.06.2004	05.06.2005	1	LECTURER
2.	KARUNYA UNIVERSITY, COIMBATORE, INDIA	08.06.2005	31.12.2008	5 YRS	LECTURER
	KARUNYA UNIVERSITY, COIMBATORE, INDIA	01.01.2009	06.09.2010	3 MTS	ASSISTANT PROFESSOR
3	ASIA PACIFIC UCTI, BUKIT JALIL	13.09.2010	TILL DATE		LECTURER

PAPERS HANDLED:

- Engineering Mathematics I, II, III, IV
- Numerical Methods
- Probability and Queuing Theory
- Probability and Bio Statistics
- Discrete Mathematics
- Operations Research
- Statistics and Numerical Methods
- Mathematical Statistics
- Graph Theory and Optimization Techniques
- Sequences and series
- Calculus

KNOWLEDGE IN COMPUTER:

- & Dos, Windows
- & MS-Office
- & Visual Basic, Oracle
- & HTML, Java

CONFERENCES:

- Participated in the one day seminar on “Recent Trends in Mathematics” in Manonmaniam Sundaranar University, Tirunelveli on March 17, 2004.
- Participated in the “Graph Theory Day – III International conference on Recent Developments on Combinatorics and Graph Theory” in Kalasalingam University during June 10 – 14, 2007.

OTHER RESPONSIBILITIES:

- Served as a National Service Scheme Programme Officer
- Served in the University Hostel as Warden (Welfare & Discipline)
- Worked as a Department Time Table Coordinator
- Worked as Students Counselor

ABOUT ME:

Date of Birth	:	04.05.1981
Age	:	30
Sex	:	Male
Father’s Name	:	Mr. P. Mohan
Marital Status	:	Bachelor
Nationality	:	Indian
Passport Details	:	H6943565

I hereby declare that the details furnished above are true and correct to the best of my knowledge and belief.

DATE : 18.10.2011

(M.PRABU)



Red A Harchaoui

English Language teacher

I am a young English teacher with a long experience in Vietnam teaching different ages and levels, willing and ready to take the next challenge. Interested in teaching high-level students to communicate the language and the knowledge, the wisdom, and international experience.

✉ redaharchaoui@gmail.com

☎ +84 56 3570 321

📍 Ecopark, Van Giang, Vietnam

PROFESSIONAL EXPERIENCES

Director / English teacher. Bristol Language Academy Vietnam

10/2019 - Present Ecopark, Hung Yen - Vietnam

British Imported Brand of English language centers

Achievements/Tasks

- Director of Operations & Expansion Vietnam for Bristol Language Academy.
- Head & Main lecturer of the Business English Program.
- Teacher : English for Different classes and levels.
- Examiner for the Professional T.O.E.F.L.

English teacher for primary school VPBOX Vietnam

09/2020 - Present Hanoi - Vietnam

Missions / Challenges :

- implement English teaching in public schools for grades 3-5
- Develop the speaking skills and general English level
- Develop the general knowledge and assess the exams

English teacher for Primary & Secondary Flatworld Hung Yen

09/2018 - 08/2019 Van Giang - Hung Yen

Missions / Challenges :

- Implement English teaching in primary schools: Grades 4-5.
- Implement English teaching for Secondary schools.
- Responsible for educational auditing and foreign teachers assessment.

HIGHER EDUCATION

Master Degree: Finance and Management French Business School : E.N.C.G

09/2010 - 06/2016 El Jadida - Morocco // Lyon - France

Courses

- Finance, Business, Marketing Strategy
- Management
- Financial analysis and accounting

Pro-Master Degree: International Affairs University of Lyon / Business school

09/2014 - 09/2015 Lyon France

COMPETENCES

Adaptability

Patience

Team work

Active listening

Integrity

Solution oriented

Long experience

Diversified Experience

Positivity

Loyalty

Cross selling

LANGUAGE CERTIFICATES

Advanced T.E.F.L 160 hours (08/2019 - 09/2019)

Online advanced certificate in Teaching English as a Foreign language.
SCORE : 95% // 160 Hours

Advanced TCF : DALF C2 (12/2017 - 01/2018)

Advanced certificate in Teaching FRENCH LANGUAGE 97%

INTERNATIONAL EXPERIENCES

Financial Executive : REA Partnes LTD
(06/2016 - 08/2018)

- France/ Morocco/ Spain

- In charge of financial restructuring, risk management, and business development, specialized in Real Estae

Business and Science English teacher
(09/2014 - 08/2015)

- Lyon- France.

- Teaching English and Mathematics to High school students to prepare for the State exam.

ONLINE TEACHING

Bristol Language Academy (04/2021 - Present)

English classes for children and adults : Groups and 1 to 1

LANGUAGES

English



French



Spanish



INTERESTS

Motocross

History

Movies

Finance

kayaking

Reading

Adventure

Video Games

Traveling

Success

Dr Jason MacVaugh

University of Liverpool, Management School
<https://www.liverpool.ac.uk/management/staff/jason-macvaugh/>

Google Scholar profile / Citation Index scores:
<https://scholar.google.com/citations?user=6SV8V74AAAJ&hl=en>



Address: 2 York Place, Bangor, LL57 1HE, United Kingdom

Email: j.macvaugh@liverpool.ac.uk

EDUCATION

- 2009 **PhD** Knowledge Management, University of Gloucestershire
- 2007 **PGCHE** Higher Education, University of Gloucestershire
- 2003 **MSc** Human Resource Management and Industrial Relations, Brunel University
- 2000 **BSc** Business Management (Magna cum Laude) N.C. State University

EMPLOYMENT

2019 - Present: **Director of Studies** (Business Management) University of Liverpool Management School, University of Liverpool (*a Member of the elite Russell Group and holder of the 'Triple Crown' of Business School Accreditations*)

Key responsibilities: Undergraduate recruitment, selection and management for ~1000 students. Curriculum design/development. Accreditation. Coordination with local and international direct entry programmes in 1+2 and 2+2 formats. Supervision of the Academic Advising scheme. Teaching development and standards. Leading scholarly research/practice for tutors working on the degree. *This is a high profile role as Business Management is the single largest programme at the University of Liverpool*

Management: Managing year tutors, coordinating the Undergraduate Support Team, managing student representation teams, managing student experience staff, management and mentorship of new lecturers including ULTRA teacher training scheme registration and support for the FHEA recognition process

Committee work: Undergraduate Programmes Committee, Academic Quality and Standards committee, Faculty Program Board, Teaching Practice Forum, Recruitment/selection working group. National Teaching Fellowship board (and mentorship)

Outside work: External Examiner for the University of London Global MBA, Supervisor for the Stafford (Northampton) and the UWTSD DBA programmes, multiple conference and journal review boards

2017-2019: **Course Development Lead**, Norwich Business School, University of East Anglia

Key responsibilities: the redevelopment of the BSc and BA suites of Undergraduate degree courses at NBS, an expansion from 5 to 10 (including a 50% increase in planned student numbers), requiring the coordination of 5 Course Leaders, recruiting and selecting 5 further Course Leaders. Teaching observation lead, research (Innovation & Pedagogy) and employer engagement

➤ During this period Norwich Business School was awarded TEF gold, was in the top 10 in the UK on the NSS, and increased its student numbers in UG programmes by 20%

Teaching: core module delivery at UG, PG and MBA levels including Organisational Behaviour, HRM, Business Skills (Entrepreneurship), and Managing Across Cultures and International Business. Personal Advisor

Committee work: UG Program Board (member), School Board (member), University Teaching Fellows Board (member). Teaching Practice Forum (leader). *This was a senior role, working as part of the management team*

2016-2017: **Associate Head of School**, School of Marketing and Management, Coventry University

Line management: Direct line manager for 10 members of staff in the school: 7 Course Directors across both UG and PG and 3 specialists in the areas of Digital Literacy, Research Informed Teaching, and Experiential Learning. *This was senior role, working as one of six members of the management team for a school of 1800+ FT students*

➤ During this period the school achieved TEF Gold, and was Ranked in the top 10 in the UK in the NSS, including a perfect 100% NSS score (Overall Satisfaction) for the HRM degree

Teaching: Dissertation module lead, PhD / Research courses

Key responsibilities: Lead for Student Experience (NSS, TEF, PTES, AACSB & EPAS accreditation, curriculum development/innovation, course reviews) with a remit including 71 FT and 42 PT staff; recruitment/selection/induction of new staff, teaching observation lead, supervision of research/dissertations, research (Innovation & Pedagogy). Program Board (member), school induction (lead), and School Board (member)

2014-2016: **Associate Professor**, Kwansei Gakuin University, School of International Studies

Key responsibilities: Developing international student degree programs (in English), curriculum development, supervision of research/dissertations, research project administration (Kakenhi), research and publications

➤ During this period Kwansei Gakuin (and in particular our programmes in the School of International Studies) was awarded 'Super Global' Status, one of only 20 universities in Japan to win the award (and subsequent additional funding of 20,000,000 Yen from the Japanese Government)

Teaching: Basic Seminar I & 2, Basic Management, Management A & B, International Management, Research Seminar I & II, internship supervisor

Committee work: School board (member), Centre for International Education Coordination (advisor). *This was the senior role for course development among English-medium programmes*

2012-2014: **Director of Undergraduate Studies**, Hull University Business School

Matrix management: managing 9 undergraduate Program Leaders, managing the undergraduate Administrative Support Team (3). *This was a senior role, and part of the school's advisory team*

Teaching: MBA; Human Resource Management (FT and Executive including overseas in Bahrain, Hong Kong and Singapore) BA; Research Methods, Human Resource Management, Strategic Management, International Business, Organisational Change

Key responsibilities: Director of Studies (undergraduate), Learning Teaching and Assessment Coordinator, University Senate (member), under-/post-graduate program development, and National Teaching Fellowship (grant administration). Chairing the undergraduate programs committee, under-/post-graduate and executive teaching, (cross-campus) curriculum development, supervision of BA, MBA, and PhD dissertations, research and publishing

Outside work: HRM Consulting for BP (Renewable Energy Division) from December 2013-present.

2010-2012: **Assistant Professor**, Faculty of Knowledge Science, Japan Advanced Institute of Science and Technology (Ishikawa, Japan)

Key responsibilities: post-graduate teaching, supervision of MSc and PhD dissertations, research and publishing

Teaching: MSc Business Management, Knowledge Management, International Business

Committee work and funded research role: coordinator of national and international partnerships, Kakenhi and JAIST Fund (grant administration ~20,000GBP equivalent)

2006-2010: **Senior Lecturer**, University of Gloucestershire Business School (UK)

Key responsibilities: Program Leader (HRM), coordinating undergraduate Module Leaders, under-/post-graduate and professional teaching, curriculum development, supervision of BA, MBA and MSc dissertations, research and publishing

Teaching: PhD/DBA thesis supervision*, MBA/MSc (Including overseas in Vietnam); Strategic Human Resource Management, International Human Resource Management, Leadership and Development, Strategic Management CIPD; People Resourcing, Managing People, BA; Human Resource Management, International Human Resource Management, Human Resourcing, Managing Change, Organisational Behaviour, Study Skills, Public Speaking

➤ Both my teaching practice and my course development innovations (with a focus on inclusivity in higher education) undertaken during my time at Gloucestershire lead me to a National Teaching Fellowship in the following academic year

Committee work: faculty representative on the University Teaching, Learning and Assessment Committee from 2008, voted to Faculty Board in 2009, awarded Centre for

Active Learning (CeAL) Fellowship 2009-2010, awarded University Teaching Fellowship June 2010, co-lead of development and accreditation teams for new MSc in International HRM and the redevelopment of all undergraduate Business Management degree programs from 2008-2010. Placements (co-ordinator)

2004-2006: **Lecturer**, London International College of Business and Technology (UK)

Duties: part-time Undergraduate teaching

Teaching: Organisational Theory and Analysis

2003-2006: **Graduate Teaching Assistant**, Brunel University (London, UK)

Duties: part-time teaching support, seminar leading, marking

Teaching: Human Resource Management, Organisational Theory and Analysis, and Critical Perspectives on Management

2001-2002: **Operations Analyst**, Bank of America headquarters (Charlotte, USA)

Worked with central resource holders and the Diversity Team to support relationships with key external suppliers, Co-developed part of Bank of America's 'Supplier Service Automation' system

1999-2000: **Cooperative placement program**, North Carolina State University (Raleigh, USA)

Two Three-month placements, at Nortel Networks and John Deere, Supported purchasing and engineering teams by developing short reports on performance using proprietary software, Pareto analysis, and post-performance reviews

AWARDS AND ASSOCIATIONS

Awards	National Teaching Fellowship (Inclusivity in Higher Education) 2011-2014 Higher Education Academy (UK). Chartered Association of Business School's 'Leaders in Learning and Teaching' (UK)
Member	Chartered Institute of Personnel and Development (MCIPD), Higher Education Academy (FHEA), Academy of Management, British Academy of Management, European Institute for Advanced Studies in Management
Reviewer	Academy of International Business Conference, British Academy of Management Conference, European Journal of Innovation Management, Management Learning, International Journal of Sustainability in Higher Education

RESEARCH AND SCHOLARSHIP

Journal articles

- AlShwayat, D., MacVaugh, J. and Akbar, H. (2021), "A Multi-level Perspective on Trust, Collaboration and Knowledge Sharing Cultures in a Highly Formalized Organization", *Journal of Knowledge Management* (accepted for publication) (2* AJG 2018)
- Chiao, B. and MacVaugh, J. (2020), "Open Innovation and Organizational Features: An Experimental Investigation", *European Management Journal*, <https://doi.org/10.1016/j.emj.2020.12.004> (2* AJG 2018)
- Mejri, K., MacVaugh, J., and Tsagdis, D. (2018), "Knowledge configurations of small and medium-sized knowledge-intensive firms in a developing economy: A knowledge-based view of business-to-business internationalization", *Industrial Marketing Management*, Vol. 71 (May), pp. 160-170. (3* AJG 2018)
- Pritchard, C. and MacVaugh, J. (2017), "Strategic selection using person-organisation fit: evidence from stage theatre companies", *International Journal of Employment Studies*, 2017, Vol. 25, No. 2, pp. 25-42. (1* AJG 2018)
- MacVaugh, J., Jones, A. and Auty, S. (2014), "Implicit, stand-alone or integrated skills education for Undergraduates: a longitudinal analysis of program outcomes", *Journal of Further and Higher Education*, Vol. 38 No. 6, pp. 755-772. (1* AJG 2018)
- MacVaugh, J. and Evans, J. (2012), "A re-examination of flexible working in Japan", *International Journal of Human Resource Management*, Vol. 23 No. 6, pp. 1245-1258. (3* AJG 2018)
- MacVaugh, J. and Norton, M. (2011), "Introducing sustainability into business education contexts using active learning", *Higher Education Policy*, Vol. 24 No. 4, pp. 439-457. (2* AJG 2018)
- MacVaugh, J. and Schiavone, F. (2010), "Limits to the diffusion of innovation: a literature review and integrative model", *European Journal of Innovation Management*, Vol. 13 No. 2, pp. 197-221. (1* AJG 2018)
- Schiavone, F. and MacVaugh, J. (2009), 'A user based perspective on limits to the adoption of new technology', *International Journal of Technoentrepreneurship* Vol. 2 No. 2, pp. 99-114.
- Pitt, M. and MacVaugh, J. (2008), "Knowledge management for new product development", *Journal of Knowledge Management*, Vol. 12 No. 4, pp. 101-116. (2* AJG 2018)
- MacVaugh, J. and Auty, S. (2008), "Proactive Knowledge Management: An Independent Enabler of New Product Development Success?", *International Journal of Technology Intelligence and Planning*, Vol. 4 No. 3, pp. 347-363. (1* AJG 2018)
- MacVaugh, J. (2008), "Factors Affecting the Decision to Outsource Human Resource

Management: Evidence from Two Multinational PEOs." *Contemporary Management Research*, Vol. 4 No. 3.

Research grants

Limits to innovation diffusion: An empirical study in four parts* (2011-2013) My Role: project leader. External Support: Amount of program subsidy: 8,000 pounds for the pilot study (from the JAIST foundation) and 32,000 pounds for the study via Kakenhi (Japanese Ministry of Education, Culture, Sports, Science and Technology), **a total of 40,000 GBP.

*NTFS research project titled *Rethinking final year Projects and Dissertations* (2010-2012) My Role: team member. External Support: Amount of **program subsidy: 200,000 GBP** in total from the Higher Education Academy.

Redevelopment of The University of Gloucestershire Business School Curriculum* (2007-2010) My Role: team leader. External Support: Amount of **program subsidy: 20,000 GBP in total from the Centre for Active Learning.

Book chapters & other articles

Awasthi, S. and MacVaugh, J. (2012), 'Socialization and Cultural Adaptation in Subsistence Markets.' In Awasthi, S. (ed) **Handbook of Management and Behavioural Science**, Vol. III (ISBN: 978-81-89547-93-6)

'Problem Based Learning' Published (Summer 2009) in the eBook **Handbook of Sustainability Literacy** (<http://www.sustainability-literacy.org>)

Shiavone, F. and MacVaugh, J. (2012), 'Non-adoption of new technology.' In Shiavone, F. (ed), **Contemporary Perspectives on Technological Innovation, Management, Information Age** (Volume 2), 2012 (ISBN: 9781623960636)

Conference papers / Guest lectures

International & Comparative Human Resource Management

'Human Resource Management Practice in the Context of Changing Employment Law.' Presented at the *12th ISERD conference*, 2015.

Pritchard, C. and MacVaugh, J. (2011) 'Strategic selection using person-organisation fit: evidence from stage theatre companies.' **Best full paper** (HRM category) at *British Academy of Management Conference*, 2011.

Evans, J. and MacVaugh, J. (2011) 'A framework for the investigation of non-Japanese labour management in Japanese small and medium sized enterprises.' Presented at *Asian Conference on the Social Sciences*, Osaka.

Evans, J. and MacVaugh, J. (2010) 'A re-examination of flexible working in Japan.' Presented at the *25th workshop on Strategic Human Resource Management*, Barcelona, 2010.

'Factors affecting the decision to outsource Human Resource Management in

Multinational Organisations.' Presented at **22nd Workshop on Strategic Human Resource Management**, Brussels.

Chen, W. and MacVaugh, J. (2006) 'Structural Resistance and the Climate for Change in China's Free-Trade Zones: The case of GTIG.' Presented at **Conference on Organisational Change and Development in Transitional Countries**, Tallinn.

Knowledge Management

Salih, A., MacVaugh, J., and Sciavone, F. (2020) 'Technology Acceptance In A Multi-Level, Multi-Firm, Environment: An Investigation Of Hospital Construction in the Middle East' presented at **British Academy of Management Conference**, 2020.

Al Shwayat, D. and MacVaugh, J. (2018) 'A Multi-level Examination of the Relationship between Organisational Culture and Knowledge Sharing in the Banking Sector.' **SIBR Conference**, Osaka.

Tsagdis, D.; Kais, M.; MacVaugh, J.A. (2016) 'SME Internationalization Knowledge: A Developing Economy Perspective.' **Academy of Management 76th Annual Conference**, Anaheim.

Tsagdis, D.; Kais, M.; MacVaugh, J.A. (2016) 'Knowledge Cost and SME Internationalisation from a Developing Economy.' **Academy of International Business Annual Conference**, New Orleans.

Tsagdis, D.; Kais, M.; MacVaugh, J. (2014) 'SME internationalisation knowledge acquisition: A developing economy perspective.' Presented at the **Annual Tokyo Business Research Conference**, Waseda University.

'An international study of resistance to innovation diffusion: Initial findings and preparation for quantitative work.' Presented at the **Second Asia Pacific Innovation Conference**, Singapore, 2011.

'Proactive Knowledge Management: An Independent Enabler of New Product Development Success?' presented at **14th International Product Development Management Conference**, Porto, 2007.

'Knowledge Management's effect on New Product Development.' Presented at the **14th European Doctoral Seminars on Technology Management**, 2004.

Higher Education Pedagogy

MacVaugh, J. (2022) 'Student groups and cohorts, an extension of integrated skills education for undergraduates: an analysis of programme outcomes.' **ICTEL Conference**, Singapore.

Murray, J. and MacVaugh, J. (2019) 'Improving Student Satisfaction at University Using a Customer Focused Strategy.' **SIBR Conference**, Tokyo.

'Implicit, stand-alone or integrated graduate attributes for Undergraduates: an analysis of program outcomes.' Presented at the **Asian Conference on Education 2010**, Osaka.

^'Nurturing young people's environmental consciousness: lessons from the University of Gloucestershire.' Guest Lecture for the **Symposium on Green Management of Technology** (MOT), Nagano, 2010.

'Chopping off our tail: a critical examination of the development of Active Learning in Business and management education.' Presented at **Research in Education for Active Learning (REAL)** Cheltenham, 2010.

'Stand alone Generic skills or Embedded skills in modules: What does an examination of Management curricula tell us about the classic pedagogic debate?' Presented at the **International Conference on Business and Information** (Summer 2009), Kuala Lumpur.

Doctoral research student supervision

Ahmed Salih, DBA (**Awarded September 2020**) "Improving Project Management Information System Introduction Success in a Construction Context" First Supervisor (University of Liverpool, UK)

Jacqueline Murray, DBA "Improving Student Satisfaction at a Caribbean University Using a Customer Focussed Strategy" (**Awarded July 2018**) Joint supervisor (Napier University, UK)

Dana Alshwayat "Knowledge Management for Product Innovation in the Financial Service Sector." PhD (**Awarded November 2017**) First Supervisor (University of Gloucestershire, UK)

Nguyen Thu Huong "Knowledge-bridging Managers in High-Tech Partnership: A Case Study of Software Offshoring from Japan to Vietnam." PhD (**Awarded February 2012**) role: Second Supervisor (JAIST, Japan)

Kais Mejri "The Knowledge Process in Internationalization of SMEs: A Case Study of the Tunisian ICT Industry." PhD thesis (**Awarded March 2011**) role: Second Supervisor (JAIST, Japan)

REFERENCES (Please request before contact)

1. Dr Meera Sarma, Director of the Liverpool DBA, University of Liverpool, UK
Meera.Sarma@liverpool.ac.uk
2. Dr Francesco Schiavone, Professor, University Parthenope Naples, Italy
schiavone@uniparthenope.it (co-author, multiple funded projects in management research)
3. Dr Martin Jenkins, Head of Academic Development, Coventry University, UK
Martin.Jenkins@coventry.ac.uk (University wide Development Coordinator)
4. Dr Ian Pownall, Associate Professor, Lincoln University, UK ipownall@lincoln.ac.uk
(former Line Manager at the University of Hull)
5. Dr Jim Keane, Senior Lecturer, University of Gloucestershire, UK jkeane@glos.ac.uk
(former Head of Subject Group)
6. Prof Mike Norton, Visiting Professor, Tokyo Technical University, Japan
michaelnorton307@gmail.com (Mentor while working in Japan)

JOEY LAI CHONG-YEE

So 25 To 20 Phuong Tran Phu, Quan Hoang Mai, Hanoi, Vietnam
Cell: +84984258258 – lai.chongyee@gmail.com

PROFESSIONAL SUMMARY

- Have been teaching in international universities and colleges for more than 10 years.
- Highly capable to teach Financial Management, Corporate Finance, Money, Banking and Finance, Strategic Management Accounting, Managing Financial Resources and Decisions, Business Statistics and Differential Equations
- Versatile, passionate and highly committed to produce quality education

SKILLS

- Teaching/tutorial
- inquiry based learning
- student motivation
- student-centered learning
- Delivery of materials
- positive reinforcement
- Varied lesson plans
- Confidence Building
- result oriented
- computer proficient

WORK HISTORY

09/2012 to Current

Lecturer

Banking Academy of Vietnam – 12 Chua Boc St, Dong Da Dist, Hanoi, Vietnam

- Prepared lessons plan, schemes of work, tutorials, assignments, class discussions, teaching materials etc which are necessary for effective learning by the students.
- Developed, reviewed and updated all lesson plans, schemes of work, syllabus from time to time to reflect current practice.
- Graded all assignments, tests, tutorials, projects, examinations, etc. in order to evaluate students' academic performance.
- Monitored students' attendance and reporting on absenteeism
- Prepared testimonials, reference letters for students
- Provided pastoral care to students to ensure total development of the student by participating in all activities designed for that purpose.
- Conducted and invigilated examinations whenever required.
- Participated in Extra Curricular Activities or other functions.

08/2014 to Current

Part-time Lecturer

National Economics University of Vietnam – 207 Giai Phong Street, Dong Tam, Hai Ba Trung, Hanoi, Vietnam

- Lectured, tutored or instructed in accordance to the approved lesson plans and scheme of work.
- Successfully improved student participation in the classroom through integration of creative role-playing exercises.
- Prepared lessons plan, schemes of work, tutorials, assignments, class discussions, teaching materials, etc which are necessary for effective learning by the students. Assessed students learning performance and marked assignments.
- Monitored students' attendance and reporting on absenteeism.

EDUCATION

2002

Master of Financial Economics: Finance and Economics

University Putra Malaysia – Serdang, Selangor, Malaysia

2000

Bachelor of Science (Hons): Statistics

University Putra Malaysia – Serdang, Selangor, Malaysia

Recipient of Dean List

CERTIFICATIONS

Certificate in Teaching

PUBLISHED AND UNPUBLISHED PAPERS

Liew, K.S., Lim, K. P. and Lai, C.Y. (2004), "Predictability of the KLCI price movement: Evidence from the time series models", *Inti Journal*, Vol: 1 No. 4, pp239 -48

"The sustainability of budget deficit in 5 Asian Countries: A multi co-integration approach" (Master Thesis)



JOSEPH A. SCHURLEY

6 NGUYEN DU

DANANG, VIETNAM

joseph7240@gmail.com 84-12-2264-9755

QUALIFICATIONS PROFILE

A college academic with a graduate degree from Cornell University, a college Lecturer and administrator with substantial experience as educator for business, accounting, marketing and management operations.

Mr. Schurley has a 15-year career in Academia and a 14-year business career and academic accomplishments from Le Moyne College, Syracuse New York, receiving a Bachelor of Science in Labor Management and from the Cornell University School of Hotel Administration, awarded the Master's degree in Hotel Administration. While attending received a Fellowship paying all tuition.

Subsequent to business ownership and a change of life, Mr. Schurley continued his career through education in Hong Kong, Saigon and Hanoi, Vietnam and Singapore. He is now resides in Danang and employed at Pegasus International College in Danang Vietnam.

EDUCATION

Cornell University, School of Hotel Administration, Ithaca, New York

Masters Professional Studies – Hotel Management with Fellowship and Honors 1983

Le Moyne College, Syracuse, New York

Bachelor of Science, Labor Relations 1977

SUMMARY OF PROFESSIONAL EXPERIENCE

Pegasus International College, Danang, Vietnam

Vice Principal/Senior Lecturer 2014-Present

Raffles International College – Saigon, Hanoi and Singapore

Senior Lecturer/ Program Director 2007 – 2013

Penasia School of Management, Hong Kong, China SAR

Senior Lecturer 2004 – 2006

New York University, Tisch Center for Tourism, New York, USA

Senior Lecturer/Program Director 2001 - 2003

Metropolitan Hospitality Management Group - New York

Owner – Chief Executive Officer 1987-2001

Hudson Schools of Technology, New Jersey

Culinary Program Director 1983 - 1987

DETAIL CAREER EXPERIENCE

Pegasus International College, Danang, Vietnam

Vice Principal/Senior Lecturer

2014-Present

- Lecture courses for Business and Accounting.
- Direct reports, Enrollment, English, Academic and VTOS courses.
- Develop and prepare curriculum, timetables, syllabi and assessments for all programs.
- Liaise with DIDASKO Co. (Australia) provider of on-line learning resources.
- Coach Trainers regarding course delivery and classroom management.
- Facilitate positive relationships with government, accrediting agencies, and local communities.

Raffles International College - Saigon, Vietnam and Singapore

Senior Lecturer/ Program Director

2007 – 2013

- Create schedule and assign classes to all faculty,
- Contribute to the preparation of student curriculum projects, assignments, examinations etc.
- Comply with college recording and administrative requirements, including record keeping of lesson plans, assessment schedules, registers, and student details for student body of 800 students.
- Member of team for company to design and implement non-credit short courses.
- When in Vietnam, enrollment was 250, through sales and marketing increased enrollment to 800.
- Advisor to 30 students.

Penasia School of Management - 1/F, Block C, Cho Yiu Centre – Hong Kong

Senior Lecturer

2004 - 2006

The School of Management offers courses for the full & part time Diploma, seasonal courses and Professional Development. Lectured, prepared syllabi and training programs for Lecturers.

- Courses of Accounting, Business Management, Events and Conference Management.

New York University, Tisch Center for Hospitality and Tourism, New York

Senior Lecturer

2001 - 2003

During 2003 the School had 325 students enrolled in the hospitality program.

Responsible for the following courses,

- Marketing Management, Introduction to Financial Management, Entrepreneurship

Metropolitan Restaurant Group - New York City, NY

Owner, Chief Executive Officer

1987 - 2001

Designed, implemented developed concepts, menus, and recipes for **eight restaurants (8)** and **one (1) commercial** bakery in New Jersey and New York. Group averages 175 seats and \$1.7 million revenue.

Restaurants awarded “Good” to “Very Good” rating *The New York Times*. **MAN RAY**, Mr. Schurley’s French Bistro was named by **Esquire Magazine** as one of **“America’s Top Ten Restaurants of the Year”** in **1987**.

Key Results

- Managed sales level to \$17.5 million per year,
- Provided management training classes for unit level teams.
- Wrote business plans, structured funding and sourced financing.

Hudson Schools of Technology, North Bergen, New Jersey

Program Director and Culinary Instructor

1983 - 1986

Created curriculum, managed quality assurance and provided leadership for faculty and academic support positions. This also included purchasing all food, supplies, equipment and record keeping.

- Organized and developed curriculum, graduated over 225 students with industry placement of 90%, courses were Culinary Arts, I, II and Food Service Management.

AFFILIATIONS

Cornell Hotel Society, Ithaca, New York.

HONORS/AWARDS

The Cornell Quarterly, *"Alumni Profile of Joe Schurley,"* 1988

Ye Hosts Academic Society, Cornell University 1983

Cornell University, School of Hotel Administration, *Fellowship Food and Beverage Management* 1983

SVEN PFROMMER

VITA 2022

Sven Pfrommer
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VITA 1

Summary of Working Experience

Academic Appointments

December 2016 - December 2019, Singapore
Nanyang Technological University
Wee Kim Wee School of Communication and Information
Lecturer for Creativity & Advertising
Instructor for the following courses:

- Creative Strategies
- Advertising, Creativity & Copywriting
- Interactive Advertising
- Media & Marketing

July 2015 - October 2016, Manila, Philippines
Raffles Design Institute, Academic Programme Coordinator
Duties and responsibilities:

- Ensure culture of academic and creative excellence within the college.
- Oversee the academic planning and policies.
- Supervise and evaluate academic staff. Mentoring of new academic staff.
- Coordinate departmental and other academic meetings.
- Implement professional and curriculum development.
- Coordinate the departments and courses.
- Communicate with institutions of higher education and non-profits.
- Represent the College on fairs, talks and workshops

December 2012 - October 2016, Manila, Philippines
Raffles Design Institute, Manila
Lecturer and Head of the Visual Communication Department
Instructor for the following courses:

- Graphic Design and Culture
- Design Principles
- Drawing for Designers
- Creativity and Problem Solving
- Typography I & II
- Colour for Designers
- Page Layout
- Digital and Applied Illustration
- Image Processing
- Digital Photography
- Advanced Layout and Production
- Graphic Production
- Motion Design
- Identity System
- Packaging Design
- Advertising Design
- Web Design
- Design Principles
- Interactive Media Design
- Publication Design
- Portfolio Development.
- Final Project

VITA 2

Summary of Working Experience

Professional Experience

since 2012

Lecturer, Fine Art Photographer, Art Director, Visual Artist

1998-2012

Running own Branding & Advertising Agency in Berlin & Potsdam, Germany.

Founder, CEO and creative director.

The agency served more than 200 clients from Start-Ups to global Brands in:

[visual concepts / branding & packaging / advertising / corporate design & identity / digital design / visual design / motion & video design / photography / consultation / web & app design.](#)

1998

Designer for Arthesia GmbH Berlin

[Project: visual design concepts for the AUDI forum](#)

1997-1998

Art Director in London for:

The Fitch, BBC, Plus One design

1995-1997

Self-employed Berlin

Partner & Creative director at the Designstudio Pfrommer & Schulte

Accounts: Freecom Computer, Gov. Art Center Berlin, Brainbox

[Duties and responsibilities: agency creative lead, branding, corporate design, packaging, trade fair design, advertising](#)

1995

Art director at Zabriskie, advertising agency, Berlin

Accounts: SAT1, N-TV, Berliner Kurier, Darag Insurance

[Duties and responsibilities: branding, corporate design, packaging, advertising, multimedia](#)

1995

Graphic designer at: Melle & Pufe advertising agency, Berlin

Accounts: Afri Cola, Barcardi

[Duties and responsibilities: branding, corporate design, advertising, webdesign](#)

1995

Graphic designer at:

Löhlein & Schonert, advertising agency, Berlin

Accounts: Siab, Filmboard Berlin, WindSport

[Duties and responsibilities: branding, corporate design, advertising](#)

VITA 3

Summary of Working Experience

1994-95

Art director at:

Heymann & Partner, advertising agency, Berlin
accounts: Berolina, Talbot, NetCS, Biotronik, ABB

duties and responsibilities: branding, corporate design, advertising

1992-94

Student assistant and student tutor at the Hochschule HAWK Hildesheim

duties and responsibilities: instructor for video and editing

Education

1997-98

Professional Development Course / Post Graduate Studies

Photography & Printmaking

at the Royal College of Art

Scholarship by the British Council

1995

Artist in residence

Dakar, Senegal and Montpellier, Frankreich

Scholarship by the french / german institute

1994

University Degree in communication design

HAWK University of applied science in Hildesheim, Germany

1989-94

Studying communication design at

HAWK University of applied science in Hildesheim, Germany

1987-88

Italy / France, preparatory study design & art programme

1984-87

Education and degree as dental technician

1983 Berlin

Diploma secondary school

1965

Born in West-Berlin, Germany, German citizen

VITA 4

Skill Sets

Industry knowledge:

- Digital & Film Photography
- Digital Marketing
- Digital Imaging
- Digital Video
- Creative Direction
- Visual Communication
- Lecturing
- Art Direction
- Visual Design
- Communication Design
- Visual Identity
- Advertising
- Web & APP Design
- User Interface Design
- Social Media Marketing
- E-Commerce
- Branding
- Corporate Identity
- Typography
- Graphic Design
- Content Development
- Experience Design
- SEO
- Studio Art

Other Skills:

- Creative leadership
- Creative strategies
- Consulting
- Project management
- Team management
- Creative problem solving
- Design thinking
- Storytelling
- Creative thinking

Educations & teaching:

- Supervising of employee, students and trainee
- Research and development of course material
- Teaching of creative processes
- Teaching of production and software knowledge
- Hosting workshops and talks
- Curating Exhibitions
- Programme Coordinator

VITA 5

Skill Sets

Tools & Technologies

- Familiar with MAC and Windows Systems
- Adobe creative suite CC
- MS Office
- Wordpress
- Shopify
- Slack
- WOOCommerce
- Blackboard
- Adobe Advertising Cloud
- Facebook & Google AD Manager

Production process:

- Creative execution
- Picture editing and composing
- Prepress
- Offset and digital printing
- Finishing
- Studio Art
- Digital Photography workflow processes
- Photo production
- Video production
- Photo Lab
- Environmental graphics
- Packaging

Layout and design techniques:

- Drawing & Sketching
- Illustration (analog & digital)
- Layout techniques
- Painting & mixed media techniques
- Photography (analog & digital)

Language knowledge:

- German (mother tongue)
- English (fluent in written and spoken)
- French (basic knowledge in written and spoken)

VITA 6

Summary of Teaching

Teaching performance as evaluated by student feedback received average scores of 3.7 to 4.5 out of 5, depending on year, institution and course.

Mentored Students, Students' Achievements & Students' mention in the News & Media Student's Exhibitions, Special Projects

a. NTU / WKW, Singapore

- Mentoring and assist students to participate in the yearly D&AD New Blood contest <https://www.dandad.org/en/d-ad-new-blood-awards/>
- Mentoring and assist students to participate in the yearly Crowbar Award contest <https://www.crowbar.com.sg>
- For above contests students worked in teams for brands like Burger King, Amazon, Durex, Heinz, Adobe, Adidas, Bacardi and Facebook, to name only a few major brands. See some results: https://www.dropbox.com/s/lwhc2cz1kwi05z9/Portfolio_NTU.pdf?dl=0
- Individual student career and portfolio advising

b. Raffles Design College

- Organize and curate a yearly student exhibition in an art gallery in Manila.
- Mentoring students to create the visual design and communication concepts for the yearly RDI Fashion shows in Manila.
2013 Pulse: Fashion Meets Passion
https://www.preview.ph/fashion/pulse-fashion-meets-passion?reg=feed_1
2014 Desynch
https://www.preview.ph/fashion/desynch-2014-raffles-design-institute-manila-graduation-showcase?reg=feed_1
2012 Fuse
https://www.preview.ph/fashion/fuze?reg=feed_1
- Special Project
Trolls and Diwata" was a collaboration project by the NGO Streetlight (Tacloban, Leyte), the Norwegian Embassy (Manila) and Raffles Design Institute (Manila) under my supervision, mentoring students to work on this year long project.
<https://issuu.com/rdimanila/docs/trollsanddiwata>
- Individual student career and portfolio advising, evaluation of internship reports
- Other achievements
Many of my students successfully continued their studies at reputational institutions in Australia, UK and USA

VITA 7

Development of teaching materials

a. NTU / WKW, Singapore

Created all course materials from scratch for the following courses:

- CS2031 Creative Strategies (Lectures, tutorials, assessments)
- CS4029 Advertising, Creativity & Copywriting (Lectures, tutorials, assessments)
- A6348 Interactive Advertising (Lectures, assessments)
- A6322 Media & Marketing (Lectures, assessments)

Major Contributions

- 2018-19 Curriculum revision for course: CS2031 Creative Strategies

Improvements in course materials:

- 2018 Development of new sets of student materials - labs, activities, exercises, question banks, and so on.
- 2017-18 New preparation for 3 lecture courses not taught before
- 2016 Development of new sets of student materials - labs, activities, exercises, question banks, and so on.
- 2017-2019 Use of innovative technology in teaching methods

Uncommon Efforts:

- 2018 Teaching three or more different lecture courses

b. Raffles Design College, Manila

Created all course materials from scratch for the following courses:

- Graphic Design and Culture (Seminar, assessments)
- Design Principles (Seminar, assessments)
- Drawing for Designers (Seminar, assessments)
- Creativity and Problem Solving (Seminar, assessments)
- Typography I & II (Seminar, assessments)
- Colour for Designers (Seminar, assessments)
- Page Layout (Seminar, assessments)
- Digital and Applied Illustration (Seminar, assessments)
- Image Processing (Seminar, assessments)
- Digital Photography (Seminar, assessments)
- Advanced Layout and Production (Seminar, assessments)
- Graphic Production (Seminar, assessments)
- Identity System (Seminar, assessments)
- Packaging Design (Seminar, assessments)
- Advertising Design (Seminar, assessments)
- Web Design (Seminar, assessments)
- Design Principles (Seminar, assessments)
- Interactive Media Design (Seminar, assessments)
- Publication Design (Seminar, assessments)
- Portfolio Development (Seminar, assessments)
- Final Project (Seminar, assessments)

VITA 8

Development of teaching materials

Major Contributions

Improvements in course materials:

- 2012-2014 Development of new sets of student materials – labs, activities, exercises, question banks, and so on.

Uncommon Efforts:

- 2013-2016 Teaching four or more different courses
- 2015-2016 Supervising new and temporary faculty in teaching

Service and external activities

a. NTU / WKW, Singapore

- 2016-19 Participation in Alumni Events, Convocations, Outreach Programs, Recruitments.
- 2018-19 School technology investment review board member.

Workshop and Seminars

Organized

- 2019 CO-organization of an advertising symposium at Suntec, Singapore
- 2018 In collaboration with Adobe, Advertising Cloud lab workshop for graduate students
- 2017-18 Eyetracking, lab Workshop for undergraduate students

Attended

Certified Courses at NTU

- 2017 Fostering Academic Leadership among Teachers
- 2017 Teaching foundation course
- 2019 Epigeum Research Integrity Course

b. Raffles Design College, Manila

- 2012-16 Hosting of workshops and talks
- 2012-16 Representing the school on fairs, conferences and open houses
- 2012-16 Assist in student recruitments across Asia-Pacific
- 2015-16 Consultation in Internship, Study Abroad and International Learning Programs
- 2012-16 Organization of field trips and direct frequent Students art shows, on and off campus
- 2012-16 Pitch outstanding student works to the media
- 2012-16 Initiating collaborations with NGO's, Embassies, Trade and Industry
- 2014-16 Website, social media, public relations coordinator
- 2015-16 Presenter for an outreach event
- 2015-16 Official new faculty mentor

VITA 9

Research

Creative fine art practice led research covers areas of visual art, visual communication, visual culture, fine art and mixed media art ranging from photography, traditional and digital painting, art installations, public & experimental art.

Awards / Residencies / Grants

- 2021 Prix Gold, PX3, Prix de la Photographie de Paris
- 2019 Honorable Mention, International Photography Awards, Los Angeles
- 1997 Airlift Award, Berlin, Germany
- 1997 Artist in residence grant, Royal College of Art London
- 1997 Scholarship by the British Council, Berlin, Germany
- 1996 Walter Thiemann award, first price, Leipzig, Germany
- 1995 Scholarship by the German/French institute, Berlin,
- 1995 Artist in residence, scholarship in Dakar and Montpellier

Exhibitions & participation in photo & art festivals

- 2022 CICA Museum, Czong Institute for Contemporary Art, Seoul
- 2021 THE OTHER ART FAIR, Virtual Global Edition
- 2021 CAMP Gallery, New York City, Group exhibition
- 2020 CAMP Gallery, New York City, Group exhibition
- 2019 FLOW PROJECT, Bruce Lurie Gallery, Los Angeles, Group exhibition
- 2018 Ayala Museum, Artist Space, Manila, Solo exhibition
- 2018 THE DAM PROJECT - Miami, Group exhibition
- 2018 Retrospect Gallery - Byron Bay, Group exhibition
- 2018 The Other Art Fair by Saatchi Art, Sydney, Solo exhibition
- 2018 The Other Art Fair by Saatchi Art, Los Angeles, Solo exhibition
- 2016 Galeria Emergentes, Braga, Portugal, Group exhibition
- 2015 Art Toronto, Canada, Group exhibition
- 2015 International Art Fair of BOGOTÁ, Columbia, Group exhibition
- 2015 Art Lima, Peru, Group exhibition
- 2015 Affordable Art Fair, New York, USA, Group exhibition
- 2015 DiLegno Gallery, Singapore, Group exhibition
- 2015 Semperdepot Wien, Austria, Group exhibition
- 2014 Affordable Art Fair, Singapore, Group exhibition
- 2014 ART TAIPEI, Taiwan, Group exhibition
- 2014 Affordable Art Fair, London Battersea, England
- 2014 Palazzo Molin, Venice, Italy, Group exhibition
- 2014 IMM Köln, Germany, Group exhibition
- 2011 Galerie Augustin, Vienna and Mallorca, Group exhibition
- 2009 Brisky Galerie, Germany, solo exhibition
- 2009 Galerie Muschik, Germany, Group exhibition
- 2009 Art Fair Europe, Germany, Solo exhibition
- 2008 Art Fair Europe, Germany, Solo exhibition
- 2007 Tendence Fair, Frankfurt, Germany, Solo exhibition
- 2006 Tendence Fair, Frankfurt, Germany, Solo exhibition
- 2005 Wunderbild Gallery, Berlin, Germany, Solo exhibition

VITA 10

- 1998 Henry Moore Gallery, London, England, Group exhibition
- 1996 Institut für Buchkunst, Germany, Group exhibition
- 1996 HGB Leipzig, Germany, Group exhibition
- 1995 Kunstbibliothek Berlin, Germany, Group exhibition

Creative Projects & Publications

- 2021 Cyanography Limited Edition, 2x15 works in a Collectors Box, self published, Berlin
- 2020 Hongkong Limited Edition, 16 works in a Collectors Box, self published, Berlin
- 2020 Japan Limited Edition, 18 works in a Collectors Box, self published, Berlin
- 2020 Commissioned work for the AUTOGRAPH HOTEL, New York City
- 2020 Commissioned work for the HILTON HOTEL, Atlanta
- 2020 Commissioned work for an Office Space, Singapore
- 2020 Commissioned work for an Office Space, New York City
- 2019 Commissioned work for HILTON HOTEL, Chicago
- 2019 Commissioned work for COURRIER MAGAZINE
- 2019 Photo Installation Project "195 GLACIERS"
- 2019 Commissioned corporate artworks, Singapore
- 2019 Curated creative work published in Aesthetica's Magazine April / May Issue
- 2019 Curated creative work published in Aesthetica's Magazine February/March Issue
- 2019 Curated creative work published in VOGUE UK January 2019 issue
- 2018 Curated creative work published in VOGUE UK November & December 2018 issue
- 2018 Curated work published in Saatchi Art Catalog 2018
- 2017 Curated work published in Saatchi Art Catalog 2017
- 2017 Curated creative work selected for Stage Design in Portugal
- 2017 Curated creative work selected for "The Frame" by SAMSUNG
- 2017 Curated creative works selected for a Fashion Collection by Art A Porter
- 2016 Commission art works for MEIN SCHIFF 5, TUI Cruise
- 2016 Commission art works for LeGaleriste, Montreal, Canada
- 2016 Commission art works for NEWPORT, Winston-Salem, North Carolina, USA
- 2016 Commission art works for Hotel in Fort Lauderdale, USA
- 2016 Commission art works for Hotel in New York, USA
- 2016 Commission art works for Pret-A-Porter, Montreal, Canada
- 2016 Curated creative work published in Saatchi Art Catalog 2016
- 2015 Commission art works for Hilton Hotel, New York
- 2015 Commission art works for FEDRIGONI PAPER, Manila
- 2015 Commission art work for SOTHEBY'S, Vienna, Austria
- 2015 Curated creative works published in LUMAS Art Catalog, Berlin, Germany
- 2013 Commission art works for carpet edition, Vienna, Austria
- 2009 Commission art work for Mercedes, Stuttgart, Germany
- 2008 Commission art work for Winter hotels, Berlin, Germany
- 2008 Commission art works for a medical clinic, Frankfurt, Germany
- 2006 Art Edition catalog "Berlin goes Pop", self published, Berlin
- 2005 Art Edition catalog "New York goes Pop", self published, Berlin
- 2003 Art Edition catalog "Mallorca", self published, Berlin
- 1995 Commissioned creative works for the feature film "Zuckerstücke"
- 1995 Stagedesign IFAD Institut Montpellier
- 1995 Etching Art Edition "Rebirth", self published, Berlin
- 1994 Book Etching Art "Die Ästhetik des Verschwindens", self published, Berlin

VITA 11

Reviews, Contributions, Interviews, Media Citations and Reports in Newspapers and Magazines. They are mostly collected from online reviews and press and media that had covered my creative works.

2022 Media Coverage, Reviews, Reports, Citations

My work URBAN BLUR VI has been featured in the "Best of January Collection" by Artfinder, London <https://bit.ly/37CxYXL>

My work SAIGON BLUR XCIV has been featured in a collection by Rise Art, London <https://bit.ly/37wB4fV>

My work has been selected by curator Monty Preston and is featured in the "NFT van Gogh" Collection by SAATCHI ART, Los Angeles <https://www.saatchiart.com/nft/artists>

My work has been featured in "The art of celebration" Collection by Artsper, Paris <https://bit.ly/3GWQwia>

My work has been featured in the "Very Peri Collection" by Artfinder, London <https://bit.ly/33JOCmT>

My work has been featured in "The Rush of the City" Collection by Artsper, Paris <https://bit.ly/3rHw5Qb>

2021 Media Coverage, Reviews, Reports, Citations

My works have been featured in the 2021 November/December issue of Aesthetica Magazine <https://bit.ly/3dkw11Z>

My work has been selected by curator Toni Hodges and is featured in the "Master Artist List" by SAATCHI ART, Los Angeles <https://bit.ly/3lBtMvy>

My work has been selected by curator Toni Hodges and is featured in the "Monochromatic hues" Collection by SAATCHI ART, Los Angeles <https://bit.ly/3oqwVAh>

My work has been selected by curator Helen Buckley for the "Trends 2022" collection on Artfinder, London <https://bit.ly/3xVnXhu>

My work has been featured in the "Coastal 2021" Collection by McGaw, Canada <https://bit.ly/3IvDngE>

My work has been featured in the "Singapore Art" Collection, The Artling, Singapore <https://bit.ly/3DqevE2>

My work has been featured in the "Abstract Art" Collection, The Artling, Singapore <https://bit.ly/3G7kf7s>

VITA 12

My work has been selected by curator Monty Preston and is featured in the current SAATCHI ART “Industrial” Collection, Los Angeles <https://bit.ly/3Dxk6Zq>

My work has been selected by curator Connie Kim and is featured in the current SAATCHI ART “More is More” Collection, Los Angeles <https://bit.ly/2ZUspR2>

My work has been selected by curator Helen Buckley for the David Hockney collection on Artfinder, London <https://bit.ly/3ooVU6U>

My work has been selected by curator Bethany Fisher and is featured in the current SAATCHI ART “TRAVEL MEMENTOS” Collection, Los Angeles <https://bit.ly/3lBB16P>

My work has been selected for a photography auction with Singulart, Paris <https://bit.ly/3pt9Yvz>

My work has been selected for a photography auction with Singulart, Paris <https://bit.ly/31nCqqT>

My work has been selected by curator Helen Buckley for a collection on Artfinder, London <https://bit.ly/3rEOKWy>

My work has been featured in the Purple Art Collection, The Artling, Singapore <https://bit.ly/3xVldzC>

My work has been featured in the Marvellous Marble Collection, The Artling, Singapore <https://bit.ly/31ALmsk>

Two of my works have been featured in the Hong Kong Art Collection at the Artling, Singapore <https://bit.ly/31w7PXQ>

My work has been featured in the City Lights Collection, The Artling, Singapore <https://bit.ly/3ErcLfd>

2020 Media Coverage, Reviews, Reports, Citations

Three of my works have been featured in: Celebrating German Artists Collection at the Artling, Singapore <https://bit.ly/3ryUEAh>

My work has been featured in the Tatler Homes Singapore November 2020 Issue <https://bit.ly/3pwuKdG>

My work has been featured in: Art for Office Hallways Collection, The Artling, Singapore <https://bit.ly/3dkgcbF>

Three of my works have been featured in: New York Art Collection at the Artling, Singapore <https://bit.ly/3xWBh1F>

VITA 13

My work has been featured in: The Shape of It: Figurative Art, The Artling, Singapore
<https://bit.ly/3IIAaAO>

My work has been featured in: Travel Art Collection, The Artling, Singapore
<https://bit.ly/3GcZQ0P>

My work HONG KONG ARCH III has been selected by curator Rebecca Wilson and is featured in the current SAATCHI ART "NEW" Collection <https://bit.ly/3GfALIN>

My work selected by curator Rebecca Wilson and is featured in the current SAATCHI ART "NEW" Collection <https://bit.ly/3on7EqI>

Inspired by Music, The Artling, Singapore <https://bit.ly/3Dr7UsT>

My work featured in the current "NEW IN SEPTEMBER" Collection on Artfinder
<https://bit.ly/3dmaWUY>

My work featured in the current "BEST IN JUNE" Collection on Artfinder
<https://bit.ly/3Gk68vJ>

My work selected by curator Rebecca Wilson and is featured in the current SAATCHI ART "NEW" Collection <https://bit.ly/3orN3Sg>

My work has been featured in the "A Taste of Japan" Collection, The Artling, Singapore
<https://bit.ly/3xWBw03>

My work has been featured in the "Photographers to Watch" Collection, The Artling, Singapore
<https://bit.ly/3xXpyDv>

My work has been featured in the "Satisfy Your Wanderlust" Collection, The Artling, Singapore
<https://bit.ly/3rERb38>

My work has been featured in the "Art for the Workplace" Collection, The Artling, Singapore
<https://bit.ly/3dp7cSm>

2019 Media Coverage, Reviews, Reports, Citations

Featured at "Meet The Creators" this month on the CANVAS Blog by Saatchi Art
<https://bit.ly/3diZb1v>

My work has been featured in "EMERGING ART NOW" collection, curated by Rafaela Garga, ShairArt Gallery, Braga, Portugal <https://bit.ly/3fRy2Us>

EXHIBITION IN LOS ANGELES AT THE LURIE GALLERY <https://bit.ly/3DqFexx>

My works featured in French publisher COURRIER INTERNATIONAL MAGAZINE
<https://bit.ly/3IDGI45>

VITA 14

My work has been selected by curator Rebecca Wilson and is featured in the current SAATCHI ART “NEW” Collection <https://bit.ly/3Ge12Rw>

MANILA WORKER has been awarded a Honorable Mention in the 2019 International Photography Awards. The entry competed in the “Fine Art Portrait” category. <https://bit.ly/3Gk6D95>

My work selected by curator Rebecca Wilson and is featured in the current SAATCHI ART “NEW” Collection <https://bit.ly/3dk4dL2>

My work selected by curator Monty Preston and is featured in the current SAATCHI ART “The Big Picture” Collection <https://bit.ly/332XvHx>

My work HUMAN VISION I has been featured in the ARTSPACE “Make a Statement” collection

My work has been selected by curator Rebecca Wilson and is featured in the current SAATCHI ART Paris collection <https://bit.ly/3ErgF7P>

My works have been featured in the 2019 February/March/April & May issues of Aesthetica Magazine <https://aestheticamagazine.com/issue/86/>

My works have been featured in the 2019 February/March issue of Aesthetica Magazine <https://aestheticamagazine.com/issue/87/>

My works have been featured in the 2019 April/May issue of Aesthetica Magazine <https://aestheticamagazine.com/issue/88/>

2018 Media Coverage, Reviews, Reports, Citations

My work has been featured in the VOGUE MAGAZINE UK November & December issue

My work has been selected by curator Rebecca Wilson and is featured in the New This Week Selection at SAATCHI ART <https://bit.ly/3EuRKjM>

My work has been selected by curator Rebecca Wilson and is featured in the New This Week Selection at SAATCHI ART <https://bit.ly/3Im9mAz>

The Fractured Gaze The Contemporary Art Modern Project <https://bit.ly/3IpDTNK>

Top Photographers: meet 5 photographers who have proven to be popular favorites throughout 2018 <https://bit.ly/3IAI1ki>

Indistinct Exhibition coverage MNLgo <https://bit.ly/3dkh2oP>

Indistinct Exhibition coverage, All Events in City <https://bit.ly/3rDthoM>

Indistinct Exhibition coverage, Mynila <https://bit.ly/332GGwk>

VITA 15

Indistinct Exhibition coverage, The Philippine Star <https://bit.ly/3oocLqr>

Indistinct Exhibition coverage, Philippine Primer <https://bit.ly/2ZUtEzG>

Indistinct Exhibition coverage, Philippine Primer <https://bit.ly/3lEBncP>

Indistinct Exhibition coverage, Businessworld <https://bit.ly/3rCe6fj>

Indistinct Exhibition coverage, Daily Tribune <https://bit.ly/3Emetyh>

Indistinct Exhibition coverage, PinoyKawayan <https://bit.ly/3lEA9OV>

Indistinct Exhibition coverage, Malaya Business Insight <https://bit.ly/3opuDkZ>

Indistinct Exhibition coverage, Spot.ph <https://bit.ly/2ZUuA78>

Indistinct Exhibition coverage, Internations <https://bit.ly/3GfSCsL>

Indistinct Exhibition coverage, Philippine Daily Inquirer <https://bit.ly/3EvRpNC>

Indistinct Exhibition coverage, The Philippine Star <https://bit.ly/3lyhALZ>

WKW Alumni Magazine <https://bit.ly/3DqHR5f>

Chasing movements across Asia: German artist Sven Pfrommer in Manila – in conversation <https://bit.ly/3dniCGm>

My work OCEAN ELEVEN VII has been selected for the printed Saatchi Art Catalog 2018. <https://bit.ly/31vC6Gv>

2017 Media Coverage, Reviews, Reports, Citations

My work Human Touch I has been selected for the printed Saatchi Art Catalog Fall 2017. <https://bit.ly/3IouHte>

My work has been selected by curator Katherine Henning and is featured in the Hot Shots: New Photography collection at SAATCHI ART <https://bit.ly/3doGWYh>

My work has been selected by curator Rebecca Wilson and is featured in the current SAATCHI ART collection <https://bit.ly/3ImKWag>

My work has been selected by curator Rebecca Wilson and is featured in the current SAATCHI ART collection <https://bit.ly/3xVufxC>

My work have been selected for a new SAMSUNG television product named “The Frame”. curated by Elise Van Middeltem. <http://www.samsung.com/de/tvs/theframe/artstore>

VITA 16

My work has been selected to be part of the printed LUMAS ART MAGAZINE
<https://bit.ly/3Ge2Ud0>

My work has been selected by curator Lauren Lanster and is featured in the recently published catalog. <https://bit.ly/3ont478>

My work HUMAN ORDER V has been selected by curator Evangelyn Delacare and is featured in the current SAATCHI “Art for Your Office Lobby” collection <https://bit.ly/3ophJTZ>

2016 Media Coverage, Reviews, Reports, Citations

MY WORK FEATURED IN CROSS CONNECT MAGAZINE <https://bit.ly/3lBhgfK>

My work been selected by Curator Hayley Miner for the SAATCHI “New Photography” collection
<https://bit.ly/3EqYDSR>

My work NY GLAM XV has been selected by curator Katherine Henning and is featured in the current SAATCHI “Inspired by Fashion” collection. <https://bit.ly/3pmuiic>

My work NY WAY II has been selected by curator Rebecca Wilson and is featured in the current SAATCHI “New this week” collection. <https://bit.ly/3G7k8ZA>

My work Human Exposure V has been featured in this recently published catalog. See the Saatchi Art Catalog spring 2016 <https://bit.ly/33303W7>

2015 Media Coverage, Reviews, Reports, Citations

My work HUMAN SENSOR IX has been selected by curator Katherine Henning and has been featured in the SAATCHI “Statement Art” collection <https://bit.ly/3Dt5CJT>

My work NEW YORK COLOR I has been selected by curator Jessica McQueen and featured in the SAATCHI “Gifts for World Travelers” collection. <https://bit.ly/3xWOMDH>

My work DUBAI FRAGMENTS VII has been selected by curator Lauren Lanster and featured in the SAATCHI “Architecturally Round” collection. <https://bit.ly/3oqSa4W>

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I am a hotelier with more than 10 years' experiences around the world as well as 7 years of teaching hotel management in international universities.



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Education

2022 - Onward	Doctorate in Business Administration (DBA), <i>UBIS Geneva, Geneva, Switzerland</i>
2020	MBA in Hospitality and Tourism Management <i>FIU – Florida International University, Florida, USA</i>
2020	Leadership Certificate in Hospitality Management <i>AHLEI – USA</i>
2014	TESOL TEFL Certificate <i>TEFL INTERNATIONAL, Compass Education Campus, Ho Chi Minh City, Vietnam</i>
2014	Certificate in Culinary Arts & Kitchen Management <i>ISCHAM, Manila, Philippines</i>
2011	Bachelor Degree of Art in Hospitality Management and Event Management <i>Glion Institute of Higher Education, Bulle, Switzerland</i>

Work Experience

2020 - 2022	Associate Lecturer in Hospitality and Tourism Management, <i>R.M.I.T. Vietnam, HCMC, Viet Nam</i>
2020	Visiting Lecturer in Hospitality Tourism & Business Management <i>UEF, University of Economics and Finance, TPHCM, Viet Nam</i>
2015 - 2018	Associate Lecturer in Hospitality & Tourism Management <i>PSB College, International Singaporean University</i>
2015 - 2018	Associate Lecturer in Hospitality & Tourism Management <i>Nguyen Tat Thanh University, Vietnam</i>
2015 - 2017	F&B Consultant, Acting Operation Manager <i>Anh Tukk, Hoa Tuc Group, HCMC, Vietnam</i>
2014	Food & Beverage Manager <i>The Grand Ho Tram – Former MGM, Ba Ria, Vung Tau, Vietnam</i>
2012 - 2013	Assistant Group Food & Beverage Manager <i>The Reverie, WMC Group, HCMC, Vietnam</i>
2011 – 2012	Assistant Food & Beverage Manager <i>Saigon Gourmet Group, Pre opening team – HCMC, Vietnam</i>
2010 – 2011	Restaurant Manager <i>Le Gruyeren, Bulle, Switzerland</i>
2010	Controller Reciever (internship) <i>Park Hyatt, HCMC, Vietnam</i>
2008	Maitre d'Hotel (internship) <i>G.I.H.E., Montreux, Switzerland</i>
2007 - 2008	Assistant Event & Restaurant Manager <i>Heywood Mount Hotel, Tenby, Wales, Uk</i>

SKILLS

Food & Beverage Management

● ● ● ● ●

Customer Service

● ● ● ● ●

Event Planning

● ● ● ● ○

Menu Development

● ● ● ● ●

F&B Operational Training

● ● ● ● ●

Teaching

● ● ● ● ●

Course Development

● ● ● ● ●

I.T. SKILLS

Office ● ● ● ● ●

Amadeus ● ● ● ○ ○

Opera ● ● ● ● ○

Languages

French: Fluent

English: Fluent

German: Intermediary

Vietnamese: Notion

DETAILED ACADEMIC EXPERIENCE 2015 - Onward

Associate Lecturer in Hospitality & Tourism Management

RMIT University Vietnam, TPHCM, Viet NAM

- Service Quality Management
- Food and Beverage Management
- Rooms Division Management
- Facilities Management
- Tourism Destination Planning
- Eco Tourism and Sustainability Practices

Visiting Lecturer in in Hospitality Tourism & Business Management

UEF, University of Economics and Finance, TPHCM, Viet NAM

Developed and taught courses related to business management:

- Principle of Management

Associate Lecturer in Hospitality & Tourism Management

PSB College, International Singaporean University

Developed and taught courses related to hospitality, Tourism and Event Management:

- Principles of Hospitality
- Rooms Division Management
- Food and Beverage Management
- Destination Management
- Sustainability in Hospitality
- Event Management
- Housekeeping Management
- IT Management in the Hospitality industry
- Customer Service and Total Quality Management
- Integrated Resort Management

Associate Lecturer in Hospitality & Tourism Management

Nguyen Tat Thanh University, Vietnam

Developed and taught courses related to hospitality, Tourism and Event Management:

- Rooms Division Management
- Food and Beverage Management
- Event Management
- Housekeeping Management
- Principles of Hospitality

April 2015 to September 2017



ANH TURK

MODERN THAI CUISINE

Position

F&B Consultant / Acting Director of Operations

Key Responsibilities

- Creating and implementing SOP, Training Manual related to Service and Production procedure
- Developed and Implemented HACCP standard mostly related to Kitchen Management and Hygiene
- Daily training with staff on operational procedure
- Daily training with manager on FB management and Leadership skills
- Developed and implemented Marketing Promotional Plan, Training plan, Event plan, Upselling plan
- Created and implemented FB Data Statistics
- Created tool for service recovery and trained the staff accordingly
- Implemented KPI

Key achievements

- Successfully developed data analytic system which allowed the restaurant to change their product according to the right segment market
- Achieved to reduce Food cost from 40-45% to under 33%
- Achieved to develop the MICE segment with an augmentation of 38% in 4 months and 63% in 6 months
- Achieved to reduce employer turnover by 40%
- Succeeded to bring the table turnover from 0.3 to 1.2 over 6 months



Position

Food and Beverage Manager – The Grand Ho Tram Strip Resort Casino, Former MGM, Vietnam

Key Responsibilities

- Managed and in charge of 4 outlets including French Fine Dining, Night Club, Coffee Shop, Sushi Bar
- Developed Training Plan and training workshop
- Focusing mostly on generating revenue from low occupancy period (Mon. to Thur.)
- P&L Monthly Analysis with monthly report to FB Director / GM Manager
- Developed the promotional aspect of FB for the Hotel through promotions, packages, product launches
- In charge of supervising banqueting department during VIP Event
- Guest Survey analysis with action plan to maintain consistency and service quality
- Intensive training in Complaint Management and Service Recovery

Key achievements

- Brought in 5 months the night club revenue to (-12.000)usd to +10.000usd / months
- Maintained guest satisfaction and service quality/consistency with 60% reduction of staff
- Developed full yearly training plan with SOPs and Training Manual
- Reduced to staff turnover from 1.7 a month to 0.3 a month
- Successfully rebranded and re-concept the French Fine Dining into a Continental BBQ restaurant

February 2012 – March 2013



Position

Group Assistant Food and Beverage Manager – Pre Opening Team of The Reverie

Key Responsibilities

- In charge of pre-opening team FB department for the Reverie Hotel (LHW)
- Acting F&B Manager for their other properties including Windsor Plaza Hotel (5 stars), Sherwood & Mayfair Residence (2 upscale resident type hotel apartment) as well as 2 restaurants in Saigon.
- Developing the FB Department
- FF&E List creating, SOPs, Service Flow
- Architectural plan review and modification according to business need
- Draw and designed the Italian Restaurant Bar
- Training Plan and all its content
- Focusing on purchasing and stock rotation for Windsor hotel
- Re-developed and successfully implemented new menu and new service for Sherwood Residence
- Closely working with the GM on Customer retention through customer database analysis as well as customer surveys

Key achievements

- Successfully implemented FB Training for a pre-opening hotel for all the department
- Readjustment of the par stock and the stock rotation for Windsor hotel resulting in a reduction of waste management of 14%
- Implemented new cocktails lists and its promotional plans
- Successfully brought the fine dining from 0.4 seat turnover/night to 0.87 in 4 months.

September 2011 to February 2012



Position

Food and Beverage Assistant Manager - EON 51-52 (Former Stratto Alto Cirrus) Gourmet Group, Saigon Catering Company, Ho Chi Minh City, Vietnam

Key Responsibilities

- Pre-opening team of 3 outlets in the Bitexco Financial Tower
- FF&E List Creation
- In charge of 2 of their other outlet (1 continental restaurant and 1 food court restaurant)
- Developed training as well as SOP's
- Mostly focusing on staff training , staff retention, customer service, promotional plan
- Controlling monthly beverage cost and food cost
- Architectural plan review and modification that follows
- Daily work with the executive Chef for implementing new ideas concepts and promotions
- Budgeting staff and stock
- Mostly on the floor during operational hours and building up networking according to owner request to create a VIP and a MICE segment

Key achievements

- Successfully opened 3 outlets in the same time
- Creation of partnership with tour and travel agencies building up the MICE segment and attaining a 30% revenue market share resulting in a monthly +15% profit average.
- Closely worked with wine supplier and created wine list as well as wine cellar design

July 2007 to June 2008



Position

Event / Restaurant Assistant Manager – Heywoodmount Hotel & Spa, Tenby, UK

Key Responsibilities

- In charge of Breakfast, lunch and dinner service
- Acting Restaurant Manager
- Developed a staff training on how to be more efficient in Wedding services
- Maintaining the consistency of the service while working with more than 60% CL
- Setting up the outlets
- Preparing food according to the guest request (several moment in the kitchen as a “chef”)
- Daily Weekly and monthly report to General Manager
- Closely work with housekeeping to understand restaurant procedure cleaning

Key achievements

- Built from A to Z a wedding of 2 days for more than 500 peoples Successfully brought the restaurant from 1 rosette to 3 rosette (equivalent of Michelin stars in UK)
- including closely work with surrounding other hotels.
- Restructured the Stewarding area as well as its procedure and its equipment (chemical products...)

An Empirical Analysis of Export-Led Growth of Vietnam: Trade in Value Added (TiVA) Approach

Nguyen Viet Khoi¹, Shashi Kant Chaudhary²

Abstract

This paper examines the long-run relationship between domestic value added exports and economic growth of Vietnam using ARDL bounds test of cointegration on annual data covering the period of 1995-2014. The bounds test establishes existence of both short-run and long-run relationship between exports and GDP of Vietnam and shows a substantial contribution of exports in the real GDP (0.73 percent for one percent changes in the domestic value added exports). The exports pattern of Vietnam portrays it following the footsteps of export-led growth model of Mexico, whereby it has turned itself into export production platforms for MNCs by suppressing the wages, rather than developing own indigenous industrial capacity. In such scenario, it seems challenging for Vietnam to sustain its export-led growth which it has achieved so far based on its cheap labour. With the rising living standards, ultimately the comparative advantages of cheap labour force would vanish in the future, which will cause a wave of assembly jobs to flow out of Vietnam. Moreover, two other low-cost countries in the region, Cambodia and Myanmar are likely to rise as close competitors of Vietnam in the low cost assembly works in the near future. By that time, in case Vietnam fails to enter into higher value added activities, it will drag itself into the 'middle income trap'. Therefore, the 'assembly strategy' shall be bonded with strategy to develop own indigenous industrial capacity, and national technological base. These will help Vietnam to upgrade its activities along value chains in forms of product upgrading, process upgrading, functional upgrading, and sectoral upgrading so that it can switch its role of 'assembling agent' to 'indigenous producer'.

Keywords: ARDL, Breakpoint Unit Root, Exports-led Growth, Value Added Export, Vietnam

1. Introduction

Export-led growth is a 'development strategy' that postulates that export expansion is a key factor for the economic growth of a nation. In theory, the expansion of exports can spur economic growth through several channels viz. (i) allocation of resources to the competitive sectors that results into increase in efficiency of the economy, (ii) generating employment opportunities to the unskilled labourers and improve equality, and (iii) greater inflows of FDI and technology transfers to the economy. The history of development of Germany and Japan in 1950s and 1960s; Mexico in 1970s; Asian Four Tigers (South Korea, Hong Kong, Taiwan,

and Singapore), in 1980s adopting export-led growth strategies is remarkable. There are a lot of empirical works done that support the export-led economic growth hypothesis, some of these significant works are Krueger (1978), Chenery (1979), Tyler (1981), Kavoussi (1984), Balassa (1985), Chow (1987), Fosu (1990), Salvatore and Hatcher (1991) etc. In contrary to it, there are some other empirical works viz. Jung and Marshall (1985), Kwan and Cotsomitis (1990), Ahmad and Kwan (1991), Dodaro (1993), Oxley (1993), Yaghmaian (1994), and Ahmad and Harnhirum (1995) that did not find much support to the export-led economic growth hypothesis. Thus, the stories of economic success based on export-

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led strategies are limited to only a handful European and East Asian economies and hence lacks a general consensus. Nonetheless, aforementioned economies were successfully capable of maintaining sustained rapid growth until 1997, however only China has continued forging ahead at near double-digit rates since 2000, while all others have slowed down.

In the end of 1980s, Vietnam also adopted some comprehensive and radical economic reforms in sectors including foreign trade and foreign investment, to overhaul the economy in a way to adopt the export-led growth strategy. As a result, the period of first half of 1990s became the turning point in the history of 'Modern Vietnam'. During this period, Vietnam achieved remarkable economic growth, on average 8.2 percent because of these comprehensive and radical economic reforms. Apart from these reforms, some trade related developments also took place in order to open the economy, for instance, Vietnam signed trade agreement with EU in 1992; established its full diplomatic relationship with the US in 1995; and joined ASEAN in 1995. These developments would turn into milestones in the later period while talking about the 'success story' of Vietnam.

Vietnam started to realize the outcomes of these reforms and trade developments instantly. For instance, the Vietnamese economy boomed to 9.3 percent in 1996, and on an average of 7 percent over 1996-2000, despite occurrence of 'Asian Financial Crisis' in the ASEAN region during which also Vietnam stood strong with fair economic growth of about 6 percent. Along with strong economic growth, Vietnam achieved remarkable progress in socio-economic indicators as well, for example life expectancy increased from 70.5 years in 1990 to 73.3 years in 2000; GDP per capita increased to US\$ 434 in 2000 from US\$ 98 in 1990; poverty rate reduced from 60 percent in 1990 to 38.78 percent in 2002. Such significant progress in those socio-economic indicators was also reflected in improvement of the country's position in HDI values from 0.477 in 1990 to 0.576 in 2000 (UNDP, 2016). Now it is almost 30 years since the adoption of those comprehensive and radical economic reforms, the

story of economic success has not stopped yet. Vietnam still stands stronger in terms of economic growth and progress in socio-economic indicators, as reflected by its quick jump from a category of 'poor country' to 'lower middle-income country' by 2011.

In recent time, a significant number of empirical studies are available on identifying the growth drivers of Vietnam's spectacular growth. These studies, in specific identify different factors as important growth drivers so far, for instance, cheap labour force, foreign direct investment (FDI), shift of labour force from agriculture to non-agriculture sectors increasing the labour productivity, strong intra-regional exports, policy reforms etc. However, in this paper we would analyse the contribution of exports to the economic growth of Vietnam from the perspective of domestic value added exports indicated by symbol 'DVA_EXGR' in this paper. The rest of this paper is organized as follows: section II discusses the early initiatives taken by Vietnam to enhance foreign investments and trade, which is followed by methodological framework in section III. Section III discusses the research methods, procedures and techniques used in data analysis in details. Section IV presents the empirical findings, which is followed by concluding remarks and policy discussions in section V.

2 . Early Initiatives and the Achievements

After unification of North and South Vietnam in 1975, the country was ruled under principle of centrally planned economy until 1986. But the centrally planned principle did not seem to work well for the nation. The second and third five years plan (1976-1980 & 1981-1986) failed to achieve their targets in terms of high economic growth rates, industrial production, agricultural production etc. due to bottlenecks such as low productivity, technological and managerial shortfalls that were present in the economy. Its foreign trade remained limited and was heavily dependent on the Soviet Union and its allies (as it was a member of 'Comecon'). In the first ten years, the average GDP growth rate remained strong (about 6 percent, most likely due to base year effect), but also remained quite volatile. The GDP growth rate

was recorded even negative in year 1980. Likewise, the exports growth rate remained about 16 percent per year on average, but it also remained highly volatile. In the initial 9 years, 4 years' growth rate was recorded negative. During this period, the average share of exports in GDP remained about 15 percent.

In order to overhaul the economy, a renovation framework popularly known as 'Doi Moi' was launched in 1986. This renovation framework laid foundation of many policy reforms which resulted into transformation of Vietnamese economy from centrally planned to 'socialist-oriented market economy'. The country promulgated 'Foreign Investment' law in 1987 which underwent several amendments later on to attract FDI in Vietnam. The FDI together with growth of local businesses was expected to play central role in boosting the exports of the country. However, the dissolution of Soviet-Union bloc in 1991 pushed foreign trade sector of Vietnam into trouble causing sharp fall in its exports. According to GSO (2006), Vietnam used to share about 57 percent of its total exports value with the 'Eastern Europe' alone before the dissolution of Soviet-Union bloc (1986-1990), which nosedived after 1991. Surprisingly, the GDP growth still remained 6 percent in 1991. Nonetheless, this troublous experience pushed the nation to diversify its trading partners in order to access new markets in the next few years. Some notable developments towards enhancing the foreign trade are: (i) trade agreement with the European Union in 1992, (ii) re-establishment of its relation with the US in 1995, (iii) effort to access WTO in 1995; full member of WTO in 2007; (iv) membership of ASEAN in 1995 and APEC in 1998; and (v) foreign trade relationship with 100 countries by 1995 (only 43 by 1986); 192 countries by 2000; and more than 200 economies by 2006 (GSO, 2006). Later as a member of ASEAN, Vietnam also joined other important free trade agreements (FTA) viz. ASEAN-China FTA (2002), ASEAN-Japan Comprehensive Economic Partnership (2003) and ASEAN-South Korea FTA (2005). Government of Vietnam also initiated to get into deeper international integration by signing new generation of deep preferential trade agreements (PTAs) with major

country or regional trading partners such as Japan, Korea, EU and CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership).

This is the outcome of all those cumulative progress that Vietnam stood with a domestic value added exports value of US\$ 94 billion in 2014, which is 17 times larger than the exports value in 1995. During this period, GDP increased from US\$ 20.7 billion in 1995 to US\$ 186.2 billion in 2014. Thus, in 2014, the share of domestic value added exports remained 50.5 percent. This achievement of Vietnam was attained in a short span of time which is remarkable. The trends of GDP and exports series and the respective growth rates are presented in figure 1.

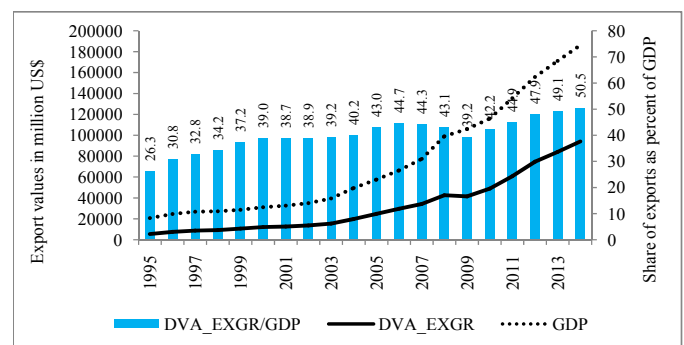


Figure 1a: Trends of Export and GDP, and their Proportion

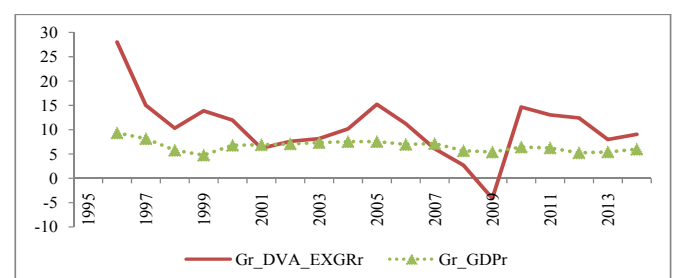


Figure 1b: Growth Rates of GDP and Export

During the study period, the domestic value added export has grown at a rate of 16.2 percent and that of the GDP at 6.6 percent. We can see that the growth rate of exports is quite volatile, while that of GDP growth rates though follow the pattern of exports, but are less volatile than growth rates of exports. The impacts of major economic shocks such as 'Asian Currency Crisis' in 1997 or 'Global Financial Crisis' in 2008 or 'Eurozone crisis' in 2010 are very clearly seen on the growth rates

of exports. Moreover, the impact of financial crisis is severe. Aftermath crisis, the exports growth rates are negative and the GDP growth rate also fell substantially (7.1 percent in 2007 to 5.7 percent in 2008 and 5.4 percent in 2009). However, by 2010, Vietnam has made a breakthrough in terms of exports and GDP growths and clear signs of recovery can be observed. But again after 2010 until 2014, growths of exports are falling. Thus, though growth rate of GDP has shown weak sensitivity to the shocks in export growth rate, there is quite higher correlation (correlation coefficient above 0.99) in terms of dollar values.

3. Data and Methodology

The contribution of exports to the economic growth of Vietnam has been analysed through examination of existence of a long-run relationship between the domestic value added exports (DVA_EXGR) and gross domestic products (GDP), both measured in real terms. Empirically, the long-run relationship between two variables in question can be tested by using either (i) two-step Engle and Granger approach, or (ii) cointegration approach, or (iii) ARDL (autoregressive distributed lags) approach. However, the first two approaches require the underlying variables to be integrated of same order one, $I(1)$, while the ARDL approach does not require the underlying variables to be integrated of the same order one, though none of them should be integrated of the order higher than one. This means that it is essential to test the presence of unit root and also to determine the order of integration for each of these variables if someone opts to apply the Engle and Granger approach, or cointegration approach. On the other hand, ARDL approach is applicable despite the underlying variables show a mixed order of integration, i.e. $I(0)$ and $I(1)$. This flexible feature of ARDL approach has made it popular in recent days as a technique to test existence of a long-run relationship.

Whilst the ARDL approach does not require testing the order of integration of variables beforehand, we have preferred to do it beforehand for two reasons- (i) at this moment, we don't know which approach would best fit to

model the existence of cointegration between underlying variables. Therefore, it is better to know their order of integration beforehand, (ii) though ARDL approach seems flexible in the initial steps in ignoring the order of integration of variables, it requires at later steps to confirm that none of these variables are integrated of order 2.

At current level of literature, there are two approaches to examine the presence of unit roots in variables' series viz. (i) the unit root test that does not allow structural break (hence after we will call it 'CURT'- the conventional unit root test); and (ii) the unit root test that allows structural break (hence after we call it 'BURT'- the breakpoint unit root test). The CURT can be conducted using Augmented Dickey-Fuller (ADF), Phillips-Perron (PP), Kwiatkowski, Phillips, Schmidt, and Shin (KPSS), Ng-Perron test etc. However, Perron (1989) by re-examining Nelson and Plosser's work (1982) by incorporating two important structural breaks, that is, 'the great crash of 1929' and 'the oil price shock of 1973' in the underlying variables series, found that CURT test might falsely result into presence of unit root when the data are 'trend stationary' with structural break(s). Surprisingly, 10 out of 13 nonstationary series were found stationary in their level forms when structural breaks were introduced in the test. Thereby Perron (1989) cautions that although use of long-span data in testing presence of a unit root allows tests with larger power in comparison to using a smaller span; however; drawback is that the long-span data may include effect of a major event, which may behave as an outlier.

In the light of Perron's caution, a researcher must be aware of the presence of outlier(s) while considering a long-span data series for testing a unit root; otherwise the use of CURT to validate the stationarity of time series might be misleading if a structural break is present in it. In this research, the underlying variables (i.e. GDP and domestic value added exports) cover a period from 1995 to 2014 for which the existing sets of literature strongly suggest possibility of structural break(s). There are at least three reasons behind this suspicion- (i) occurrence of 'Asian financial crisis' affecting ASEAN region in

1997, (ii) occurrence of ‘Global financial crisis’ in 2008 affecting the US and Euro zone, which are major markets for Vietnamese exports, and (iii) Ling et al. (2013) found presence of structural breaks in 10 macroeconomic time-series, including GDP and exports of ASEAN countries during the period of 1960-2010. They found that common structural break occurred among these ASEAN macroeconomic time series were closely associated with global economic events such as the first oil shock of 1973-1975, the second oil shock of 1979-1980, the commodity crisis in 1985-1986 and the Asian financial crisis of 1997-1998. As Vietnam is also located in and connected with the ASEAN region, such possibility cannot be denied. However, there are some empirical works in context of Vietnam viz. Nguyen et al. (2017), Nguyen (2017), Duong (2016), Bhatt (2013), and Pham (2008) who have applied CURT approach on GDP and exports series of Vietnam to test presence of unit roots, thus overlooking the possibility of presence of structural break in GDP and exports series. All of these papers though agree that order of integration of exports series is one, I(1) in level form, they differ in determining order of integration of GDP series. Nguyen et al. (2017) and Bhat (2013) concludes it as I(1), while Nguyen (2017) confirms it to be I(0) (table 1). Upon thoughtful consideration on the facts and scenarios as discussed above, we realised that it would be better to use BURT approach to confirm the stationarity and the order of integration of the underlying variables series.

Table I: Empirical Papers Using Data Series on Exports and GDP of Vietnam

Reference	Variable	Coverage	Order of integration	Method
Nguyen et al. (2017)	Net exports and GDP	1990-2015	Both → I(1)	CURT
Nguyen (2017)	Exports and GDP	1986-2015	Export (1); GDP → I(0)	CURT
Duong (2016)	Exports	1985-2015	I(1)	CURT
Bhatt (2013)	Exports and GDP	1990-2008	Both → I(1)	CURT
Pham (2008)	Exports	1986-2007	I(1)	CURT

3.1 Unit Root Test in Presence of a Single Structural Break

Perron’s work (1989) is a prominent initiative to introduce structural break in the unit root test framework. He considered three different models to test null hypothesis of a unit root against the alternative hypothesis of deterministic trend with a one-time exogeneous break in - (A) the level of the series (aka ‘crash model’), (B) the slope (aka ‘changing growth model’); and (C) both the level and slope. These hypotheses are parameterized as follows:

Null hypotheses:

$$\text{Model (A): } y_t = \mu + dD(T_B)_t + y_{t-1} + e_t$$

$$\text{Model (B): } y_t = \mu_1 + y_{t-1} + (\mu_2 - \mu_1)DU_t + e_t$$

$$\text{Model (C): } y_t = \mu_1 + y_{t-1} + dD(T_B)_t + (\mu_2 - \mu_1)DU_t + e_t$$

Here DU_t is ‘intercept break’ variable that takes the value of 0 for all dates prior to the break, and 1 thereafter (i.e. $DU_t = 1$, if $t > T_B$, 0 otherwise). Likewise, $D(T_B)_t$ is ‘one-time break dummy’ variable which takes the value of 1 only on the break date and 0 otherwise, (i.e. $D(T_B)_t = 1$, if $t = T_B + 1$, 0 otherwise).

Alternative hypotheses:

$$\text{Model (A): } y_t = \mu_1 + \beta t + (\mu_2 - \mu_1)DU_t + e_t$$

$$\text{Model (B): } y_t = \mu + \beta_1 t + (\beta_2 - \beta_1)DT^*_t + e_t$$

$$\text{Model (C): } y_t = \mu_1 + \beta_1 t + (\mu_2 - \mu_1)DU_t + (\beta_2 - \beta_1)DT^*_t + e_t$$

Here DT^*_t is ‘trend break’ variable which takes the value 0 for all dates prior to the break, and is a break date re-based trend for all subsequent dates (i.e. $DT^*_t = t - T_B$ if $t > T_B$ and 0 otherwise).

In these models, the difference $(\mu_2 - \mu_1)$ represents the magnitude of the change in the intercept of the trend function at time T_B , and the difference $(\beta_2 - \beta_1)$ represents the magnitude of the change in the slope of the trend function occurring at time T_B . The innovation series $\{e_t\}$ is taken to be of the ARMA(p, q), the orders p and q possibly unknown.

The null hypothesis of a unit root in the model (A) is presented in term of a dummy variable, which takes the value one at the time of break, while the alternative hypothesis allows for a one-time change in the intercept of the trend function. Likewise, the null hypothesis of the model (B) specifies that the drift parameter μ changes

from μ_1 to μ_2 at time T_B . The alternative hypothesis allows a change in the slope of the trend function without any sudden change in the level at the time of the break. The model (C) allows for both effects to take place simultaneously i.e., a sudden change in the level followed by a different growth path.

For empirical purpose, Perron (1989) employed an adjusted Dickey-Fuller (ADF) type unit root testing strategy, which involve estimation of the following augmented regression equations (1) – (3) (Zivot & Andrews, 1992):

$$y_t = \hat{\mu}^A + \hat{\theta}^A DU_t + \hat{\beta}^A t + \hat{\delta}^A D(T_B)_t + \hat{\alpha}^A y_{t-1} + \sum_{j=1}^k \hat{c}_j^A \Delta y_{t-1} + \hat{e}_t, \dots (1)$$

$$y_t = \hat{\mu}^B + \hat{\beta}^B t + \hat{\gamma}^B DT^*_t + \hat{\alpha}^B y_{t-1} + \sum_{j=1}^k \hat{c}_j^B \Delta y_{t-1} + \hat{e}_t, \dots (2)$$

$$y_t = \hat{\mu}^C + \hat{\theta}^C DU_t + \hat{\beta}^C t + \hat{\gamma}^C DT^*_t + \hat{\delta}^C D(T_B)_t + \sum_{j=1}^k \hat{c}_j^C \Delta y_{t-1}, \dots (3)$$

Perron assumed the break date as exogenously determined in these methods and known *ex ante*, which later drew a lot of criticism, Christiano (1992) being the first to point it. Later, many other studies viz. Banerjee, Lumsdaine and Stock (1992), Zivot and Andrews (1992), Perron and Vogelsang (1992), and Perron (1994) proposed procedures to address the choice of break date issue (Vogelsang and Perron, 1994). All of these four studies suggest endogenizing the choice of break date by making it data dependent. For this, two approaches have been considered, and both require estimation of a Dickey-Fuller type regression at all possible break dates.

The first procedure is choosing a break date that minimizes the Dickey-Fuller t-statistic across all possible regressions, and the second procedure is choosing a break date that maximizes (or minimizes, depending upon the context) a statistic which tests the significance of one or more of the coefficients on the ‘trend break’ dummy variables. Further, the asymptotic results are available for many combinations of trend breaks, choice of break year, and choice of AO (additive outlier) or IO (innovational outlier) models within all the four studies. For instance, Perron and Vogelsang (1992) provide results for non-trending data for both AO and IO models, where the break date is chosen both by minimizing the Dickey-Fuller t-statistics and by the significance of the

coefficient on a mean-break dummy variable. Likewise, Zivot and Andrews (1992) provide results for trending data for the IO models, where break date is chosen by minimizing the Dickey-Fuller t-statistics (we will discuss briefly about these two models shortly in the next section). On the other hand, Banerjee et al. (1992) give results in the IO framework for the crash model and changing growth model only, where break date is chosen both by the Dickey-Fuller t-statistics and by the significance of a trend break dummy parameter.

3.2 Discussion on Models

Zivot and Andrews (1992) introduced an endogenous break in the Perron’s (1989) models; and excluded the crash dummy $D(T_B)$, thus models involves estimation of the following regression equations (4) – (6):

$$y_t = \hat{\mu}^A + \hat{\theta}^A DU_t(\hat{\lambda}) + \hat{\beta}^A t + \hat{\alpha}^A y_{t-1} + \sum_{j=1}^k \hat{c}_j^A \Delta y_{t-1} + \hat{e}_t, \dots (4)$$

$$y_t = \hat{\mu}^B + \hat{\beta}^B t + \hat{\gamma}^B DT^*_t(\hat{\lambda}) + \hat{\alpha}^B y_{t-1} + \sum_{j=1}^k \hat{c}_j^B \Delta y_{t-1} + \hat{e}_t, \dots (5)$$

$$y_t = \hat{\mu}^C + \hat{\theta}^C DU_t(\hat{\lambda}) + \hat{\beta}^C t + \hat{\gamma}^C DT^*_t(\hat{\lambda}) + \hat{\alpha}^C y_{t-1} + \sum_{j=1}^k \hat{c}_j^C \Delta y_{t-1} + \hat{e}_t, \dots (6)$$

Here, $DU_t(\lambda) = 1$ if $t > T\lambda$, 0 otherwise.
 $DT^*_t(\lambda) = t - T\lambda$ if $t > T\lambda$, 0 otherwise.

Hats on the λ parameters indicate estimated values of the corresponding break fraction. It is important to note that Zivot and Andrews method regards every point as a potential break-date and runs a regression for every possible break-date sequentially. The break date is selected where the t-statistic from an ADF test of unit root is at a minimum (i.e. most negative) (Waheed et al., 2006). On the other side, Perron and Vogelsang (1992) included $D(T_B)$ in Perron’s (1989) model, but excluded t, their models are given as below (7) – (9):

Innovative Outlier Model (IOM)

$$y_t = \mu + \theta DU_t + \delta D(T_B)_t + \alpha y_{t-1} + \sum_{i=1}^k c_i \Delta y_{t-1} + e_t, \dots (7)$$

Additive Outlier Model (AOM) – Two steps

$$y_t = \mu + \theta DU_t + \tilde{y}_t, \dots (8)$$

$$\tilde{y}_t = \sum_{i=0}^k w_i D(T_B)_{t-1} + a \tilde{y}_{t-1} + \sum_{i=1}^k c_i \Delta \tilde{y}_{t-1} + e_t, \dots (9)$$

\tilde{y}_t in the above equations represents a detrended series y. Later Perron (1997) included both $D(T_B)$ and t in his Innovational Outlier (IO1 and IO2) and Additive Outlier

(AO) models, which are presented as below (10) – (12):
IO model allowing one time change in intercept only (IO1):

$$y_t = \mu_t + \theta DU_t + \beta t + \delta D(T_B)_t + \alpha y_{t-1} + \sum_{i=1}^k c_i \Delta y_{t-i} + e_t \dots (10)$$

IO model allowing one time change in both intercept and slope (IO2)

$$y_t = \mu + \theta DU_t + \beta t + \gamma DT_t + \delta D(T_B)_t + \alpha y_{t-1} + \sum_{i=1}^k c_i \Delta y_{t-i} + e_t \dots (11)$$

AO model allowing one time change in slope (AO)

$$y_t = \mu + \beta t + \delta DT^*_t + \tilde{y}_t \dots (12)$$

Here $DT^*_t = 1 (t > T_B) (t - T_B)$

$$y_t = \alpha \tilde{y}_{t-1} + \sum_{i=1}^k c_i \Delta \tilde{y}_{t-i} + e_t$$

Among bunch of these models, like any other researcher, we also faced the problem of selecting an appropriate

model to determine the stationarity of a time series in presence of structural break. Results of different models in different test specification viz. (i) with intercept only, (ii) with trend only or (iii) with both intercept and trend were likely to differ, causing confusion in terms of inclusion of irrelevant information and the exclusion of relevant information. In either case, the model might be misleading. Nonetheless, in order to overcome this state of confusion Shrestha and Chowdhury's paper (2005) on 'sequential procedure' becomes an effective guideline, and thereby we have followed their sequential procedure in the unit root analysis. A flow-chart based on this paper has been presented in figure 2. Other aspects of these models have been discussed in the 'empirical results' section.

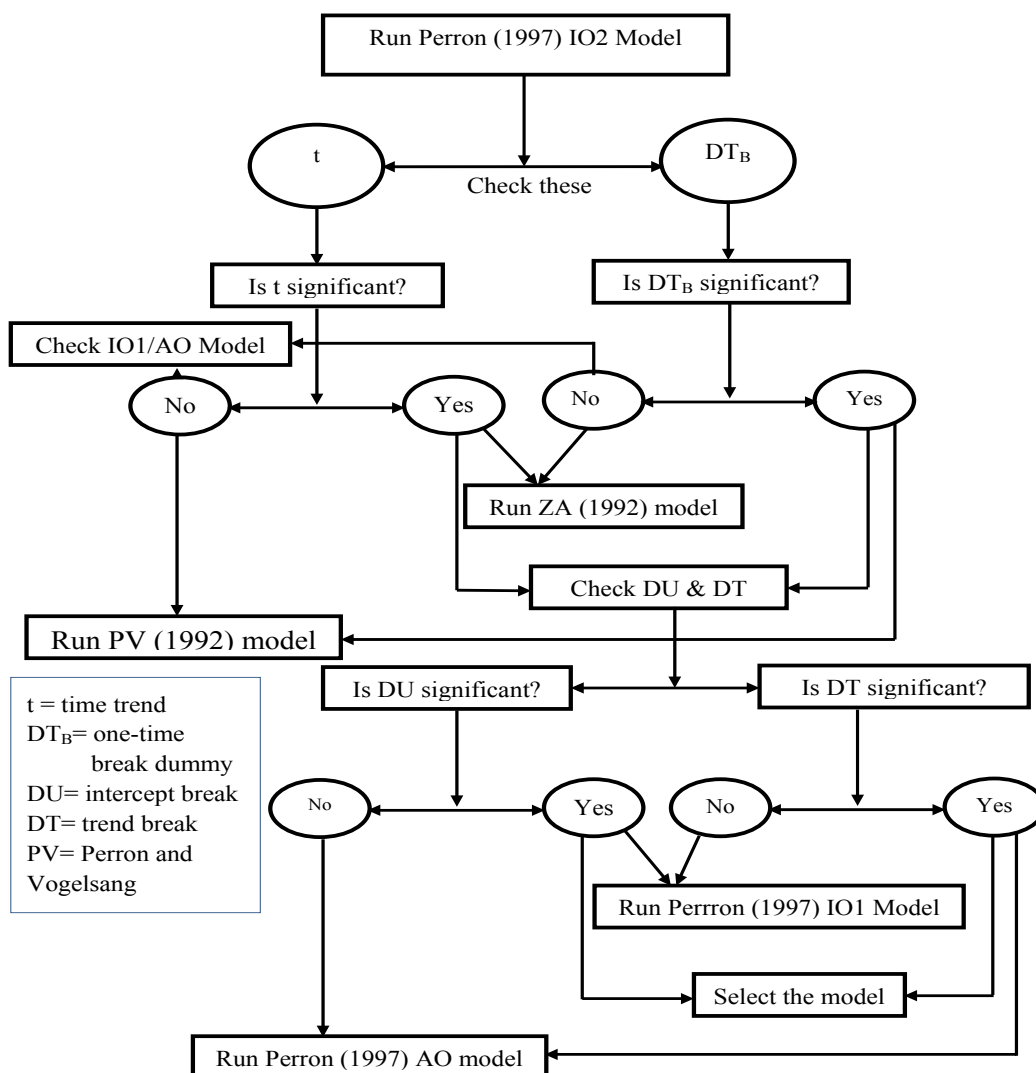


Figure II: Flow Chart for the Sequential Procedure

Source: Researchers' contribution based on sequential procedure described in Shrestha and Chowdhury's paper (2005).

3.3 Cointegration Test

3.3.1 Engel-Granger Approach

The first step of Engle-Granger approach requires testing for unit roots in variable series, after which two cointegration regressions (direct and reverse) between variables are estimated using ordinary least square (OLS)¹ method. The second step involves testing stationarity in the error terms of the two cointegration regressions as estimated in the first step. According to Engle and Granger (1987), if the stochastic error terms are integrated of order zero, I(0), then y_t and x_t are said to be cointegrated. In this case, residuals from the equilibrium regression can be used to estimate the error correction model.

Hence, if variables series $\{y_t\}$ and $\{x_t\}$ are cointegrated, the variables would have the error correction form as below:

$$\Delta x_t = \alpha_0 + \alpha_x \rho_{t-1} + \sum_{i=1}^p \alpha_{1i} \Delta x_{t-i} + \sum_{i=1}^p \alpha_{2i} \Delta y_{t-i} + e_{xt} \dots (13)$$

$$\Delta y_t = \beta_0 + \beta_y \rho_{t-1} + \sum_{i=1}^p \beta_{1i} \Delta x_{t-i} + \sum_{i=1}^p \beta_{2i} \Delta y_{t-i} + e_{yt} \dots (14)$$

where Δ is first difference operator on variables, ϵ_{xt} and ϵ_{yt} are white noise disturbances (which may be correlated with each other), and α 's and β 's are all parameters. The ρ_{t-1} is the error correction term (ECT) whose magnitude (α_x or β_y) is expected to be a negative fraction between 0 and unity, and implies a 'speed of adjustment' per year of any deviation from the long run equilibrium path in order to maintain the long-run equilibrium relation between underlying variables. The independent variables are said to 'cause' the dependent variable if the error correction term (ECT), and the coefficients of the lagged independent variables (summation of α_{2i} in equation (13) and summation of β_{1i} in equation (14)) are jointly significant.

3.3.2 Johansen Test

Johansen (1988) test of cointegration is based on the relationship between the rank of matrix and its

1 *The direct and reverse cointegration regressions for two time series Y_t and X_t can be written as follows in log linear form:*

$$Y_t = \alpha_0 + \alpha_1 X_t + u_{1t} \quad \text{and} \quad X_t = \beta_0 + \beta_1 Y_t + u_{2t}$$

characteristics roots. Its generalised model can be written in form of a vector auto regression (VAR) in levels with the constant suppressed as:

$$x_t = \sum_{i=1}^k A_i x_{t-i} + u_t \dots (15)$$

For the simpler case $k = 1$, it is simply-

$$\Delta x_t = (A_1 - I) x_{t-1} + \epsilon_t = \Pi x_{t-1} + \epsilon_t \dots (16)$$

where, x_t and ϵ_t are $(n \times 1)$ vectors; A_1 = an $(n \times n)$ matrix of parameters; I = an $(n \times n)$ identity matrix; and $\Pi = A_1 - I$, n is the number of variables.

The Johansen test examines the rank of Π matrix. If the rank $(\Pi) = 0$, then the variables are not cointegrated, otherwise they are said to be cointegrated. In fact the rank of Π provides the number of cointegrating vectors. Further, the Johansen test comprises of two tests: the maximum eigenvalue test, and the trace test. For both test statistics, the initial Johansen test is a test of the null hypothesis of no cointegration against the alternative of cointegration. These tests differ in terms of the alternative hypothesis.

3.3.3 ARDL Bounds Test

The basic form of an ARDL (p, q) regression model can be represented as follow:

$$y_t = \delta_0 + \delta_1 t + \theta_1 y_{t-1} + \theta_2 y_{t-2} + \dots + \theta_p y_{t-p} + \beta_1 x_{t-1} + \beta_2 x_{t-2} + \dots + \beta_q x_{t-q} + e_t \dots (17)$$

Pesaran et al. (2001) reduced the basic form of ARDL to the conditional error correction form in their seminal paper which got the most attention in applied work to test for the existence of long-run relationship. Their conditional error correction form of ARDL model can be represented as follow:

$$\Delta y_t = \delta_0 + \sum_{i=1}^p \theta_i \Delta y_{t-i} + \sum_{i=0}^q \beta_i \Delta x_{t-i} + \delta_1 t + \lambda_1 y_{t-1} + \lambda_2 x_{t-1} + e_t \dots (18)$$

where Δ represents the first difference operator; θ 's are the short-run coefficients and all the terms in the summations are the short-run dynamics of the model; λ 's are the long-run coefficients, and e is the error term of the equation.

For testing the long-run relationship, the interest is to test that λ_1 and λ_2 are non-zero. If these are statistically equal

to zero, it means that long-run relationship does not exist among the variables. This is done by performing ‘bounds test’ where one would check the significance of F-statistic for null hypothesis that ‘no long-run relationship exists’ (i.e. $\lambda_1 = \lambda_2 = 0$). The guideline is that if value of F-statistic is greater than the upper bound (I1) critical value, it is called to be significant and one can reject the null hypothesis, otherwise cannot reject it.

Once the ‘bounds test’ leads to the conclusion of cointegration, the long-run relationship between variables can be estimated by the following regression equation:

$$y_t = \alpha_0 + \alpha_1 x_t + u_t \dots\dots\dots (19)$$

The residual series $\{u_t\}$ obtained from equation (19) when used in the regression equation of the short-run dynamic model would give the value of ‘error correction term (ECT)’. Thus, the error correction model can be represented as:

$$\Delta y_t = \delta_0 + \sum_{i=1}^p \theta_i \Delta y_{t-i} + \sum_{i=0}^q \beta_i \Delta x_{t-i} + \rho u_{t-1} + v_t \dots\dots\dots (20)$$

where, $u_{t-1} = (y_{t-1} - \alpha_0 - \alpha_1 x_{t-1})$, α with hats represent OLS estimates of α 's in the long-run equation (19), and ρ is the speed of adjustment.

In this study, the basic equation to examine the contribution of domestic value added exports on GDP has been formulated as below:

$$GDP_r = \alpha_0 + \alpha_1 DVA_EXGR_r + u_t \dots\dots\dots (21)$$

where GDP and DVA_EXGR are GDP and domestic value added exports of Vietnam both measured in real terms.

4. Variables and Data

The data of current GDP and real GDP (base year 2005) have been taken from UNCTADSTAT. Likewise, the current data on domestic value added exports has been extracted from OECD TiVA database (2016 edition). Once data were obtained, the current and constant values of GDP were used to compute the GDP deflator that has been later used to convert current exports values into the real values. For further analysis, real values of both variables have been treated in their natural log forms viz. LNGDPr as dependent variable and LNDVA_EXGRr as independent variable.

5. Empirical Analysis

5.1 Testing Presence of Unit Root and Structural Break

As stated earlier we have applied Perron’s (1997) model and Zivot and Andrews’ (1992) (ZA for short) model to confirm the order of integration of series $\{LNGDPr\}$, and $\{LNDVA_EXGRr\}$. The appropriate model has been chosen following the ‘sequential procedure’ as presented in section (3.2) of ‘methodological framework’. In Perron’s model, the break date has been chosen by minimizing the Dickey-Fuller t-statistics, and the optimal lag length was set automatic to be chosen by the software based on Schwarz information criteria (SIC). The decision on nonstationarity or stationarity of the series has been laid on the level of significance of ADF statistics in Perron’s model and the ZA statistic in ZA model within 5 percent level. Estimated results are presented in Table II.

Series: Real GDP (LNGDPr)

Under Perron’s IO2 model, the ADF statistic for $\{LNGDPr\}$ in level form is not found significant at 5 percent level. So is the case in its first differenced form. Nonetheless it is significant at 10 percent level. But as the accepted level of significance is 5 percent so, we considered it insignificant. Moreover, the ‘time trend (t)’ and ‘break dummy (DT_B)’ were also insignificant at 5 percent level. Therefore, following the ‘sequential procedure’ IO1 model was estimated next. Under Perron’s IO1 model, the ADF statistic for $\{LNGDPr\}$ in level form is also not found significant, but is significant in its difference form at 5 percent level. Moreover, coefficients of both ‘time trend’ and ‘intercept’ are also found significant. Therefore, LNGDPr is nonstationary in level form, integrated of order 1 or I(1). The structural break is found to exist in the series in year 2002 (Table II).

Series: Real domestic value added exports (LNDVA_EXGRr)

The test statistics of IO2 model for $\{LNDVA_EXGRr\}$ suggest that it is integrated of order (0). Time trend (t), ‘dummy break (DTB)’ and ‘intercept break (DU)’ are found significant, while ‘trend break (DT)’ is

insignificant. In such situation, the ‘sequential procedure’ suggests estimating IO1 model. Under IO1 model, the ADF statistic is significant at 1 percent level, thus confirming stationary in level form, I(0). Moreover, all parameters are found significant at 5 percent level. It suggests presence of structural break in the series in year 2008 (table 2). Thus the dependent variable (LNGDPr) is integrated of order one, I(1) while the independent variable (LNDVA_EXGRr) is integrated of order zero, I(0). This perfectly matches the necessary condition for applying ARDL (autoregressive distributed lag) approach to examine the long-run relationship between GDP and exports (i.e. order of integration of the variables shall not be of order I(2), and the dependent variable must be I(1).

5.2 Estimating ARDL Models and Checking their Robustness

To estimate a sound ARDL model, we tried various

permutations setting the maximum lag length of 4 on both dependent variable and regressor. In the end, a maximum lags of 2 on dependent variable and 4 on regressor under specification of ‘unrestricted constant and no trend’; and setting ‘one time break dummy variable’ on LNGDPr as fixed regressor yielded statistically valid model that is ARDL (1, 4). After this, we have applied Breusch-Godfrey LM test to confirm that the errors of this model are not serially correlated; results of which have been presented in Table III .

The ‘observed R- square’ value is not found significant at 5 percent level. Therefore, the null hypothesis that ‘there is no serial correlation in the model residual’ cannot be rejected; it means the chosen model ARDL (1, 4) is free from serial correlation. Hence, the outcomes of the selected ARDL models are desirable to go ahead for the next level of analysis.

Table II: Results of Breakpoint Unit Root Tests

Perron (1997) Model									
Variable	Type	Level			First Difference			I(p)	Remarks
		T _B	k	ADF statistic	T _B	k	ADF statistic		
LNGDPr	IO2	2004	0	-3.838891	2003	1	-4.95469*	I(1)	Time trend (t) and break dummy (DT _B) were not found significant in IO2 model.
LNGDPr	IO1	2002	0	-3.018388	2002	1	-6.643501***	I(1)	Time trend (t) and intercept break (DU) are found significant.
LNDVA_EX-GRr	IO2	2008	4	-5.66457**	-	-	-	I(0)	Both time trend (t) and dummy break (DT _B) are found significant. Intercept break (DU) is also significant, but trend break (DT) is insignificant.
LNDVA_EX-GRr	IO1	2008	2	-5.949359***	-	-	-	I(0)	

***, ** & * indicate significant at 1 percent, 5 percent and 10 percent level, T_B = Break time, k = lag length selected automatically by the software.

Source: Researchers’ estimates.

Table III: Results of Breusch-Godfrey Serial Correlation LM Test

F-statistic	1.165934	Prob. F(4,4)	0.4427
Obs*R-squared	8.612887	Prob. Chi-Square(4)	0.0715

Source: Researchers’ estimates.

Next, we have diagnosed the stability of the ARDL model using CUSUM test. This test plots the cumulative sum together within 5 percent critical lines. Guideline is that if the cumulative sum remains inside the area between the two critical lines, the selected model must be stable, otherwise unstable. As the CUSUM statistic for the

chosen model lies within 5 percent critical bands (figure 3), means absence of any instability of the coefficients in the ARDL model.

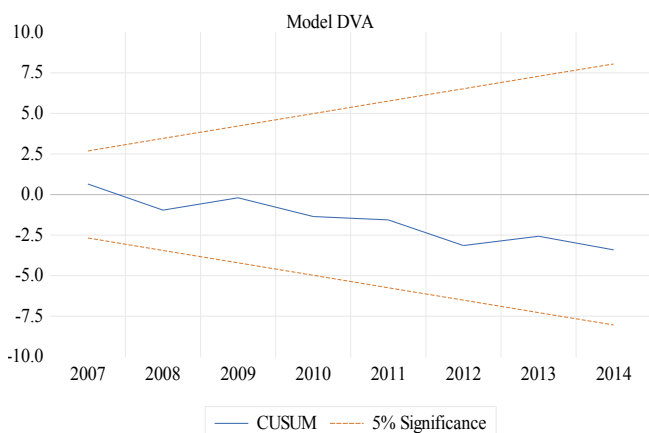


Figure III: CUSUM Test for the Chosen ARDL (1, 4) Model

5.3 Bounds Test of Cointegration and Error Correction model

For determination of long-run relationship between GDP and exports, we have applied ‘bounds test’, the results of which are presented in Table IV. The F-statistic for the bounds test for the estimated ARDL (1, 4) model has been found bigger than the asymptotic critical value (7.84) from Pesaran et al. (2001) and finite sample critical value (9.28) from Narayan (2005) at 1 percent level. It means the null hypothesis that ‘no long-run relationship exists’ can be rejected at 1 percent level of significance. This validates existence of a long-run relation between GDP and exports in their level forms.

Table IV: Results of Bounds Test

F-statistic	Significance Asymptotic: n=1000 Pesaran et al. (2001)			Significance Finite sample: n=30 Narayan (2005)				
	1%		5%	1%		5%		
	I0	I1	I0	I1	I0	I1	I0	I1
44.617***	6.84	7.84	4.94	5.73	8.17	9.28	5.39	6.35

*** Significant at 1 percent level, k = the number of independent variable in the model.

After establishing the long-run relationship between GDP and exports, we have estimated the long-run cointegration equation, the results of which have been presented in Table V.

Table V: Results of Cointegration Equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNDVA_EXGRr	0.734173***	0.008525	86.12359	0.0000
ECT(-1)	-0.331045***	0.033040	-10.01947	0.0000

*** Significant at 1 percent level

The coefficient of LNDVA_EXGR is found positive (0.73) and highly significant, thus confirms the positive effect of gross exports on GDP. It can be interpreted as ‘one percent change in domestic value added exports in real terms results into a long-run increase in real GDP of Vietnam by 0.73 percent’. This can also be viewed as the proportional change in GDP is 73 percent of the change in domestic value added exports such that when domestic value added exports rise, GDP tends to lag behind, creating disequilibrium. Such disequilibrium is corrected by 33.1 percent (which is the coefficient of ‘error correction term’ ECT, Table V) per year in order to maintain the long-run equilibrium relation with domestic value added exports, *ceteris paribus*. With this speed, the

economy would take 3 years (i.e. one divided by absolute value of coefficient of ECT) to absorb the full effect of value added exports’ shock on GDP.

The short-run causality in the model has been examined using Wald coefficients test, which is used to confirm the joint significance of lagged regressors on GDP. The results are reported in Table VI. To confirm the result, the estimated value of F-statistic in Wald test shall be compared with the Pesaran et al. (2001) critical value bounds. The guideline is that if F-statistic is greater than the upper bound value (i.e. I1) within 5 percent level of significance, the short-run causality runs from exports to GDP.

Table VI: Results of Wald Test

Test Statistic	Value	df	Asymptotic critical value bounds for the F-statistic [#] , k=1			
			(Case III: Unrestricted intercept and no trend)			
			1% Significance		5% Significance	
F-statistic	17.895***	(5, 8)	I0	I1	I0	I1
Chi-square	89.473	5	11.79	11.79	4.94	5.73

*** & ** Significant at 1 percent and 5 percent level respectively. [#] Pesaran et al. (2001, p.300), k= number of regressor.

Interestingly, the estimated F statistic is greater than the upper values at 5 percent level of significance, thus qualify the guideline. Hence, it can be concluded that causality exists between exports and GDP in the short-run i.e. ‘exports short-run causes GDP’.

6. Conclusion

Vietnam prioritized export expansion since its adoption of ‘Doi Moi’ in 1986, following the footsteps of Japan, Singapore, Hong Kong, Taiwan, and South Korea. To enhance its access to foreign markets and promote exports, Vietnam also did some notable developments in the 1990s in signing bilateral and multilateral trade agreements. Visibly, since 1995 Vietnam has consistently achieved higher economic growth relying on exports, and been reaping the benefit of export-based strategy in terms of job creation, foreign reserves, and improving living standard. The ARDL bounds test of cointegration establishes existence of both short-run and long-run relationship between exports and GDP of Vietnam and shows a substantial contribution of exports in the real GDP, as much as 0.73 percent for one percent changes in the domestic value added exports. This is a fascinating number. However, a huge question is whether Vietnam can sustain this growth. To answer this question, we shall look at the growth prospective of Vietnam from two perspectives:

i. **Inherent bottleneck in the export-led growth model:**
The overall exports pattern of Vietnam portrays it following the footsteps of export-led growth model of Mexico, whereby it has also turned itself into export production platforms for foreign multi-nationals by suppressing the wages, rather than developing own indigenous industrial capacity. Mexico model of export-led growth strategy is different from the

one adopted by Germany or Japan or Asian Four Tiger countries or China. These countries’ export strategies led to enhance their own industrial capacity. Nonetheless, the Mexico model has been less successful so far. Mexico has not yet recovered its strong performance of 1960–1980. Since 1980, GDP growth has been sluggish, labor productivity has been unchanged, and total factor productivity growth has been negative.

Considering the prerequisites for the Mexico model to work, it seems challenging for Vietnam to sustain its export-led growth which it has achieved so far. With the rising living standards, ultimately the comparative advantages of cheap labour force would vanish in the future, which means a wave of assembly jobs would flow out of Vietnam leaving masses of workers without jobs, creating dark days in the country. In addition, two other low-cost countries in the region, Cambodia and Myanmar are likely to rise as close competitors of Vietnam in the low cost assembly works in the near future. By that time, in case Vietnam fails to enter into higher value added tasks due to lack of adequate skills or technologies or both, it will drag itself into ‘middle income trap’ (a situation when a country cannot compete in low value added stages due to rising labour costs, and also cannot compete in higher value added stages due to lack of adequate skills and technologies).

ii. **Changing political and macroeconomic situations:**
Another challenge in the existing model is to manage risks that would originate from ‘supply shocks’ and ‘demand shocks’. Though Government of Vietnam has initiated to get into deeper international integration by signing new generation of deep

preferential trade agreements (PTAs) with major trading partners such as Japan, Korea, EU and CPTPP apart from ASEAN-China FTA (2002), ASEAN-Japan Comprehensive Economic Partnership (2003), and ASEAN-South Korea FTA (2005), the changing macroeconomic situations that has developed across major trading partners of Vietnam in past few years has led to believe that the export-led growth strategy will fray for Vietnam. For instance, US consumers are debt saturated, and the US government is now more concerned about imports from outside. Europe is constrained by fiscal austerity. Japan continues to suffer from weak internal demand, and is also still hooked on export-oriented growth. That means if these macroeconomic conditions sustain the foreign demand for Vietnam's exports would weaken for sure that might have catastrophic impact on its economic growth.

Therefore, the 'assembling platform' strategy shall be bonded with strategy to develop own indigenous industrial capacity, and national technological base. These will help Vietnam to upgrade its activities along value chains in forms of (i) product upgrading, (ii)

process upgrading, (iii) functional upgrading, and/or (iv) sectoral upgrading so that it can switch its role of 'assembling agent' to 'indigenous producer'. Of course, these do not seem feasible in a short term since a large proportion of Vietnamese labour forces lack adequate skills and expertise that are necessary to carry out such activities. In addition, Vietnam also lacks 'Vietnamese brand name' in international market at present time that has made it relying on foreign companies for marketing abroad. Therefore, in the meantime, government shall also prioritize involvement of domestic firms in global value chains. All of these require prompt initiatives in order to bring changes in the existing 'education and vocational training' related policies so that knowledge, skills and know-how of young generations can be enhanced. Likewise, Vietnam shall enter into more deep preferential trade agreements (PTAs) with its trading partners to be able to manage the supply and demand shocks to exports. In addition, it shall also focus on diversification of its export products and markets; and building up strong domestic demands for its products in order to sustain its economic growth.

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A biomechanical model for the idiopathic scoliosis using robotic traction devices

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Abstract. The mathematical modeling of idiopathic scoliosis has been studied throughout the years. The models presented on those papers are based on the orthotic stabilization of the idiopathic scoliosis, which are based on a transverse force being applied to the human spine on a continuous form. When considering robotic traction devices, the existent models cannot be used, as the type of forces applied are no longer transverse nor applied in a continuous manner. In robotic devices, vertical traction is applied and in addition, parameters such as magnitude, direction and angle of the force applied are required and essential, if the best therapy plan is to be administered. In this study, we propose a mathematical model to the idiopathic scoliosis, using robotic traction devices, and with the parameters obtained from the mathematical modeling, set up a case-by-case individualized therapy plan, for each patient. To the best of our knowledge, modeling involving these assumptions was never investigated before, neither was the usage of modeling to establish viable and effective bounds for all the possible parameters in a robotic traction device.

1. Introduction

Biomechanical models of the human spine, including idiopathic scoliosis, have been studied by several authors such as [1, 2] or even more recently in [6, 7]. In the classic [9], the portion of the human spine involved in a scoliotic curve is modeled as a uniform flexible column of homogeneous isotropic material, creating a curved beam column as mechanical analog. This proposed model failed to include the interaction between the human spine and the spinal musculature and other supporting structures. This interaction was later included in [3]. By introducing the flexural rigidity (or bending stiffness) factor (EI), the author shows that the behavior of the articulated human spine could be simulated by a continuous spine model. In [8] a spine-orthosis model is presented. This two-dimensional model describes the interaction of the spine with the orthotic stabilization device and is viewed in the frontal pane. Throughout the paper the authors establish the mathematical model comprised by a differential equation and assumptions on the boundary conditions. However the mathematical model used cannot explain or cover the forces involved in a robotic spinal traction device, such as the Antalgic Trak Technology. This type of devices have very specific features and characteristics that must be incorporated in the model, or read from the model as a specific output in order for the therapy to be as successful as possible. The methods used throughout this paper rely on mathematical modeling of the forces involved in robotic spinal traction devices, through the use of differential equations. To model such devices a



differential equation, along with the appropriate boundary conditions are presented. Analytical methods are used to obtain the solution and an analytical approach on the relation between the parameters is also presented. To better illustrate this relation, an individual test case is presented, where all the parameters, such as angle, force and point of incidence are presented. To the best of the authors knowledge, no existing model incorporates all of these features.

2. The spine-orthosis model

The spine orthosis model presented in [8] is based on the assumption that the portion of the human spine involved in a scoliotic curve is assumed to be biomechanically analogous to an initially curved beam-column, as shown in figure 1

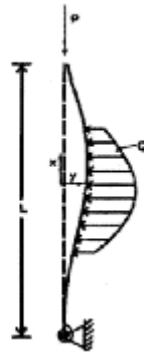


Figure 1. A biomechanical model of the spine orthosis-model

One can notice the inclusion in this model of Q , which represents a distributed lateral load. This is introduced to simulate, in the same general solution, the stabilizing transverse load of the orthotic device used. This model is viewed in the frontal plane, hence the total lateral displacement, $y(x)$, is expressed as the sum of the initial lateral displacement, $y_0(x)$ and the lateral displacement due to axial and transverse loads, $y_1(x)$. Therefore,

$$y(x) = y_0(x) + y_1(x) \quad (1)$$

The initial lateral displacement, $y_0(x)$, is assumed to be calculated by a curve-fitting technique based on an anteroposterior radiography, for each individual patient. As per $y_1(x)$, it is given by the solution of the differential equation

$$EI \frac{d^4 y_1}{dx^4} + P \frac{d^2 y_1}{dx^2} = Q(x) - P \frac{d^2 y_0}{dx^2}, \quad x \in \left[-\frac{L}{2}, \frac{L}{2} \right]$$

where EI is the flexural rigidity or bending stiffness of the human spine, P is the axial load, L is the length of the beam column and $Q(x)$ is the transverse load imposed by the orthotic device. The boundary conditions to be coupled with the above differential equation are

$$\begin{aligned} y_1 \left(-\frac{L}{2} \right) &= y_1 \left(\frac{L}{2} \right) = 0, \\ EI \frac{d^2 y_1}{dx^2} \left(-\frac{L}{2} \right) &= k_s \frac{d^2 y_1}{dx^2} \left(-\frac{L}{2} \right), \\ EI \frac{d^2 y_1}{dx^2} \left(\frac{L}{2} \right) &= k_i \frac{d^2 y_1}{dx^2} \left(\frac{L}{2} \right), \end{aligned}$$

where k_s , k_i are the torsional spring constants of the springs that are part of the orthotic device. These are adjusted for each specific case and for each orthotic device. The combination between the parameters in the differential equation and on the boundary conditions are very general in nature and are supposed to be used to model several different types of orthotic devices, such as, the lumbar and thoracic pads of the Milwaukee brace, the built-in pad of the Boston brace, among others. Ideally, for each type of orthotic device, a different set of values for both k_s and k_i would be determined, depending on the setup and characteristics used, making this model a highly individualized and customizable model.

3. The biomechanical model for robotic traction devices

Robotic traction devices are one of the available methods to use as therapy for patients that have mild scoliotic spine. These noninvasive devices are designed to take most of the weight of the spine, while simultaneously applying a downward or upward traction force that will impact the original alignment of the spine. However, the effects of traction therapy on lumbar spine biomechanics are not well known and, to the best of the authors knowledge, there are no mathematical models that incorporate all the features of these devices. The robotic traction devices considered here are robotic traction chairs, where the patient takes a seated position in the chair, with his head fixed and the waist strapped to the chair. An example of these chairs is the Robotic Antalgic-Trak device. These chairs are designed to provide stabilization to the posterior thoracic rib arch, while simultaneously incorporating decompression and traction to the spine. This type of devices requires a great deal of different inputs from the operator. Some might appear to be standard, such as force to apply and session duration, whilst others require a much more detailed and thorough analysis, like the angle and point of application. However, without any model to calculate the force required, the adjustment of the traction depends solely on the patient feedback and levels of comfort. Therefore these inputs should be calculated from a model and determined on an individual level. However, no existent model takes all of these features and characteristics in consideration. The following model, as shown in figure 2, is now proposed.

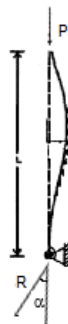


Figure 2. The proposed biomechanical model of the spine for traction devices

In this model, P represents the axial load, R represents the traction force applied via the device and α , the angle under which the pull is made, measured between the x -axis and vector R . This angle can vary between 0° and 90° . One should also emphasize that this angle is to be applied in opposite direction of the curvature due to the idiopathic scoliosis. As in the model presented in [8], x represents position in the spine measuring L . Hence the mathematical model proposed is given by the differential equation

$$EI \frac{d^4 y_1}{dx^4} + P \frac{d^2 y_1}{dx^2} = -P \frac{d^2 y_0}{dx^2} - R \cos(\alpha), \quad x \in \left[-\frac{L}{2}, \frac{L}{2} \right] \quad (2)$$

along with the boundary conditions

$$y_1 \left(-\frac{L}{2} \right) = y_1 \left(\frac{L}{2} \right) = 0, \quad (3)$$

$$EI \frac{d^2 y_1}{dx^2} \left(-\frac{L}{2} \right) = 0,$$

$$EI \frac{d^2 y_1}{dx^2} \left(\frac{L}{2} \right) = k_i \frac{d^2 y_1}{dx^2} \left(\frac{L}{2} \right),$$

where k_i is given by

$$k_i = \frac{3EI}{L_i},$$

as suggested in [8] and L_i represents the length of the inferior portion of the spine not included in the scoliotic curve. Also $k_i = 0$, as the upper portion of the spine is considered to be unsupported or subject to any force/pressure from the device. In robotic traction devices similar to this one, the traction force, R , can be applied downwards or upwards. In this particular case, we assume the force is being applied downwards. A similar model can be obtained if the force is applied upwards. Also, the angle α , is an adjustable parameter on the device. We consider, as in the device, α to be the angle between the x and y axis. The interaction between R and α make it possible for the traction force to be applied on a wide range of angles. To better illustrate the full link between all the variables, parameters and applicability of the model, a test case is presented next.

4. Modeling a test case on a robotic traction device

As in most applications, adapting the theoretical model to a specific case requires a great combination of techniques. The objective of this section is to show how the parameters can interact and on top of that, how the model can be obtained and constructed for each individual. For this particular test case we consider a 43 year old male with a mild scoliotic initial curvature, as shown in the figure 3. The details of the specific parameters are shown in table 1.

Parameter	Value
Age	43
Weight	78 kg
Gender	Male
Spine length (L)	58 cm
Bending stiffness (EI)	15.1 Nm ²
Angle (α)	0°
Inferior portion of the spine L_i	5 cm
Axial load (P)	37 N
R (maximum load advised)	255 N

Table 1. Specific parameters for the test case

The value for the bending stiffness, EI , has been the subject of several different studies. In this paper we consider the value proposed in both [4, 5], which is the mean value for a 43 year old male. Later in this paper a discussion in terms of the angle, α , and its impact will be considered, however initially for the first simulation we assume that the traction force applied is strictly downward, making $\alpha = 0$.



Figure 3. Subject MRI - test case

As shown by (2), in order to obtain y_1 , which is the solution of the problem (2)-(3), y_0 , the initial displacement must be determined first. This process was done using a curve fitting process. The value obtained for this particular individual was

$$y_0(x) = -1.0798x^3 + 0.0364x^2 + 0.1883x + 0.0276. \quad (4)$$

In addition, since due to the seating position, a portion of the weight of the head still impacts on the spine, the axial load P , was not excluded from the model and was considered to have the same impact as in [7]. This value, which is calculated taking in consideration the subject's weight, was estimated to be $P = 36.9312216 \text{ N}$. Therefore, considering all the specific parameters, equation (2) becomes

$$15.1 \frac{d^4 y_1}{dx^4} + 36.9312216 \frac{d^2 y_1}{dx^2} = -36.9312216 \frac{d^2 y_0}{dx^2} - R \cos(\alpha), \quad x \in \left[-\frac{L}{2}, \frac{L}{2} \right], \alpha \in [0, 90] \quad (5)$$

Similarly, the boundary conditions become

$$y_1(-0.29) = y_1(0.29) = 0,$$

$$15.1 \frac{d^2 y_1}{dx^2}(-0.29) = 0, \quad (6)$$

$$15.1 \frac{d^2 y_1}{dx^2}(0.29) = 906 \frac{d^2 y_1}{dx^2}(0.29).$$

The total lateral displacement, $y(x)$, can then be determined and is given by

$$\begin{aligned}
y(x) = & -0.00186717139 xR + 1.751291904 \sin\left(\frac{49\sqrt{5806554}x}{75500}\right) \\
& -0.034101777 \cos\left(\frac{49\sqrt{5806554}x}{75500}\right) + 0.01166819341 R \\
& +0.00123585514 \sin\left(\frac{49\sqrt{5806554}x}{75500}\right) R - 0.01171378479 \cos\left(\frac{49\sqrt{5806554}x}{75500}\right) R \\
& +1.686067906 \times 10^{-11}x^2 - 2.548421660 x - 0.01353868023 x^2 R \\
& +0.0613155274
\end{aligned} \tag{7}$$

Let us emphasize that the function, $y(x)$, depends on x , the point of application and also on R , the traction force to be applied. This interaction can be illustrated by the graph shown in figure 4, where $x \in [-\frac{L}{2}, \frac{L}{2}]$ and $R \in [0, 255]$

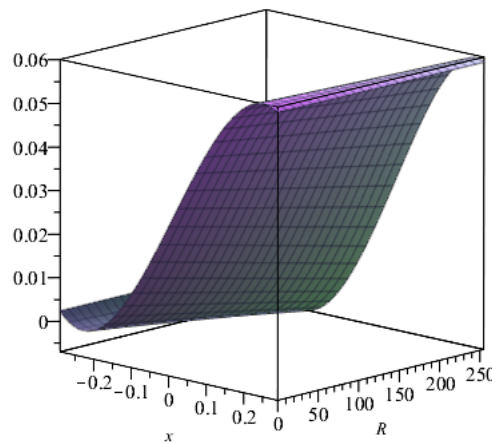


Figure 4. Solution in terms of location, x and traction force, R

From the analysis of the solution (4) one can identify the maximum to be attained when $x = 0.2526$, for any value of R . Plugging this information back in (4), we obtain the total lateral displacement, y , but in terms of R , as shown below

$$\begin{aligned}
y(R) = & 0.01033267910 R + 1.751291904 \sin\left(0.0001639396319\sqrt{5806554}\right) \\
& -0.034101777 \cos\left(0.0001639396319\sqrt{5806554}\right) \\
& +0.00123585514 \sin\left(0.0001639396319\sqrt{5806554}\right) R \\
& -0.01171378479 \cos\left(0.0001639396319\sqrt{5806554}\right) R - 0.5824179791.
\end{aligned}$$

Equation (4) provides then the total lateral displacement, in terms of the traction force, R . Bearing this in mind, one can now determine the total traction force necessary, for this specific

individual, so that the total lateral displacement of the spine, both initial and the one due to the axial and transverse loads, to be 0. For this specific case, the total traction force to be applied is then

$$R = 18207 \text{ N.}$$

Let us recall that this simulation was obtained for $\alpha = 0^\circ$, however, α is one of the adjustable parameters in the robotic traction devices. The seating chair of the device can have the angle of application changed, ranging from 0° to 70° . These angle variations can be used for some patients where the aligned position at 0° is not comfortable. However, the change in the angle of application has a real impact in the total traction force to be applied. Once the angle is changed, the total traction force to be applied increases, as shown in the graph 5.

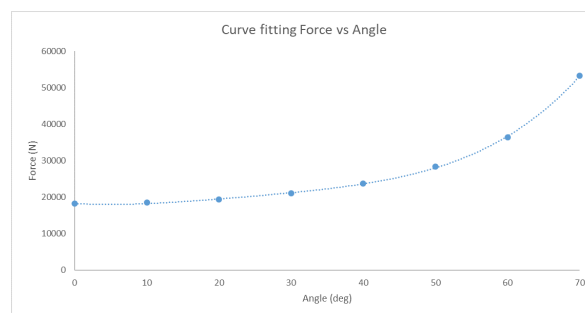


Figure 5. Graph showing the relation between the angle, α and the traction force, R .

As one can see from the graph, the relation between the two variables is highly nonlinear and the higher the angle applied, the higher the total traction force to be applied.

5. Conclusion

In this study, it was possible to obtain the model for robotic traction devices, based on equations (2)-(3). The advantage of such a model lies on the fact that each individual feature can be measured and the therapy plan can be designed, based on each patient's characteristics, without the usage of any invasive technique and with minimal knowledge of the subject, since for the model application only age, gender and an MRI or radiography showing the scoliotic curve are necessary. By doing so, one can obtain the total value of the traction force to be applied, necessary for the scoliotic curve to be eliminated. This total value obtained is a threshold value, meaning that for instance in our test case, a total force of 18207 N, would have to be applied in total for the scoliotic curve to be eliminated. For each therapy session, a maximum traction force of 40% of the body weight is recommended. Meaning that in our test case a maximum of 410 N is recommended per therapy session. This means that the patient would have to take sessions in the traction device, until a total threshold of 18207 N of force is accumulated. This information can and should be used to clearly identify *a priori*, from the diagnosis stage, which cases can be considered for therapy using robotic traction devices. In this test case, it clearly shows that the traction device alone cannot be seen as a therapy to eliminate the scoliotic curve. However, for mild cases of scoliosis, the total traction force is considerably smaller. For those, the robotic traction device can be seen as a valid therapy. One of the future points of this research focus on determining the exact amount of force that is transferred after each session and what percentage is carried forward for the next sessions. In this way, the exact number of sessions can, in future, be determined, for each patient.

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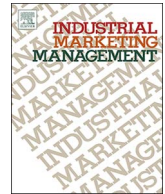
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Target and position article

Knowledge configurations of small and medium-sized knowledge-intensive firms in a developing economy: A knowledge-based view of business-to-business internationalization

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ABSTRACT

This paper explores knowledge configurations (i.e. combinations of knowledge types and sources) in the business-to-business internationalization of knowledge-intensive small and medium-sized enterprises (SMEs) in a developing economy. Semi-structured interviews were conducted with 33 owners/managers of 22 such firms that internationalized from Tunisia; so to establish their knowledge configurations and other key characteristics. In spite of their many differences (e.g. firm age, host markets, entry modes, resource endowments, products and services) they share an interesting empirical regularity; they have not developed internationalization knowledge. That is, a knowledge type portrayed as key in the extant theorizing. The findings show the knowledge configurations of these SMEs and how they compensated for their knowledge shortcomings. The implications for industrial marketing management theory and practice are discussed, along with several viable avenues for further context-specific and practice-oriented research.

1. Introduction

Resource availability, and knowledge/learning in particular, play a pivotal role in SME internationalization (Autio, Sapienza, & Almeida, 2000; Casillas, Moreno, Acedo, Gallego, & Ramos, 2009; Johanson & Vahlne, 1977, 2009); especially in business-to-business (B2B) settings (Karlsen, Silseth, Benito, & Welch, 2003; Lindsay, Rod, & Ashill, 2017). Internationalizing SMEs face smallness, newness, foreignness, and outsidership liabilities (Almodóvar & Rugman, 2015; Buckley, 1989; Johanson & Vahlne, 2009; Knight & Cavusgil, 2004; Oviatt & McDougall, 1994). In addition SMEs internationalizing from developing economies¹ face severe home-liabilities. For example: weak institutions, elevated levels of economic and political instability/risk, poor infrastructure, shortage of specialised financial intermediaries, malfunctioning markets, and underdeveloped industrial linkages (Kiss, Danis, & Cavusgil, 2012; Meyer, Estrin, Bhaumik, & Peng, 2009; Schwens, Eiche, & Kabst, 2011).

The knowledge and learning needs of SMEs internationalizing from such home-settings have been well documented (Ibeh & Kasem, 2011; Nguyen, Ngoc, & Bryant, 2013; Thai & Chong, 2008; Yamakawa, Peng,

& Deeds, 2008; Zhu, Hitt, & Tihanyi, 2007). Yet none of these studies examined the respective knowledge configurations (i.e. combinations of knowledge types and sources), which have emerged as an increasingly important explanation for the ability of SMEs to internationalize from developed economies (Deligianni, Voudouris, & Lioukas, 2015; Fletcher & Harris, 2012; Fletcher, Harris, & Richey, 2013; Weerawardena, Mort, & Liesch, 2017).

This paper is a response to on-going calls for further study into SME internationalization from developing economies (Ibeh & Kasem, 2011; Kiss et al., 2012; Zahra & George, 2002), answering the research question: ‘how do the knowledge configurations of SMEs from a developing economy enable them to engage in international B2B markets?’

The answer to this question has significant implications for industrial marketing management (IMM) theory and practice. It has been argued for example that internationalization knowledge (IK), is a fundament of a firm's ability to effectively operate in foreign industrial markets (Weerawardena et al., 2017). However, the transformation of situation-specific experiential knowledge into IK (i.e. codified principles and effective organizational routines) is costly (Eriksson, Johanson,

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¹ In this study we use developing as shorthand for any economy that is not developed; e.g. emerging, less/under-developed, third world. More precise classification systems are introduced in the research context section (3.2).

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Majkgard, & Sharma, 1997: 340). The key sources of IK (e.g. consultants and lawyers) are expensive (Fletcher et al., 2013; Fletcher & Harris, 2012). In addition, maintaining strategic alignment with an ever-evolving base of IK requires on-going investments (Autio et al., 2000; Fletcher et al., 2013; Fletcher & Harris, 2012; Prashantham & Young, 2011; Weerawardena et al., 2017). Our findings demonstrate how B2B SMEs may avoid such costly affairs and internationalize on a 'shoe-string' with some measure of success (e.g. more than 56% of foreign sales, firm survivability, and continued engagement with internationalization).

Given the central role of knowledge and learning in knowledge-intensive firms (Brennan & Garvey, 2009) this study like many others before it (Deligianni et al., 2015; Ibeh & Kasem, 2011; Moen, Gavlen, & Endresen, 2004; Nummela, Saarenketo, & Puumalainen, 2004; Saarenketo, Puumalainen, Kylaheiko, & Kuivalainen, 2008; Voudouris, Dimitratos, & Salavou, 2011) focuses on Information and Communication Technology (ICT) SMEs. In particular 22 ICT SMEs that are dependant solely upon B2B markets, and that have been internationalizing from Tunisia during the 1992–2009 period; i.e. prior to the 'Arab Spring'.² This is a particularly interesting context for answering our research question as it allows us to investigate knowledge configurations of B2B SME internationalizing with meagre resources, from an underprivileged home-setting, at the periphery of the ICT industry.

The research objectives of this study can therefore be summarised as: 1) to explore the knowledge configurations of B2B ICT SMEs internationalizing with meagre resources from such a home-setting, 2) given that these have not been studied before, identify any novel empirical regularities that could enhance the extant theorizing in this area, and 3) develop respective recommendations on the basis of this new found knowledge.

The rest of the paper is organized as follows. In the next section we review the relevant literature. In the methods section, we discuss further our research context and why it is particularly pertinent along with our qualitative research design and analysis. In the penultimate section we detail the main findings concerning the knowledge configurations of our SMEs. We conclude by discussing some key areas for further research and the implications of our study.

2. Literature review

Internationalizing SMEs need different kinds of knowledge (Johanson & Vahlne, 1977). Satisfying this need requires the pursuit of multiple forms of knowledge acquisition (Autio et al., 2000; Eriksson, Majkgård, & Sharma, 2000; Fernhaber, McDougall-Covin, & Shepherd, 2009). By conceptualizing internationalization as a process of organizational learning and knowledge development (Autio et al., 2000; Eriksson et al., 2000; Johanson & Vahlne, 1977, 2009) a range of knowledge configurations have been explored in the literature (Fletcher & Harris, 2012; Hilmersson, 2014; Huber, 1991).

There is, thus, a history of attempts to classify knowledge configurations pertaining to SME internationalization with varying degrees of specificity. These range from the forms of knowledge specific to new international ventures (Park, LiPuma, & Prange, 2015), to the finer types of experiential knowledge in incremental internationalizers (Eriksson et al., 2000; Hilmersson, 2014), and the differentiated learning mechanisms of early versus late internationalizers (Schwens & Kabst, 2009). The Fletcher and Harris (2012) framework is adopted in this study as it:

a) has been used successfully with cases of internationalizing ICT SMEs,

- b) not only does it classify the knowledge types popularised in the extant literature but also intersects them with an adequate set of source categories, and
- c) has been demonstrated to be able to identify "knowledge content and sources that are critical for internationalization, but that may be absent" (Fletcher & Harris, 2012: 631).

The framework was developed by drawing extensively on Huber's (1991) conceptualisation of knowledge acquisition. It synthesizes insights from SME internationalization and organizational learning to identify knowledge configurations. These can comprise three types of knowledge (technological, market, and internationalization) and five categories of sources (direct, vicarious experience, grafted experience, external search, and internal information). The importance of these knowledge types in SME internationalization from developed economies is well documented (e.g. Deligianni et al., 2015; Sullivan & Marvel, 2011; Voudouris et al., 2011; Weerawardena et al., 2017). They are discussed next in turn.

Technological knowledge confers firm-specific advantages in developing and adapting products and services that are transferable across borders (Kogut & Zander, 1993). Technological knowledge also includes organizational awareness of technological change across the broader market, and the relative position of competitors, thus informing positioning (Sullivan & Marvel, 2011). A growth in the organizational stock of technological knowledge will result in enhanced products and services, creating new opportunities both at home and abroad (Dhanaraj & Beamish, 2003; Oviatt & McDougall, 1994; Zahra, Ireland, & Hitt, 2000). Technological knowledge has been shown to be related positively to international diversity and high-control entry modes (Zahra et al., 2000: 944).

Market knowledge is specific to each host market, including knowledge of potential customers, distribution channels, institutions, legal and regulatory conditions, and risks (Burgers, Van Den Bosch, & Volberda, 2008; Johanson & Vahlne, 1977, 2009). A growth in the organizational stock of market knowledge will reduce uncertainty and risk (Fletcher & Harris, 2012), assist in exploiting growth opportunities (Wiklund & Shepherd, 2003), and help to better respond to market needs (Deligianni et al., 2015). Market knowledge has been shown to be related positively to variations in the experiences a firm has with different entry modes (Descotes & Walliser, 2010).

Internationalization knowledge (IK) is a firm-specific ability to understand and pursue multiple international opportunities (Blomstermo, Eriksson, Lindstrand, & Sharma, 2004). It assists in screening foreign markets, evaluating partners, and managing FDI (Prashantham & Young, 2011; Welch, Benito, & Petersen, 2007). IK has been shown to be related positively to variations in the experiences a firm has in different markets (Barkema & Vermeulen, 1998). It is formalised/codified in principles for evaluating and targeting new internationalization opportunities in general, as evidenced by enhanced organizational routines during subsequent market entries (Eriksson et al., 2000; Fletcher & Harris, 2012; Prashantham & Young, 2011). IK development is thus costly (Eriksson et al., 1997: 340) as it requires the transformation of situation-specific experiential knowledge into codified principles and effective organizational routines (Prashantham & Young, 2011). IK development is often enabled by expensive sources such as consultants, lawyers, new senior appointments, and/or government advisors, as reported in Fletcher and Harris (2012) and Fletcher et al. (2013). Such costs are further inflated by the time/effort needed to 'unlearn old IK' and in general by the need to maintain strategic alignment with an ever-evolving base of IK, which requires on-going investments (Autio et al., 2000; Fletcher et al., 2013; Fletcher & Harris, 2012; Prashantham & Young, 2011; Weerawardena et al., 2017).

Our discussion of IK already touched upon the first category of knowledge sources; namely *direct experience*. In SMEs this tends to originate from the owner (or senior management team's) previous international career, education, or business venture (Madsen & Servais,

² At the time an SME in Tunisia was defined as having less than 300 employees and/or USD 3,000,000 in assets (Conseil du Marché Financier, 2006).

1997). However, as introduced above, experiential knowledge is situation-specific (e.g. country, mode of entry), which makes it costly to develop and may impede its transfer (Eriksson et al., 1997: 340).

Vicarious knowledge acquisition refers to learning from the experience of others, for example through networking, licensing or joining export clubs. Networking provides an entry point for many SMEs and especially so for ICT ones (Coviello & Munro, 1995, 1997). However, some vicarious knowledge may be firm-specific and difficult to integrate with existing routines (Miner, Michael, Ciuchta, & Yan, 2008). Although SMEs internationalizing from developed economies utilise social networks (Kundu & Katz, 2003), the regional and/or cultural networks located in developing economies provide limited vicarious knowledge (De Clercq, Danis, & Dakhli, 2010; Menzies, Brenner, & Fillion, 2003). Even when vicarious knowledge may be available in these networks, the benefits to an SME may be denied or limited due to underdeveloped networking skills and behaviours (Tang, 2011), or by the tendency of dominant network members to appropriate a greater share of the created value (Pérez & Cambra-Fierro, 2015). In the absence of knowledge support in the home country, expensive formal external searches and time intensive codification of internal information may be eschewed in favour of a continued reliance on personal networks for market knowledge (Kiss & Danis, 2008). Vissak, Zhang, & Ukrainski (2012: 353) reported examples of SMEs originating from developing economies with deficiencies in (experiential) market knowledge that thrived when entering the market of developed economies. When seeking to access more developed markets, well-funded SMEs may invest in grafting knowledge to augment limited market and internationalization knowledge (Vissak et al., 2012).

Grafting knowledge involves recruiting experienced professionals or acquiring overseas business units through foreign direct investment (FDI). Recruitment is a potential source of grafting knowledge, but experienced international managers are costly and often prefer working in larger organizations (Li, 2008).

External searched knowledge is acquired from codified sources found by scanning the external environment. Such sources are crucial for internationalizing firms with limited experience (Casillas et al., 2009). In the absence of other sources, government advisors and consultants can provide this knowledge, but their contribution is context dependent (e.g. given prior experience or political preference for particular products, countries, or markets).

Internal information is to be found within the boundaries of a firm; e.g. residing and/or developed by its staff and systems (Borrás & Tsagdis, 2008; Huber, 1991). The ability of owners and/or managers to identify and make use of internal information sources is dependent upon communication, interpersonal relations, and ‘knowing who’ may have the requisite information or experience (Karlsen et al., 2003).

Thus SMEs internationalizing from developing economies are known to face severe knowledge shortcomings (Ibeh & Kasem, 2011; Nguyen et al., 2013; Thai & Chong, 2008; Yamakawa et al., 2008; Zhu et al., 2007). Often they cannot access knowledge sources at home due to hostile and/or malfunctioning domestic markets, state owned enterprise (SOE) bias, government censorship of foreign information, constrained access to libraries and information centres, prohibitively expensive Internet costs, and in general, knowledge-poor environments (Nguyen et al., 2013; Thai & Chong, 2008; Yamakawa et al., 2008). Accessing knowledge sources at home (e.g. business groups, or local government policy makers and advisors) requires the development of networks, aligning with the government (Zhu et al., 2007), and may even entail relocation (Nguyen et al., 2013). If the domestic transaction costs exceed the costs of crossing national borders, then SMEs in developing economies may seek more “efficient institutions” abroad (Boisot & Meyer, 2008: 349). For instance, by attending international industry exhibitions, by forming international joint ventures, and in general, through successful and unsuccessful relationships with (potential) non-domestic knowledge sources (Ibeh & Kasem, 2011; Yamakawa et al., 2008).

Internationalizing with severe knowledge shortages can force the founders of such SMEs to manage their businesses “autocratically”; with short-term survival shaping their internationalization choices, and their “managers [to] operate with far less information than managers in other countries would tolerate” (Thai & Chong, 2008: 94ff). Such SMEs need to create a series of temporary competitive advantages (i.e. value for their customers and owners) that allow them to maintain an active engagement with internationalization and the inflow of knowledge that they may be otherwise unable to source (Zhu et al., 2007).

Although the above studies provide some valuable insights into the knowledge and learning of SMEs internationalizing from developing economies, they do not go as far as detailing the knowledge configurations of their focal firms. Establishing this required a different kind of study as detailed in the following section.

3. Research methodology

3.1. Research approach and generalizability

The methodological literature suggests the use of qualitative research, and case studies in particular, for theory development; whereas quantitative research is used for theory testing (Eisenhardt & Graebner, 2007: 26; Tsang, 2014: 373). As the critical review of the literature in the previous section identified, there seems to be no fully-fledged theory of the knowledge configurations in (*knowledge-intensive B2B*) SMEs internationalization (*from developing economies*) that is ripe enough for testing. This holds true even if its qualifiers (in *Italics*) are suspended.

What the literature review revealed instead is a growing interest from several quarters, including: international business (Fletcher & Harris, 2012) and non-linear internationalization (Vissak & Francioni, 2013), international entrepreneurship and ventures (Park et al., 2015), dynamic capabilities and growth-strategies (Deligianni et al., 2015), and industrial marketing (Lindsay et al., 2017; Weerawardena et al., 2017). Each contributes its own research design (e.g. longitudinal, cross sectional, ethnographic), lenses (e.g. network theory, institutional theory, resource based view), and theorizing³ about this complex phenomenon.

This study therefore goes beyond differentiated replication (as per Uncles & Kwok, 2013: 1399ff) to find mechanisms used by our sample firms to compensate for the lack of knowledge configurations reported in Fletcher and Harris (2012). Had a mere differentiated replication or quantitative testing of extant theorizing been adopted (instead of our qualitative exploration), then these would have been impossible. That is, our findings aim to fill the aforementioned gap (as introduced in Section 1), and enhance the extant theorizing (as reviewed in Section 2).

We side with (Davies, 1999: 91) in our pursuit of *theoretical generalizability* by generalizing our findings in the context of the extant theorizing. So that the *reader* can “make inferences about extrapolating the findings to other settings” (Polit & Beck, 2010: 1453) we provide a detailed description of: a) our empirical setting (discussed next), b) the characteristics of the focal SMEs and their internationalization (in Table 1), and c) how the SMEs in our sample compare with the population (in Section 3.3). These aid in deciding the extent of within-population generalization. As the population of SMEs internationalizing from developing economies and their characteristics are unknown, it is impossible to provide similar aids to cross-population transferability.

Nonetheless, the review of the nascent literature of SMEs internationalizing from developing economies identified a few empirical reports from other populations; e.g. in China (Tang, 2011; Vissak et al., 2012), Costa Rica (Lopez, Kundu, & Ciravegna, 2009), Turkey (Inemek & Matthyssens, 2013), Syria (Ibeh & Kasem, 2011), and Vietnam

³ Theorizing as a prequel to theory (Swedberg, 2016; Weick, 1995).

Table 1
Sample characteristics.

Firm	Age	Pre	TLE	Assets	En	Sn	F%	Internationalization pathway (chronological order)	HS
A ₄	10	0	5	300,000	60	7	70	1999 FDI (Rwanda), 2002 EXP (Cameroun), 2004 SUB (France/Africa)	1, 1, 3/1
B ₄	22	15	12	ND	55	5	60	1995 EXP (Mauritania), 1997 FDI (Libya)	1, 1
C ₅	6	3	1	170,000	25	8	65	2006 LIC (MENA), 2007 LIC (Europe, N. America), 2008 EXP (Cameroun)	1–2, 3, 1
D ₂	7	0	2	38,000	30	5	55	2002 SUB (France), 2005 EXP (France), 2007 FDI (France)	3, 3, 3
E ₁	12	0	7	50,000	15	6	40	1997 SUB (France), 2000 EXP (Algeria), 2002 FDI (Algeria)	3, 1, 1
F ₁	7	0	7	10,000	4	3	70	2002 SUB (USA)	3
G ₁	10	0	10	100,000	25	3	60	1999 SUB (France)	3
H ₁	12	0	12	200,000	10	4	55	1997 SUB (France)	3
I ₁	8	0	8	ND	55	2	90	2001 SUB (Germany)	3
J ₁	16	0	16	561,000	20	5	80 <	1993 SUB (France)	3
K ₁	4	3	1	50,000	4	2	20	2008 EXP (Oman)	1
L ₁	17	6	11	170,000	40	2	30	1998 EXP (Rwanda)	1
M ₁	4	0	4	60,000	150	5	30	2005 SUB (France)	3
N ₁	6	3	3	10,000	6	10	80 <	2006 SUB (France)	3
O ₁	7	0	7	ND	10	2	80 <	2002 SUB (France)	3
P ₁	2	0	2	ND	10	1	80 <	2007 SUB (France)	3
Q ₁	9	9	0	ND	6	1	80 <	2009 SUB (Germany)	3
R ₁	8	0	8	10,000	5	7	80 <	2001 LIC (France)	3
S ₁	8	7	1	30,000	15	3	80 <	2008 EXP (Morocco)	1
T ₁	17	0	17	ND	150	5	80 <	1992 SUB (France)	3
U ₁	20	19	1	ND	1	7	30	2008 SUB (France)	3
V ₁	8	0	8	50,000	5	10	60	2001 SUB (Canada)	3

Note: subscripts denote the number of interviewees; Age of the SME at the time of primary data collection; Pre(cocity): SME age at first entry; Time lapsed since Last Entry (TLE); Assets (TND) 2009 average exchange rate USD to TND 1.35; Number of employees (En); Number of ICT services offered (Sn); Percentage of sales to foreign markets (F%) for some SMEs only a rough indication was provided, namely below 80%; Host economy stage of development (HS); No data (ND).

(Nguyen et al., 2013; Thai & Chong, 2008), that seem to support the possibilities of cross-population extrapolations. That is, these studies indicate resource limits in home-settings that have led SMEs to apply differentiated strategies and leverage meagre sources and/or types of knowledge/learning while internationalizing. Furthermore, anecdotal empirical evidence (discussed in Section 5) suggests that users of our findings are able to recognize their transferability across rather differing populations “that may or may not be superficially similar to those studied” (Maxwell & Chmiel, 2014).

Reflecting the exploratory nature of the present study, and the absence of any previous work on the knowledge configurations of B2B ICT SMEs internationalizing from Tunisia (or other developing economies for that matter), a qualitative research design was developed. Our design focused on a single country and industry because the SME knowledge configurations, internationalization, and their settings are rather complex.

We opted for the ICT industry in particular due to: a) its key role in the Tunisian economy (as discussed next), b) the rich stock of prior ICT studies (Deligianni et al., 2015; Ibeh & Kasem, 2011; Moen et al., 2004; Nummela et al., 2004; Saarenketo et al., 2008) that delineate a useful backdrop for our theorizing, and c) the fact that ICT provides a direct entry point for internationalization. In other industries, the use of technology for market entry may be alien. There may also be a lack of shared technology platforms and absence of international standards that raise barriers to foreign market entry. This would add unnecessary complications that lie beyond the tasks at hand.

3.2. Research context

We conducted this study in Tunisia, a transitional democracy of approximately 11 million people, which obtained its independence from France in 1956. Prior to the 2011 revolution that led to regime change and free elections, the domestic market had been volatile and institutionally weak. It should thus be made explicit that primary data collection was carried between January and July of 2010; i.e. before the revolution and was unaffected by it. This is not to say that the period the data refer to was trouble free. That is, between 1987 (birth of the oldest firm in our sample) and 2010 (when data collection took place) there had been: a coup d'état, corruption, plundering of state funds,

joblessness (unemployment rarely below 14%), high prices, socio-economic unrest, counter terrorism measures, use of security forces to suppress protests, human rights abuses, suppression of media and humanitarian groups, legal system failures, low levels of FDI and GDP growth, crony capitalism and domestic market protection through barriers to entry (i.e. large domestic corporations with government ties have been dominating the domestic market), and the broader repercussions of the 2008 financial crisis (Human Rights Watch, 2008; OECD, 2012; World Bank, 2015; World Economic Forum, 2012). Moreover, during this period Tunisia was listed by the World Bank as a lower-middle income economy; and by the World Economic Forum as a stage 2: efficiency driven economy⁴ (World Bank, 2015; World Economic Forum, 2009).

Developing economies however, are not merely resource, institutionally, stability, transparency, or otherwise deprived (e.g. as introduced in Section 1). Instead it might be more insightful to consider that their endowments are rather imbalanced, inconsistent, or idiosyncratic.

Thus, although the above have plagued Tunisia, it also benefits greatly from its geographical position and its highly educated, low-cost workforce, who are often multilingual. It is also of note that in ICT services, the sector focused on in this study, labour costs can account for 80% of production costs (Neumann, 2006).

Although we did not find any assistance programmes targeting B2B ICT SMEs in particular; during the study period there have been a number of initiatives to aid the internationalization of Tunisian ICT SMEs. These include: the development of ICT infrastructure, provision of venture capital and finance, export promotion, and wider (including international) business development support. Neumann (2006) provides an overview of such programmes and suggests uncertain results for ICT SMEs.

Nonetheless, Tunisian ICT companies have been internationalizing during this period; mainly to Europe (France, Germany, and Italy), the

⁴ The World Economic Forum (WEF) classifies economies into three stages of development. Countries falling in between these three stages are considered to be “in transition” from one stage to the next (World Economic Forum, 2009: 11). Several studies, this one included, adopt the WEF classification system; for an example within the international entrepreneurship field see Kiss et al. (2012).

Middle East, and Africa. In particular computer, communication, and other ICT services exports accounted for about 30% of total service exports in 2010 (World Economic Forum, 2012). The contribution of the ICT industry to the Tunisian GDP has been growing for two decades, including an increasing share of sales abroad (Ministry of Communication Technologies and Digital Economy, 2015).

There have been a few studies of SMEs internationalizing from Tunisia and ICT ones in particular. Although none of them focused explicitly on B2B SMEs, nor explored their knowledge configurations, they provide some relevant insights. For example concerning the dominance of the mono-destination exporting tendencies of Tunisian SMEs (Koubaa & EpKoubaa, 2012) and the statistically insignificant relation of product complexity, managerial characteristics, attitudes, and environmental variables to the Tunisian SMEs entry model choice (Khemakhem, 2010).

3.3. Sampling

Our study adopted a purposeful (i.e. non-probability) sampling technique. We identified Tunisia and the ICT industry as key parameters for developing our sampling frame (as discussed in the previous section). This sampling technique was extended to the selection of participants. The usual criticism (cf. Saunders, Lewis, & Thornhill, 2012) of this approach to sampling is bias, and the fact that the extent to which the sample is representative of the entire population cannot be attested with a particular level of confidence. Sampling bias can cause the data (and therefore any results/findings) to differ (e.g. be skewed) from those of the entire population. The methodological advice when using purposeful samples, is to describe how the selected participants differ from a random sample that one could hypothesise (for the sake of such a comparison) to have been selected from the population. This is considered after the discussion of our sampling procedure (and there are respective supplementary material freely available upon request).

Thus, in line with prior studies of Tunisian SMEs engaged in internationalization (e.g. Bellouma, 2011; Zaiem & Zghidi, 2011) our study also used the CEPEX⁵ directory as a sampling frame. In the 2009 edition of the CEPEX directory 333 ICT SMEs were listed (CEPEX, 2009).

These were all contacted via email (with a reminder two weeks after the initial email) and 22 agreed to participate in our study. We decided to include them all in our study, as we wanted to theorize knowledge configurations on the basis of all available instances; instead of those that fitted some preconceived criteria. Their characteristics can be seen in Table 1.

Although our sampling method resulted in a 7% participation rate, it yielded sufficient variety for the purposes of this study. Moreover, sampling bias was tested against in the following manner. Quantitative comparisons between our sample and the population characteristics (e.g. age, assets, size in terms of employees, specialisation, ownership, and targeted markets) were undertaken (supplementary material available upon request). We found that, apart from having 60% fewer assets (an advantage for this study as we are interested in internationalizing SMEs with meagre resources), our 22 SMEs do not appear to differ considerably and/or consistently from the CEPEX population. Follow up calls were also made to 25 non-respondents whose characteristics fell inside as well as outside the sample's variety (e.g. too large, too international) seeking to rule out qualitatively any systematic bias.

⁵ Centre for the Promotion of EXport, is a governmental institution providing export assistance (e.g. information provision, promotion) for SMEs in Tunisia (www.cepex.nat.tn). Tunisian SMEs with exports are automatically listed to the CEPEX directory free of charge.

3.4. Data collection

Face-to-face semi-structured interviews were conducted with 33 owners/managers from the 22 firms listed in Table 1. Retrospective accounts were used as the main interview approach (Golden, 1992, 1997; Miller, Cardinal, & Glick, 1997) combined with key informant strategies (Rao & Perry, 2003). Owners/managers were initially targeted as the most likely persons to be knowledgeable about the firm operations and its knowledge acquisition efforts from birth.

Interview questions were informed by the literature and started by profiling the interviewees and their companies, progressing to open-ended questions about their internationalization, knowledge, and learning. Firm-specific documentation, relating to international operations (e.g. administrative documents, brochures, contracts, progress reports, newspaper articles and company websites) was also collected and studied. These helped to: develop general background information prior to an interview, better understand the firm products and services, obtain information on the history of the firm, and augment and validate the data collected through the interviews (e.g. overcome memory bias).

All interviews were conducted in French, in an area of the workplace where interviewees could not be overheard. As recommended by Guba and Lincoln (1994), all interviews were digitally recorded and transcribed. The average length of the recorded interviews was 90 min.

A pilot study was conducted with a handful of interviewees during which telephone and video-conferencing based interviews were also experimented with, and the pilot results were utilised to fine tune the primary data collection protocols. The fieldwork commenced six months after the pilot.

Five of our firms (A-E), selected on the basis of having more than one international market entry, were investigated at greater depth. In particular, their knowledge changes during their subsequent foreign market entries. For example, in four of them (see Table 1) additional staff members (e.g. general managers, marketing managers, technical managers, and senior engineers) were interviewed and additional documents were gathered and reviewed (e.g. past annual reports). The subscript next to each SME alias indicates the number of interviewees in each company. The interviews in these firms spanned approximately a month. Their recordings varied between three and 12 h; with saturation used to indicate the end of data collection in each case (Yin, 2009).

Given the focus on SME-elites, a single-respondent bias was unavoidable in some cases, albeit not particularly harmful, as it was ameliorated through the additional secondary and primary data sources. For example, in 18% of our SMEs (A-D) where more than one individual was interviewed (denoted by the subscript next to the SME alias), no single respondent bias was detected.

3.5. Data coding and analysis

The interviews were transcribed in French and sent to the interviewees for review and approval. They were then translated into English by the leading author (native-speaker). Another multi-lingual academic partner in Tunisia supported back translation. After a textual review, the transcripts and other secondary data were coded and entered to Nvivo7 and Excel for analyses.

Themes and codes originally gleaned from the literature (e.g. knowledge sources and types, mode of entry) provided a preliminary framework for the analysis. This allowed, as a first step, the mapping of SME internationalization (e.g. as summarised in Table 1), which alerted us that we maybe witnessing some atypical internationalization patterns (e.g. Alpha's FDI as a first entry a birth) and that thus we could expect some unusual knowledge configurations.

Still, nothing prepared us for finding no evidence of IK. At first we thought that the respective data might have been overlooked during coding. Thus, a different combination of authors coded the data for IK a second time, and still could not identify any terminology relating to IK as defined in our literature review. Being forced to accept the lack of IK

evidence raised two important questions: a) how could this be explained? and b) what do our firms use instead?

Answering these questions required the adoption of a systematic combining approach (Dubois & Gadde, 2002, 2014) familiar in IMM studies (cf. Aaboen, Laage-Hellman, Lind, Öberg, & Shih, 2016; Halineen & Törnroos, 2005). Systematic combining is a non-linear approach involving a number of iterations between framework, data, and analyses. Pursuing this placed additional emphasis on the five cases of ‘repeat’ internationalizers (i.e. those SMEs that had more than one entry) reported in Section 4.2.

We pursued both within and cross-firm analyses as well as comparisons with the literature in a non-linear manner. Within-firm analysis allowed us to delve into each SME knowledge configuration to explain how this came about, as well as the manner through which they compensated for their knowledge shortcomings and the absence of IK in particular.

Cross-firm analysis was applied to sets of firms (e.g. single vs. multiple foreign market entries, old/late vs. young/early firms/internationalizers, internationalizing to countries at the same vs. different stages of development, single vs. multiple product/service specialisations) in order to test the explanations developed by the within-firm analysis and to moderate their generalization (Dubois & Gadde, 2014: 1281). While both types of analyses were being pursued, any ongoing findings were contrasted with the literature. To that effect, it also needs to be clarified that the literature review (in Section 2) was finalised following the completion of the analyses.

4. Findings and discussion

4.1. Knowledge configurations

Table 2 summarises the sources and types of knowledge used by our SMEs during internationalization.

Starting with knowledge sources, our SMEs accessed four of the five sources indicated in Fletcher and Harris (2012). That is, internal information was not used as a source for any type of knowledge. The most frequently accessed sources were those of direct experience and vicarious knowledge. Both can be categorised as experiential, the key source firms are said to access when pursuing internationalization, and which also supports the validity of our findings.

Grafted experience and external search were only used by two firms (namely Alpha and Bravo). This is understandable, given that such sources are hardly affordable for most SMEs originating from developing economies. Upon closer inspection it appears that Alpha and Bravo are responsible for a large proportion of the identified patterns and could thus be construed as outliers. They will be further discussed in the following section (4.2).

Technological knowledge was the most frequently occurring type of knowledge in our sample. Having said that, market knowledge was the

most widely sought, as it was pursued from twice as many sources as technological knowledge. Customers were a major source of market knowledge, whereas contractors were the most common source of technological knowledge.

Looking at the resultant knowledge configurations as a whole, it appears that the majority of our firms develop their technological knowledge through vicarious experience, and that a significant minority relies in addition to direct experience. This situation is somewhat reversed when it comes to market knowledge. It appears that the majority of our firms develop their market knowledge through direct experience and that a significant minority relies in addition to vicarious experience.

Having provided an overview of the knowledge configuration patterns in our sample of SMEs, the somewhat simplistic argument could be made that IK did not develop because these firms made only a single foreign market entry, and that the five firms that had more than one entry are the exception that proves the existence of this rule. This is doubtful for several reasons. For one, there is empirical evidence from SMEs internationalizing from a developed economy that develop IK proactively; i.e. before they sell abroad (Fletcher & Harris, 2012). So, in principle, entry is not required to develop IK; just an intention of entry seems enough. The focal firm must also be able and willing to meet the high costs of IK as introduced in Sections 1 and 2. This maybe the case for SMEs originating from developed home-settings, but seems unlikely for their underprivileged-counterparts with meagre resources. This makes it pertinent to deepen our investigation of the five SMEs that had more than one foreign market entry.

4.2. Repeat internationalizers

The founders/owners of the repeat internationalizers have been actively managing their SMEs (A-E) from inception. Their SMEs are at the lower end of the size scale, with a workforce between 15 and 60 employees. The owners have bilingual capabilities (French and Arabic), and most of them have ICT engineering backgrounds, and prior experiences/networks in France. Alpha and Bravo exhibit the richest knowledge configurations (as depicted in Table 2).

In line with the rest of our firms, these five firms were motivated to internationalize to increase revenues; using as their main advantages cultural and technical competences at low cost (i.e. leveraging their home advantages). Although counterfactuals are notoriously difficult to establish, it should stand to reason that for several of our firms (e.g. those with elevated share of foreign sales), sole reliance on the domestic market was simply not a viable option. They thus entered relatively proximate markets during their first entry, which was triggered by being alerted of an opportunity from the owner's personal network. Charlie is the only exception to this last cross-case pattern in that it actively sought to create an opportunity through developing a new network. Charlie also poses a further exception, as it is our only case

Table 2
Sources and types of knowledge.

	Technological knowledge	Market knowledge	Internationalization knowledge
Direct experience	Customers (A, B, D, E, G, I, L) Sales offices in host markets (A, B)	Customers (A, C, E, G, H, I, K, L, O, T, U) Prospecting (D, S) Sales offices in host markets (A, B)	
Vicarious experience	Contractors in host markets (C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, T, U, V) Partners in targeted markets (A, B) Licensees (R, C) Partners in home market (O)	Partners in targeted markets (A, B) Licensees (R, C) Contractor's network in host markets (E, H) ICT firms internationalization club (I) General manager's foreign network (A) General manager's local network (B)	
Grafted experience		Recruited director in host market (A) Recruited staff in host market (A, B)	
External search		Market databases and reports (A, B)	
Internal information			

where the same entry mode has been used more than once.

In the remaining paragraphs of this section we delve deeper into their cases using verbatim quotations to provide insights on the key dynamic interactions that have taken place in each case, and which resulted to the knowledge configurations (established in Section 4.1). In particular, the discussion will draw attention to their lack of IK, and conclude with a summary of what these SMEs used instead during their continued engagement with internationalization.

Alpha entered three different markets using a different mode of entry each time. This suggests that any IK that could have been developed proactively, or reactively, from each of these entries would have been of limited benefit as there is little that is generic across the markets and/or modes of entry. In particular, they internationalized at birth with an FDI to Rwanda to provide software as part of a successful bid by a French hardware company with which the owner of Alpha had prior experience. The general manager affirms:

'We made our first internationalization by chance through a French friend who brought us a deal in Rwanda...He trusted me and moreover we had technical knowledge of what we were asked for...We also speak French which helps us communicate easily with our customers. We decided to make a very small branch there to be a base for expansion to other countries in the region. The software developed in Rwanda had become a reference to show to potential customers elsewhere in Francophone Africa.'

So within three years they successfully exported to Cameroon, and two years later they signed a contract with the French company to provide such software to its customers in other African countries. Thus, developing IK seems redundant, as their first entry was by chance; their second entry utilised a different entry mode, while the internationalization nuances of their subsequent entries were taken care of by their French partners.

Moving to Bravo, which had 15 years of *'technical experience'* in its home market prior to its first export to Mauritania, and was triggered by an opportunity notified *'by a Tunisian friend'*. Prior to the notification of the opportunity they had never developed any IK, and upon notification of the opportunity the owner simply *'took the airplane and went to sign the deal'*. Two years later: *'we were solicited by potential customers from Libya... that operation was also pure opportunism like the previous one.'* Bravo, has not been actively seeking internationalization opportunities, not even after their first successful internationalization. This more than justifies their lack of developing IK proactively or reactively.

Delta internationalized at birth, and over a seven-year period it simply increased its control over the mode of servicing the same market. It entered France through a contract, improved its product/services through a customised website for potential French customers, and exports increased. A commercial branch (FDI) was then established to prospect more customers and seek sales in other European countries. Its owner stated: *'We started by subcontracting to learn and improve our financial situation to go to the next level: exporting. Having done that, we went to the third level, which is FDI. We are learning and growing.'* However, at the time of the interview, they had not developed any IK nor serviced any customers outside France. Given the relative success of deepening in the same market (55% of all sales) it would take a rather heroic argument to convince that the benefits of developing IK proactively or reactively could have outweighed its costs.

Echo started its internationalization also at birth, as a contractor to a French company due to some personal contacts. As a result, its technological knowledge got enhanced and over a three-year period its products and services got improved; to the point that Echo started exporting its products and services to Algeria with little product and/or organizational adaptation. As the Algerian market was growing, Echo subsequently altered its mode of servicing this market by opening a local branch. Although this greenfield FDI could be seen as more risky, it is also a more beneficial and controllable mode of servicing this growing market. As in the previous cases there seems little that Echo could have benefited from developing costly IK proactively or reactively.

Last, but not least, Charlie is somewhat exceptional as it is our only firm not to be using pre-existing social and business networks, but creating new ones for each entry as well as the only one to have used the same entry method more than once. Thus, it had the potential to benefit from the development of IK. That is, Charlie's case held the key to understanding why even firms with more than one entry do not develop IK even when theoretically it may appear cost-effective to do so. The answer lies in the combination: a) of good knowledge of the product/service offerings and the organizational arrangements that make them possible, b) aided by the fact that these are relatively standardized products whose final customers around the world are culturally similar, and perhaps most importantly, c) by the owner's centralization of decision making powers on all matters pertaining to internationalization and their direct and often sole involvement in initiating and/or completing entry. In the case of Charlie, every entry was preordained by the owner visiting international exhibitions, meeting the potential licensees and importers, and negotiating the terms. After that, given the adopted entry mode, it was mainly the licensees and importers that had to undertake the bulk of the work, leaving Charlie to manage the internationalization process by exception. Thus, the proactive and/or reactive development of IK in Charlie's case would have incurred unnecessary costs.

Following this key realisation, it was possible to see a similar pattern in all of our repeat internationalizers. For example, it was the owner that got notified (A, B), that got on the plane the next day (B), that had developed the product on the basis of which the first foreign entry was made (D, E).

So, if we were to summarise some of the key patterns and insights from this study, it appears that the development of IK may be counterproductive in cases where firms target one or a few markets and/or do not use the same entry mode more than once. Moreover, it appears that firms can maintain an active engagement with internationalization, even in the absence of IK. Therefore, we posit that it is possible to make up for knowledge shortages and in particular the absence of IK by:

- 1) Centralizing strategic and operational internationalization decisions to the owner/CEO. Reducing the demand for IK any other staff may have had if internationalization decisions were decentralized to them, while also reducing uncertainty for the firm as a whole.
- 2) Having CEOs/owners with extensive knowledge of the products/services and the arrangements involved in their production. It helps if products are standardized, but as our cases illustrate, given the right owner/CEO background this can also work with highly customised products. This also ameliorates any unforeseen side effects of (1).
- 3) Developing niche strategies using modes for entering and servicing the foreign markets that do not require extensive and/or on-going owner/CEO input; so that 1 and 2 above can be maintained indefinitely and inexpensively.
- 4) Following international (technological) standards. That is, making this kind of knowledge part of the company's lifeworld, and thus also reducing uncertainty as well as aiding 2 and 3 above.
- 5) Having social and/or professional networks the CEO/owner can trust (and vice versa) and/or operating in markets where the owner/CEO trusts third party enforcement (i.e. substituting IK with trust in social and/or formal relations).
- 6) Leveraging home advantages (such as low cost labour, cultural competencies) and available knowledge configurations to compensate for internationalization and/or other knowledge shortcomings.

5. Future research directions and limitations

Our study offers several new and viable avenues for future research of context-specific and practice-oriented studies of B2B internationalization knowledge. Starting with the prevalence of mono-destination/single entry internationalizers, which (as introduced in Section

3.2) has been identified in previous studies (e.g. Koubaa & EpKoubaa, 2012). This does not pose a particular limitation of our design. Such SMEs could have been excluded from our study, however, this would have been an arbitrary methodological decision, that would have resulted in omitting something integral to the research context and the manner in which SMEs from this context internationalize. Various reasons have been conjectured for this mono-destination/single entry empirical regularity, ranging from culture to resources (Koubaa & EpKoubaa, 2012; Marchesnay, 2011). Obviously some further research in this area is needed, which should also take into account the following.

The dominant perspective in this study has been knowledge/learning (resource-based) (Kuivalainen, Puumalainen, Sintonen, & Kyläheiko, 2010; Westhead, Wright, & Ucbasaran, 2001); with the relational/network perspective (Chetty & Blankenburg Holm, 2000; Coviello & Munro, 1995, 1997; Ibeh & Kasem, 2011; Moen et al., 2004) playing a more minor role. That is, where we felt the role played by social relations and/or business networks made a difference to our findings and theorizing, we made that explicit (e.g. cases A-E, with regards to IK compensation). Nonetheless, given our main focus on knowledge, the dominance of a knowledge perspective seems defensible in this study as a first step. Still, we are aware of the beneficial insights additional and multiple perspectives could bring; e.g. a combination of knowledge and network perspectives as in Sandberg (2014) and/or combining industry-strategy-institutional perspectives as in Yamakawa et al. (2008). Thus, we can foresee benefits in subsequent steps, from future studies in the areas detailed in this section, that combine such additional perspectives and/or from the experimentation with different dominant ones.

Although this study did not focus on the role played by policy, it surfaced during the interviews that three of our SMEs (A-C), received both hard (e.g. finance to attend international exhibitions) and soft (e.g. market information) policy support. They claimed that such policy support was very helpful, and had there been more policy support, they could have been able to further expand their activities abroad. As these three SMEs employed between 25 and 60 members of staff and made 60–70% of their sales in foreign markets, this provides some evidence, as suggested by Durmuşoğlu, Apfelthaler, Nayir, Alvarez, and Mughan (2012), that SMEs of these sizes can participate in such programmes with some positive results. Nonetheless, uncertainty still remains for SMEs at the smaller-end of the size spectrum (European Commission, 2015: 68; Neumann, 2006). Thus in line with Durmuşoğlu et al. (2012), further research is suggested with a more explicit focus on SMEs to establish their ability to benefit from policy support, as well as the kind of policy support that may be better suited to their predicaments.

The lack of IK evidence suggests that the notion itself needs to be problematized and placed under the microscope. It may be the case, somewhat contrary to the extant theorizing (e.g. Eriksson et al., 2000; Fletcher & Harris, 2012; Prashantham & Young, 2011) that IK may be tacit, and thus less costly, but still useful. Further research is thus suggested in tacit IK varieties. In general this study adopted the Fletcher and Harris (2012) framework that makes use of a rather coarse knowledge classification schema. Although not a limitation for this study, investigating the knowledge types popularised as pivotal in the extant theorizing we reviewed a number of finer classification schemes (e.g. Hilmersson, 2014; Park et al., 2015) that could be utilised in subsequent studies investigating more nuanced understandings of each knowledge type. For example, three of the four finer types of experiential knowledge identified by Hilmersson (2014: 813), namely: institutional, business, and social network knowledge can act as indicators of a firm's liability of foreignness, outsidership, and psychic distance providing a direct interface to the area of further research discussed next.

This study also encountered some interesting empirical regularities concerning the foreign market locations during first entry. For example, France (of which Tunisia was a former colony) with its large market,

familiar language and institutions has been, unsurprisingly, by far the most popular first foreign market entry destination (by D, E, G-H, J, M-P, T). Nonetheless, France only accounts for 50% of our firms' first market entry destination (i.e. no better than chance if these were to be decided by the toss of a coin). There were thus some notable exceptions. For example, Alpha's FDI in Rwanda as its first foreign market entry, or the US and Germany as the first entry destination for subcontracting by F and I respectively. We know that psychic distance applies at the level of the decision maker, and is a synthetic concept relating to cultural, structural, and language differences (Johanson & Vahlne, 2009; O'Grady & Lane, 1996). Outsidership on the other hand, is a firm level concept relating to a network of relationships (Johanson & Vahlne, 2009). In the case of SMEs, and our SMEs in particular, there is an extensive overlap between the individual and firm levels. Thus, further research is suggested on the interplay of these levels, the entrepreneur's perceptions of outsidership and psychic differences. Moreover, such research is also likely to provide useful insights for the demarcation of the relevant geography; as in the Born Global versus Regional debate (Lopez et al., 2009).

Finally, this study focused on a single home-country and industry context. In other industries, the use of technology for market entry may be alien, and there may be lack of shared technology platforms and absence of international standards that raise the barriers to foreign market entry. Moreover, other home-countries may have differing predicaments, history, and geography. As no two countries are the same Becker's (1990: 240) seminal work needs to be kept in mind, suggesting that the generalization of our findings is not about if the knowledge configurations in (knowledge-intensive B2B) SMEs internationalizing (from developing economies) are the same or vary in some manner that may be predicted on the basis of our theorizing. Instead the value in the generalization of our findings is about how variations in home-settings (e.g. levels of stability, resources, security, safety, development) create (unusual) knowledge configurations and (atypical) forms of internationalization (in terms of the extant theorizing), give birth to (idiosyncratic) solutions to compensate for knowledge shortages (and in general reduce uncertainty) while maintaining a continued successful (e.g. in terms of firm viability and share of revenues from exports) engagement with internationalization. These radically different cases (when measured up against the extant theorizing) produce enriched cognitive schemas that allow for "intellectual generalization even when settings are radically different" (Donmoyer, 2008: 372).

The feedback to earlier versions of this paper from a number of international audiences in France, Japan, the UAE, the USA, and the UK (MacVaugh, Mejri, & Tsagdis, 2014; Mejri, MacVaugh, & Tsagdis, 2015, 2016; Tsagdis, 2016; Tsagdis, Mejri, & MacVaugh, 2016a, 2016b) suggests that our findings can be extrapolated to the SME experiences from a number of industries and developing economies (e.g. traditional carpet making in Bangladesh, clothing in Colombia). Obviously, such impromptu and informal accounts can be no substitute for rigorous research. Thus, we cannot but suggest further research in this area across multiple industries and developing economies so to enhance the value in the generalizability of our findings.

6. Conclusions and implications

This paper answers ongoing calls to study SME internationalization from developing economies at a greater depth (Ibeh & Kasem, 2011; Kiss et al., 2012; Zahra & George, 2002). It provides one of the first accounts of the knowledge configurations of internationalizing (knowledge-intensive B2B) SMEs from a developing economy. These SMEs internationalize in the face of liabilities relating to their home-specificities, in the absence of IK held as fundamental so far (Fletcher et al., 2013; Kuivalainen et al., 2010) and in general with meagre access to knowledge sources.

Our study makes some of the first steps in redressing the limitations of extant theorizing by demarcating a space for the study of these

businesses. This is also why we embraced a maximum diversity approach to our sampling instead of theoretical sampling that relies on a fit with pre-conceived theoretical categories. As the research progressed, it became clear that in actual fact SMEs with knowledge shortages are the majority rather than the exception, at least, in our sample.

We found that our SMEs accessed few sources of knowledge and developed even fewer types of knowledge. In particular, none of them: a) used internal sources of information for achieving internationalization goals, b) used grafted experience and external search to acquire technical knowledge, and c) developed IK. Customers were the most common source of market knowledge, and together with contractors (in the respective host markets) the most common sources of technological knowledge.

Our repeat internationalizers (A–E), accounted for a large proportion of these patterns so we decided to investigate them further. We argued that developing IK proactively or reactively, given their internationalization history, would have been more of a cost and less of a benefit. We also delineated the mechanisms they used to compensate for their knowledge shortcomings (e.g. centralizing decision making, leveraging home advantages, trust).

We found that most of our firms remain in much the same nascent internationalization phase many years after first entry. The few that progress in their internationalization often do so on a quasi-serendipitous basis. Still, none of our interviewees indicated that they were unhappy with the results of their internationalization.

Therefore, our findings carry some implications for IMM theory/research, practice, and policy. Concerning theory/research, the limits of the extant theorizing were identified throughout this study and the way it needs to be augmented to take into account our findings was discussed. A mechanism was proposed to compensate for knowledge shortages and IK absence in particular. Moreover, a number of viable avenues for further research were delineated in the previous section.

Moving to IMM practice, owners/managers could vary the position of their SMEs in the trade-off between costly knowledge development and internationalization. This could prove beneficial in certain markets, which may not provide the high returns to justify the requisite knowledge development costs. In particular, for SMEs with meagre resources in underprivileged home-settings and/or at the periphery of their sector, the implication is that they can compensate for knowledge shortages and choose a position in the aforementioned trade-off that ensures a suitable knowledge flow to their organization. As we demonstrated, a number of idiosyncratic positions in these trade-offs are viable; as long as a dynamic linkage is maintained between the knowledge configurations (which could be missing several types and sources) of a firm and its continued engagement in the internationalization process.

There are also thus implications for policy makers. Even in developed economies the extent to which the smallest firm sizes benefit from a rather extensive and rich range of internationalization policy measures is still uncertain (European Commission, 2015: 68). We thus wish to suggest a more explicit policy focus on finding ways to help SMEs leverage their existing knowledge configurations more efficiently and effectively.

Finally, we wish to conclude this paper with a message of hope to aspiring entrepreneurs and policy makers around the world in that our study finds that it is viable for SMEs to internationalize with some measure of success (e.g. 56% of foreign sales on average across our sample), even in the face of severe (firm and home) liabilities.

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Understanding the Relationship between Language Ability and Plagiarism in Non-native English Speaking Business Students

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Abstract Despite a continued focus exploring the factors related to plagiarism, the relationship between English language ability and plagiarism occurrences is not fully understood. Multiple studies involving student or faculty self-reporting of plagiarism have shown that students often claim English language ability is one of the main reasons why they commit plagiarism offences; however, little research has tested these claims in a rigorous, quantitative manner. This paper presents the findings of an analysis of data collected in a private, international university located in Vietnam, from non-native English speaking students studying business degrees. Analysis of the data builds on previous studies by showing that there are statistically significant differences in the English language abilities of students who have previously committed plagiarism offences, compared to students who have not, suggesting that programmes designed to improve the academic English skills of non-native English speaking students may help reduce incidences of plagiarism.

Keywords Plagiarism · Academic misconduct · English language ability · Non-native English speaker (NNES) · English as a second language · Turnitin

Introduction

Over the last several decades, there has been a clear rise in the number of overseas students studying in international universities (Burns 1991; Verbik and Lasanowski 2007), as well as an

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increasing number of private offshore universities offering degrees accredited by foreign institutions in overseas countries (Altbach and Knight 2007). Due to this growing internationalisation of higher education, all institutions need to be aware of the different needs that students who are non-native English speakers (NNES) have when compared to the needs of native English speakers (NES) when studying in an academic environment where English is the language of instruction and assessment (Miller and Endo 2004; Reid 1987).

Coupled with these required changes is the problem of student plagiarism in these groups, particularly a lack of understanding as to the factors that lead to NNES students engaging in plagiarism behaviours. As a number of studies (detailed below) suggest that there is a suggested link in the literature between English language ability and plagiarism, any institution which has NNES students enrolled in its programmes must be aware of these links, and take steps in order to support and educate these students to ensure that plagiarism incidents are minimised wherever possible. We do not suggest that simply because a student is a NNES that they are more likely to plagiarise, but it is more likely that there will be a wider range of English language abilities in this group of students when compared to NES students.

By clearly identifying the relationship between English language ability and plagiarism amongst NNES students, this research sets out to assist institutions who have populations of NNES students present. In doing this, we demonstrate that students whose English language abilities are weak may require more support in this area if institutions are to help them avoid the pitfalls of plagiarism and be successful in their academic journeys. In order to do this, this research explores the case of an offshore private institution where English is the language of instruction. We present the statistical analysis of data which the institution has collected as part of its plagiarism reduction initiatives, including the English language ability of students. This data is then matched to student records of plagiarism to explore whether there is a difference in the English language abilities of students who plagiarise compared to students who do not plagiarise. We begin by presenting the current state of the literature in this area to highlight the need for further research, before detailing the methods and results of the present study.

Literature Review

Before we explore the factors leading to plagiarism occurring, we must first explain what we mean by this term. Although authors including Bennett et al. (2011), Park (2004) and Mozgovoy et al. (2010) have presented detailed categories of what constitutes plagiarism, for the purposes of this study, we define plagiarism as ‘the act of submitting an assignment that belongs partially or completely to somebody else without due reference’. For the purpose of the data analysis, a plagiarising student is one who, at some point during their study, has had one or more pieces of work identified as worthy of investigation under suspicion of plagiarism, and has been found guilty of this offence by an academic misconduct panel. This plagiarism may be a deliberate, transgressive attempt to gain an unfair advantage, or an accidental, non-transgressive offence which has occurred due to either a lack of knowledge or misunderstanding of the relevant rules and conventions of academic writing. As it is not possible to determine with any degree of confidence which type of offence has occurred during the plagiarism investigations, we do not differentiate between these two categories of plagiarism in this study.

A number of empirical studies, both quantitative and qualitative, have sought to identify the factors which may cause students to be accused of plagiarism, regardless of intent. Excluding the English language ability of students, these factors include:

- Poor time management/procrastination
- Fear of failure/pressures to succeed
- Wish to improve grades
- Personal/family problems
- Lack of knowledge of referencing/plagiarism policies
- Misunderstanding as to what constitutes plagiarism
- Attempting to keep up with the demands of instructors
- Lack of understanding of, or interest in the material
- Likelihood of being caught or penalties being applied
- Not considering plagiarism to be a problem
- Broader cultural views relating to plagiarism
- Personality traits
- Level of study and academic integration in the university
- Ease of accessing online materials
- Gender

The above list is a summary of the factors shown to have had some effect on students' propensity to plagiarism and is drawn from Batane (2010), Bennett (2005), Currie (1998), Fazel and Kowkabi (2013), Flowerdew and Li (2007), Goh (2015), Guo (2011), Hensley et al. (2013), Howard et al. (2010), Jones (2011), Martin (2011), Martin et al. (2011) Okoro (2011), Payan et al. (2010), Pecorari (2003, Pennycook (1996), Stowers and Hummel (2011), Walker (2010), and Walker and White (2014).¹ Regarding English language ability, this has been highlighted by multiple authors as a potential factor which is related in some way to plagiarism offences, especially in NNES students.

In research carried out in institutions where NNES and NES students are jointly presented in the studies, language abilities appear as one reason behind plagiarism, but not the primary reason (Goh 2015; Walker 2010). However, when the focus of the discussion relates to NNES students, the primary reason given for plagiarism occurring appears to be the lack of language ability (Currie 1998; Bretag 2007; Chen and Ku 2007). While it is not in the scope of this paper to identify causal factors, it is possible to hypothesize reasons that may contribute to this relationship. Jones' (2011) research for example, found that a lack of understanding and inability to comprehend information was a contributing factor in both unintentional and intentional plagiarism. It is therefore possible that a lower ability in the target language correlates with a lower ability to comprehend and understand information. This may lead to students engaging in transgressive, deliberate plagiarism by engaging in contract cheating/passing off the work of others as their own, or alternatively, to unintentional plagiarism through a lack of understanding of academic policies and regulations. Identifying causal factors, through fraught with difficulties, is therefore a promising avenue for future research.

Studies which have explored plagiarism with specific reference to NNES students and found a negative relationship between levels of English language ability and plagiarism

¹ Although we will not discuss these other factors in more detail here, for a thorough review of the broader plagiarism literature see Pecorari and Petrić (2014).

include Bretag (2007), Li (2015), Pennycook (1996), Marshall and Garry (2006), and Chen and Ku (2007). However, many studies exploring this relationship are based on self-reported data from both students (Goh 2015; Jones 2011) and faculty (Abasi and Graves 2008; Bretag 2007; Li 2015; Walker and White 2014). Attempting to unpick any direct relationship between language ability and plagiarism in this way is challenging for three reasons. Firstly, there are methodological limitations to asking faculty to provide reasons for student plagiarism, as it is not possible for faculty to know with any degree of certainty why a particular student has engaged in plagiarism. Secondly, if a student is asked to provide explanations of why they have committed plagiarism, the social desirability bias may persuade the student to explain this as a language/understanding issues, when the real reason may be related to other factors explored above. Finally, in studies where the language abilities of student have not actually been tested, explanations from students that low levels of language abilities are a factor behind plagiarism may represent a lack of confidence in using academic English as opposed to a lack of ability: a student may have sufficient language skills to create an assessment without any assistance, but if they are not confident in their skills, they may be more likely to seek out alternative methods of completing assignments.

All of the studies identified above have found a generally negative relationship between English language ability and plagiarism, however Soto et al. (2004) found a positive relationship between these factors. They performed a chi-square test of independence in order to analyse relationships between plagiarism in student submissions, and responses to demographic questionnaires, and found that NES students were more likely to engage in plagiarism than NNES students. The reason why NNES students engaged in less plagiarism was explained as a lower level of ability in 'blending their writing with improperly paraphrased technical text' (p. 47). Although this study explored differences in levels of plagiarism between NES and NNES speakers, it did not seek to directly test differences in English language abilities, but relied upon the categorisations of whether students spoke another language at home, or whose first language was not English as a proxy for whether or not a student was a native speaker of English. As multilingualism is certainly not a factor which we are suggesting is associated with plagiarism, we do not accept this as suitable evidence of the suggested negative relationship between language and plagiarism.

Following our review of the current research, we have noticed a number of gaps in the literature. Firstly, there appear to be no studies which have specifically sought to explore the relationship between language ability and plagiarism as a key research objective. All studies presenting any links between language abilities and plagiarism do this as one of a number of factors associated with plagiarism. Although this is helpful in gaining an overall understanding of the factors relating to plagiarism, without collecting the appropriate data relating to how English language ability affects plagiarism, it is difficult to carry out a rigorous analysis of this particular factor. Pecorari and Petrić (2014), highlight the focus in plagiarism-related research to use qualitative research methods rather than quantitative research methods to explore this area. After carrying out our review of the literature, we find this statement to be true, and see that the number of studies which use statistical techniques to explore the relationship between English language ability and plagiarism is extremely small. This suggests that the field could warrant being explored more thoroughly from the quantitative methodological perspective. With the exception of Soto et al. (2004) discussed above, we have identified no other studies using a quantitative approach, suggesting that the relationship being explored is not as clearly identified in the literature as it could otherwise be. Finally, none of the identified studies have used direct assessments of the English language capabilities of students in their research.

Instead, they use proxies of whether a student is a NNES as opposed to a NES (Soto et al. 2004), an international student as opposed to a home student (Walker 2010) or self-reported language difficulties (Goh 2015; Jones 2011). Without having objectively measured the English language ability of students, it is not possible to correctly identify any relationship between this, and incidences of plagiarism, due to the high likelihood of measurement error having occurred.

Based on the above identified gaps in the literature, we seek to determine what relationship exists between plagiarism offences committed by students and their tested English language ability. In doing so, we provide three key contributions to the literature:

1. This study is the first to directly examine the relationship between English language abilities of students and plagiarism thus enabling a closer exploration of any relationships present.
2. In using statistical methods to test these relationships we offer a methodological contribution by taking a quantitative approach as opposed to a qualitative approach to this problem.
3. By directly testing the English language ability of the students in the study and comparing this to recorded university plagiarism data, we offer a more accurate analysis of any relationship which may be present, as well as not relying on potentially inaccurate self-reported student responses with regard to plagiarism offences.

Data Collection

British University Vietnam (BUV) is a private university operating since 2009 in Hanoi, Vietnam. The university offers a number of business-focused degree programmes which are awarded by British universities, including The University of London and Staffordshire University. The vast majority of students are Vietnamese nationals and Non-Native English Speakers (NNES). All students who begin a course of study have achieved an English language proficiency score, either an official IELTS preparation score, or an alternative English language qualification equivalent to an IELTS 6.0 with no sub-skill below 5.5.

In order to curb 'second-generation' plagiarism threats (Malesky Jr. et al. 2016), including ghostwriting, and to improve the English for Academic Purposes (EAP) skills of our students, BUV operates an Academic English Masterclass (AEM) module, compulsory for all students. This module focuses on teaching academic English skills including paraphrasing, locating and using sources effectively, and academic honesty. The module culminates in an exam under timed conditions, written by hand, and with the compulsory use of provided sources. As such, it is a wholly representative sample of their ability to utilise sources and synthesise information, as well as testing their grammatical and communicative writing ability.

This sample then acts as a 'control text' for comparison against future submitted assessments. While there may be discrepancy between a timed written exam and a long-form essay, and this is an acknowledged limitation of the initiative, comparison of the two texts as a 'fingerprint' is still revealing; ghostwritten papers tend to be markedly different in style, content, and expression. This therefore provides a degree of evidence (though not conclusive proof) either that the student is academically honest or has submitted plagiarised work.

These essays are marked with a framework inspired by, although different from, the International English Language Testing System (IELTS), produced under The British Council,

IDP Australia, and Cambridge English. This is then used to assign students a numerical score on a scale from 0 to 9. Further rationale for this system of grading is addressed in the discussion section of this paper.

The single numerical mark scoring system is essential in comparing submitted written work with work produced in the exam. As an example, if a student were to be assigned a mark of '4.0' in the controlled written assignment, yet submitted a piece of writing well above this level, at a '7.0' or above, this may be seen as reasonable grounds for suspicion of academic misconduct.

The marks of the AEM exam are then recorded by BUV's team of English for Academic Purposes (EAP) teachers in a database, marked and distributed to teaching faculty along with the marking criteria and rubric. Marking practices for consistency are employed, including group marking sessions, second marking practices, and regular training sessions.

Although these AEM exam results are used in order to detect any potential cases of contract cheating in the student body, for the purpose of this study, it is the AEM Assessment Scores which are relevant. Data relating to whether or not students have been found guilty of plagiarism offences were taken from university records of Academic Misconduct Panels which had been convened between August 2014 and February 2017. These panels are convened every academic semester following the grading period and are consistent in their membership. They evaluate all potential cases of plagiarism which have been highlighted by examiners during the grading process in order to determine whether plagiarism as defined by the standards of the university has occurred. Intent is not considered in the decision that a plagiarism offence has occurred, only in the punishment of the offence.

Data Analysis

In order to determine whether students who had been caught committing plagiarism demonstrated any statistically significant differences in English language abilities from students who had not been caught plagiarising, records of the outcomes from academic misconduct panels were matched with the output from the AEM exams described above and conducted at the end of the April 2015 and October 2016 semesters. During these exams, 244 students had their English language ability tested, and they were assigned a band score modelled on, although not equivalent to, an IELTS band score. IELTS was selected as inspiration for the assessment grading framework for a number of reasons. Although it has been recognised that there are important differences between academic writing and the IELTS writing tasks (Moore and Morton 2005), there are many important similarities in register, tasks given, and grading criteria. Furthermore, IELTS provides a high-quality, generic framework for assessing writing tasks, encompassing task achievement, cohesion and coherence, lexical resource, and grammatical range and accuracy. For these purposes, a further category, of academic skills ability (including referencing and citation) was included in the marking rubric developed using an IELTS-inspired model. Finally, due to the English department's familiarity with the IELTS system of scoring, using a model inspired by this framework was considered to lead to greater internal consistency and harmonisation between markers, which was complemented with peer-marking sessions, training sessions, and second-marking practices.

Student ID numbers from plagiarism records were used to match up this data with the scores obtained by these students in the AEM exams. In order to ensure the anonymity of students, all names were removed from records of both plagiarism and language scores and only student ID numbers were used for the matching process. As some students had two

recorded AEM scores, in these cases, the highest AEM score was chosen in order to give a fairer estimate of the language skills the student was truly capable of attaining. As the focus of this test was on the language abilities of students whose first language was not English, all students whose first language was English was removed from the analysis by cross referencing ID numbers with university records. This only resulted in the removal of one case.

From these 243 recorded AEM scores, 67 plagiarism matches were found from the total record of 125 plagiarising students. The inability to find matching student records for all 125 cases was primarily due to some of the plagiarising students having graduated prior to the introduction of the AEM exams. Based on the AEM and plagiarism records available, students were split into two groups: students who had plagiarism offences recorded against them (plagiarisers), and students who had not been found to have committed plagiarism (non-plagiarisers). In order to test whether there were significant differences in the language abilities between the two groups, we performed a two-tail independent samples t-test (t-test) using IBM SPSS (Version 23).

Statistical Analysis Results

Prior to carrying out the t-test, tests for outliers, variance and normality were carried out. Data are mean \pm standard deviation, unless otherwise stated. An independent-samples t-test was run to determine if there were differences between the English language abilities of students who were found to have previously committed plagiarism, compared to students who had not previously committed plagiarism. One outlier was found in the non-plagiarism group with an AEM score of 3.0. As the minimum English score for entry into BUVA is IELTS 6.0 or an equivalent English language qualification, this was judged a non-effort by the student concerned and the record was removed, leaving 175 non-plagiarising students, and 67 plagiarising students.

Normality of the AEM scores for both groups was assessed using z-scores, a Shapiro-Wilk test, and a graphical analysis of Q-Q plots. AEM z-scores were normally distributed for plagiarisers with a skewness of 2.048 (standard error = 0.293), and kurtosis of 0.29 (standard error = 0.578), and for non-plagiarisers with a skewness of 1.342 (standard error = 0.184), and kurtosis of -1.173 (standard error = 0.365). Graphical analysis of Q-Q plots also showed that data was approximately normally distributed, however, both groups failed to pass the Shapiro-Wilk test. Although t-tests have been shown to be robust to non-normally distributed data (Lumley et al. 2002; Heeren and D'Agostino 1987), a Mann Whitney-U test was also performed to confirm the results of the t-test.²

There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = 0.082$), but due to the large differences in the sample sizes between the two groups Welch's t-test (Welch 1974) was used to conduct the analysis as recommended by Howell (2010).

The English language ability amongst the non-plagiarising students (6.21 ± 0.98) was higher than amongst the plagiarising students (5.85 ± 0.83), a statistically significant difference of 0.36 (95% CI, 0.111 to 0.605), $t(140.632) = 2.86$, $p = 0.005$, effect size (d) = 0.40.

² The Mann-Whitney U test showed that distributions of the IELTS scores for plagiarisers and non-plagiarisers were similar, as assessed by visual inspection. Median IELTS scores were statistically significantly higher in non-plagiarising students (6.0) than in plagiarising students (5.5), $U = 4563.5$, $z = -2.703$, $p = 0.007$.

Analysis from both the Welch t-test and the Mann Whitney-U test show that there are significant differences in language abilities between the two groups of students with students who committed plagiarism showing significantly lower levels of English abilities than students who were not found to have committed plagiarism.

Discussion

As the extant literature suggests, our data clearly shows that the English language ability of students is negatively related to a student's propensity to commit plagiarism offences.

However, in order to interpret these results appropriately and therefore recommend appropriate intervention strategies, we must seek to understand *how* language ability is connected to plagiarism. It is possible that a lower English language ability correlates with a lower ability to comprehend and understand information. This may lead to students engaging in transgressive, deliberate plagiarism by engaging in contract cheating/passing off the work of others as their own, or alternatively, to unintentional plagiarism through a lack of understanding of academic policies and regulations.

A key consideration when interpreting the results of this study is therefore one of intent. If we assume that all students who plagiarise do this deliberately and are just 'caught in the act', this could give a different interpretation to any set of results than if we believe that all students who plagiarise do this unintentionally, and just needed more education as to what truly constitutes plagiarism. If we take the first view, we could interpret this as showing that plagiarising students with lower English language ability are more likely to decide to commit plagiarism than those whose English skills are higher. However, taking the second view would provide an alternative interpretation; that plagiarising students with poorer language skills are less likely to understand the academic regulations relating to plagiarism and therefore unintentionally commit plagiarism. Fazel and Kowkabi (2013) are optimistic with regard to unintentional plagiarism as they do not consider plagiarism as an ethical problem, but rather a writing problem. They believe that "*a student's inappropriate textual borrowing is not intentional unless proven otherwise*" (p.87). Although this view does not take into account intentional cheating practices such as contract cheating, it is interesting to consider that even though there may be clear evidence (in the eye of faculty) of plagiarism having taken place, the issue of intent to plagiarise should be considered when deciding on interventions to reduce plagiarism.

During the preliminary examination of the plagiarism records, it was clear from the explanations given by students that many of them did not realise what they were doing was wrong, and that their usage of other people's work was not permitted. Although it is certainly possible that these students understand the academic regulations perfectly well, this unintentional plagiarism is something that the AEM intervention was specifically designed to address by both improving the English language abilities of the students, as well as educating them on the academic standards that must be complied with. Unintentional plagiarism has been previously identified as a specific problem for NNES students in studies such as Deckert (1993), Fazel and Kowkabi (2013), Marshall and Garry (2006), Pecorari (2003) and Pennycook (1996) and has also been identified as an important point of consideration for plagiarism cases in general (Howard 1995; Sutherland-Smith 2005). In our set of results, the presence of students with strong English language capabilities (students with estimated AEM score bands of 7.0 and above) in the plagiarising group, suggests that the most likely scenario

is that the plagiarising students constitute a mix of some students who chose to commit plagiarism, and some who did this accidentally.

One important distinction that must be made when exploring plagiarism among NNES students is between cultural backgrounds and language abilities. Although many studies detailed in the literature review discuss language abilities as a factor leading to plagiarism, it is recognised that the cultural background of students may also have an effect on plagiarism views (Guo 2011; Hu and Lei 2016; Martin et al. 2011; Pennycook 1996; Stowers and Hummel 2011). Therefore, we must be careful not to conflate these two separate factors when exploring incidences of plagiarism amongst NNES students to ensure that when we see incidences of students committing plagiarism, this is not explained away as simply a language issue. These cultural aspects are also related to the causes of accidental plagiarism: whilst one student may borrow textually from other sources or engage in 'patchwriting' (Howard 1995) because of their inability to accurately express academic concepts in their own words, another may do so because they do not consider this textual borrowing to be a form of plagiarism (Pennycook 1996; Rinnert and Kobayashi 2005). In the present study, the enculturation aspects of the AEM programme could therefore be as effective in reducing plagiarism amongst students as the EAP elements of the programme.

Even if we accept the possibility that all of the plagiarising students intentionally committed plagiarism, the continued use of interventions such as the BUV Academic English Masterclass should serve to reduce this type of plagiarism by enabling students to communicate their own ideas in better ways, improve their language abilities and reduce many of the factors connected to plagiarism as discussed in the literature. At the time of analysis, only two semesters of the AEM programme had been run, therefore the potential future benefits of this programme are yet to be fully realised.

Aziz et al. (2012) highlight the difficulties present in communicating the ethical aspects of plagiarism to students, however in this case, the explanations and surprise expressed by many students in the plagiarising group suggest that many plagiarism incidences in BUV are unintentional plagiarism stemming from a lack of knowledge, as opposed to intentional plagiarism due to a lack of morals. Indeed, when confronted with their plagiarism, many students in the misconduct panels seem aghast that they were being accused of academic misconduct, despite freely admitting to having taken the work from other sources. Although the information the students receive throughout their time studying at BUV and in the AEM is designed to make them aware that plagiarism is not an acceptable academic practice, the continued presence of these unintentional plagiarisers suggest that this issue is not yet resolved. What is needed to resolve this may be a sustained institutional approach to improving awareness of what acceptable academic practice is, and what is not. The AEM initiative which BUV has been using serves to assist in this informational transfer, but also provides students with a genuine opportunity to improve their EAP skills as they progress through their university programme.

Due to the complex inter-relationships between language, intent and cultural issues discussed above, we do not believe that it is possible, or desirable, to completely separate language issues from these, and other potential factors which may be linked to plagiarism, and we do not seek to do so. Instead, the results of this research serve only to demonstrate that a lower level of English language ability does exist in students who plagiarise when compared to students who have not plagiarised (or have not been caught). Therefore improving the language ability of students may be of benefit in reducing incidents of plagiarism.

Conclusion

With the exception of the research by Bennett (2005) utilising Partial Least Squares analysis, and Guo's (2011) study using Structural Equation Modelling, researchers using qualitative data from student or faculty are unable to fully determine which factors affect plagiarism the most, as respondents tend to offer many reasons as to why they plagiarise. By analysing language ability as a separate factor in this study, we clearly show the effect that this may have on students' propensity to plagiarise. This study is first of its type to demonstrate the negative relationship between English language ability and plagiarism through the use of tested English language ability, as opposed to student self-reporting of how their language ability is a factor leading to plagiarism.

Further research in this particular area could include the examination of whether there is any relationship between the severity of plagiarism (as identified by Turnitin) and the tested English language ability of students. Due to the non-linearity and non-normality of the data available from BUW records, it was not possible to run any correlation analysis on the data from the plagiarising students ($n = 45$). Transformation of the relevant variables was attempted in order to achieve this, but no transformations resulted in data suitable for analysis. As visual inspection of this data did not reveal any form of linear relationship between the two variables, despite the plagiarising students having significantly lower mean AEM scores than the non-plagiarising students, this could suggest that when a student commits a plagiarism offence (whether unintentionally or deliberately), their English language ability has no influence on how severe their plagiarism is. Although no firm conclusions can be drawn using this data set, we recommend that other researchers explore this particular area for confirmation of this theory. The higher education environment within Vietnam may also provide many other opportunities for exploration in this field. As this current research was performed in a private university with a British educational culture, it would be interesting to compare the data with that from a public university to explore whether this relationship between English language ability and plagiarism is also present in the wider student population of Vietnam.

Although this paper takes a quantitative methodological approach, we recognise the value of existing and future qualitative investigation in this field. Performing a deeper investigation into the relationship between language and plagiarism by carrying out interviews with students of differing language abilities would be beneficial in truly understanding why differences in language ability exist between plagiarising and non-plagiarising students.

The findings of our study suggests that one method to help reduce incidences of plagiarism is to develop the language skills of all students through initiatives designed to assist students in their EAP skills, such as that described in the AEM initiative by BUW reported in this paper. Due to the increasing internationalisation of higher education, as well as the reliance on overseas students to make up student numbers on many programmes, ensuring a high quality experience by NNES students is becoming even more important. By reducing the likelihood of NNES students plagiarising (whether intentional or unintentional) and therefore being caught and punished for plagiarism offences, initiatives such as this may increase the recruitment and retention rates of NNES students. Understanding this may allow universities reliant on such groups of students to maintain future revenue streams whilst at the same time increasing the academic standards and rigour of all students. It is not enough, however, simply to create initiatives for 'International students' in an attempt to assist these students with plagiarism prevention. Rather, there needs to be a clear identification of student needs dependent on their culture, language skills and past experience of 'Western' notions of appropriate academic conduct.

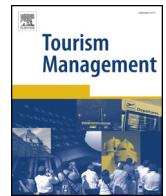
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Conflict of Interests All authors were employed by the university in question during the time of authorship of the paper.

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The role of iconic-historic commemorative events in event tourism: Insights from the 20th and 25th anniversaries of the fall of the Berlin Wall



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ABSTRACT

The role of commemorative events for event tourism has received marginal attention. Existing research primarily considers commemorative events for their social and political significance within the nation. This paper argues that commemorative events defined as ‘iconic-historic’ can play an important role for event tourism. Using the 20th and 25th anniversaries of the fall of the Berlin Wall as archetypical examples, this in-depth qualitative study contends that such iconic-historic commemorative events may be as significant as hallmark events within strategic event portfolios. The contributions of this paper are the definition of iconic-historic events as distinct forms of commemorative events; the recognition of the potential significance of these events to event tourism; and the development of a commemorative portfolio which can inform the established event portfolio for strategic event tourism management. The paper concludes by making recommendations for the use of such events in event tourism settings.

1. Introduction

Events are important devices for making places more attractive to visit and creating economic benefits for destinations (e.g. Hodur & Leistriz, 2006; Richards & Palmer, 2010). In an image-saturated society and in a competitive globalised world, where effective destination brands are becoming increasingly important, events can be used for destination promotion as well as the construction of a destination brand (e.g. Dinnie, 2011; Mackellar, 2014; Mendes, Valle, & Guerreiro, 2011). The widespread use of events for tourism-related outcomes such as the above has given rise to the study and strategic implementation of event tourism. The concept of event tourism refers to the process of using planned events for the development and marketing of destinations for tourism (Getz, 2008). In the academic literature this phenomenon has recently been investigated from perspectives such as destination branding (Mackellar, 2014; Mendes et al., 2011), tourism strategy and product development (Connell, Page, & Meyer, 2015; McKercher, 2016; Stokes, 2008) as well as stakeholders and partnerships (Mariani & Giorgio, 2017; Todd, Leask, & Ensor, 2017).

In destination and event tourism planning, the development and maintenance of an event portfolio is seen as good strategic practice. This management approach sees hallmark events as being particularly desirable devices for achieving long-term event tourism benefits (Getz, 2008; Getz, Svensson, Petersson, & Gunnervall, 2012; Ziakas, 2014).

Hallmark events are commonly defined as recurring events which are inextricably linked to their location and are usually also valued for their potential for community-building (Getz et al., 2012; Todd et al., 2017). Well-known examples include the Calgary Stampede, Munich Oktoberfest or the Edinburgh Festival Fringe.

Recent research indicates an increase in the study of event tourism as a phenomenon, reflecting the adoption of strategic event tourism and portfolio management approaches in practice. Getz and Page (2016a) propose five basic propositions underpinning event tourism to illustrate its significance. The first and primary claim is that events can attract tourists which creates economic benefits. Four further propositions cascade from this statement. These are that events can create positive images for the destination and help brand or re-position cities. They further contribute to place marketing by making places more attractive. Additionally, events can animate cities, resorts, parks, urban spaces and venues of all kinds. Finally, event tourism acts as a catalyst for other forms of desired development, such as improved infrastructure. The implication is that once events successfully attract tourists, they can be leveraged to fulfil the ensuing four propositions. According to Getz and Page (2016a) many previous studies support the core propositions, but further assessment of claims to knowledge, concepts and terms in relation to event tourism is needed to develop the field.

This paper contributes to the field of event tourism by exploring the event tourism potential of particular forms of commemorative events,

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newly defined here as ‘iconic-historic’. The paper further introduces the idea of a commemorative portfolio that can be linked to the existing event portfolio framework for strategic event tourism planning and management. Commemorative events more generally can be defined as ‘memorial services, specific ceremonies or broader events (even festivals) designed to honour the memory of someone or something’ (Getz, 2007, p. 34) or as those events that ‘are staged so that society may remember and reflect upon past occurrences and their relationship to today’ (Frost & Laing, 2013, p. 1). Whilst sports, business and leisure events as well as different types of cultural festivals have been investigated for their roles and potentials for event tourism development purposes (see Getz & Page, 2016a), commemorative events have so far received marginal attention in this context. With only limited previous research on commemorative events from a tourism point of view (most notably Frost & Laing, 2013), the role of commemorative events for event tourism remains under-researched.

A major contribution of the paper is therefore to help understand the event tourism role of particular forms of commemorative events. These events are presently defined as iconic-historic and are characterised as such based upon their alignment with existing definitions of iconic events and their commemorative underpinning. Sharing a growth in numbers and significance similar to that of hallmark events, iconic events are deemed as those that hold high symbolic value and have a strong appeal (Getz & Page, 2016b). Similar to iconic tourism sites being symbolic of their host destination, for example the Eiffel Tower and Paris, iconic events represent their host destination and become a community’s most recognised event. This is in part due to functional aspects such as reputation and scale; but iconic events differ from other forms of events in the sense of symbolising ‘something of potentially global significance’ (Getz & Page, 2016b, p. 58). The meanings of iconic events therefore are cause for people attending: being drawn by what they represent, rather than the physical and functional form of event. Some examples of iconic events are the Mardi Gras being symbolic of Rio or New Orleans and the Homecoming Celebrations of 2009 being symbolic of Scotland. Another feature of iconic events that differentiates them from other recognised distinct forms of events is they are not necessarily repeated or one-time only, which is once again due to their symbolic value.

This paper builds upon the understanding of iconic events and of commemorative events by defining ‘iconic-historic’ events as a sub-category spanning both types of events. Such events are by nature symbolically and historically momentous and, as such, grounded in commemorative practices. Iconic-historic events resonate internationally due to their symbolic meaning and value, as do general iconic events. However, these events differ from the more generic definition of iconic events due to their unique, globally significant historical context. Through studying the archetypal iconic-historic setting of the 20th and 25th anniversary events of the fall of the Berlin Wall, this study demonstrates that, while serving a unique role and purpose within their host destinations, iconic-historic commemorative events can be as significant as sought-after hallmark events to the strategic event portfolio approach and event tourism.

The paper applies the five propositions (Getz & Page, 2016a) as a tool to demonstrate the significance of such events to event tourism. It then discusses how iconic-historic events may fit into an event portfolio. It argues that, in certain contexts, such as that of Berlin, such iconic-historic commemorative events display similar characteristics to hallmark events, and can therefore be of comparable event tourism significance. The paper further situates these events within a proposed portfolio approach to commemoration which feeds into the event portfolio framework (Getz & Page, 2016a). The paper is based on constructionist research consisting of qualitative interviews with event organisers and analysis of key documents. All data were analysed with an overarching thematic analysis.

The fall of the Berlin Wall on 9th November 1989 was an event of worldwide political, socio-cultural and media significance (Manghani,

2008). In this sense, the commemorative events staged in 2009 and 2014 for the 20th and 25th anniversaries of the fall of the Berlin Wall may be considered archetypal iconic-historic commemorative events. They held high symbolic value, were representational of an internationally recognised historical occurrence and underpinned by commemoration. Whilst leading to unification of East and West Germany in October 1990, the historical event is also commonly seen as the event that became emblematic of the fall of communism in Eastern Europe as well as marking the end of the Cold War and the division of the world into two opposing ideologies (Drechsel, 2010). Due to its instant international broadcasting the fall of the Wall was immediately engrained as a defining moment in history in its global audience (Manghani, 2008). Moreover, the peaceful protests in East Germany played an important role for the fall of the Wall and the event has now become a symbol for the idea that any government or ideology can be overcome through the power of the people (Detjen, 2011). Due to the international political implications of its fall and as the city’s most famous landmark, the demands of the tourist industry played an important role for the development of Berlin Wall commemoration (Tölle, 2010). While the Berlin Wall itself as well as places of permanent commemoration are the subjects of a large body of existing literature (see, for example, Feversham & Schmidt, 1999; Frank, 2009; Harrison, 2011; Henke, 2011; Klausmeier & Schlusche, 2011; Knischewski & Spittler, 2006; Ladd, 1997; Tölle, 2010; Ullrich, 2006) the recent commemorative events associated with it have so far barely received any academic attention. With the 2009 and 2014 anniversary celebrations being the first and only large-scale internationally recognised public commemorative events of the fall of the Berlin Wall, they constitute an interesting and relevant context in which to explore the event tourism potential of iconic-historic commemorative events.

This paper starts by reviewing the relevant literature in relation to event tourism and commemorative events by drawing on previous studies from a tourism and events management perspective, but also on literature on commemoration from anthropology and sociology. The literature review also explores the extent of existing literature on commemorative events and event tourism. The paper further outlines the research context in regards to commemoration of the Berlin Wall more generally, as well as the two anniversary years more specifically. Following that, the methodology is outlined, including philosophical underpinnings. The findings of this study present the potential of iconic-historic events to event tourism management and propose a commemorative portfolio which can be linked to the strategic event portfolio approach (Getz & Page, 2016a). In addition to these theoretical contributions, the paper is therefore of tourism industry significance to destination marketers, event managers, and other professionals involved in the management of commemoration.

2. Literature review

2.1. Event tourism

According to Getz and Page (2016a), planned events not only add to destination attractiveness but are now established strategic resources used for marketing purposes in order to remain competitive. Therefore, event tourism development is an increasingly popular choice for destination marketers and policy makers. The use of festivals and events for explicit event tourism goals may aim at, for example, attracting tourists off-season, dispersing economic benefits derived from tourism, marketing and branding of the destination, using events as a catalyst for urban (re-)development and animating specific areas or attractions (e.g. Getz, 1991, 2005, 2008; Allen, O’Toole, Harris, & McDonnell, 2011; Connell et al., 2015; Getz & Page, 2016a; Hall, 1992; Mackellar, 2014; Mariani & Giorgio, 2017). All of these outcomes are embedded in the underlying key propositions presented by Getz and Page (2016a), mentioned in the introduction of this paper. In line with this, the first and foremost proposition is that events can attract tourists who may

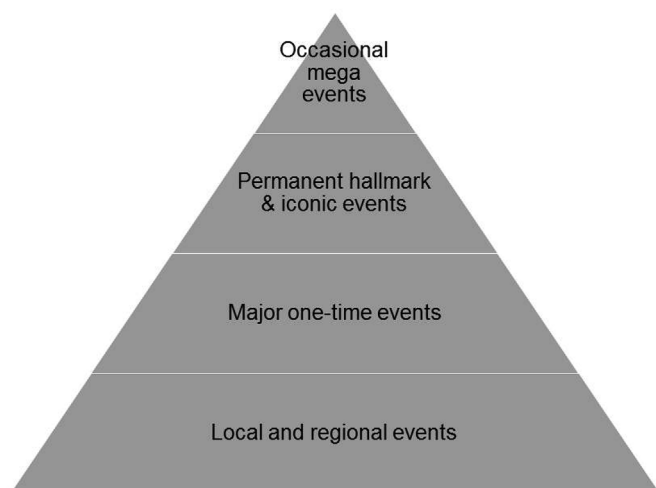


Fig. 1. The (revised) portfolio approach to events (based on Getz, 2016; Getz & Page, 2016a).

otherwise not have visited the destination, bringing along potential economic benefits as well. This ‘observable phenomenon’ (Getz & Page, 2016a, p. 596) can be leveraged for outcomes such as the aforementioned.

Event tourism strategies may require the development of existing events, bidding for mobile events or new event creation (Allen et al., 2011). In this context, an event portfolio approach is usually recommended, which refers to a strategic and goal-driven approach to the management of complementary and inter-related events of different size, impact, theme, timing and frequency within one destination (Allen et al., 2011; Getz, 2008; Getz & Page, 2016a; Ziakas, 2014). An event portfolio is thus different from the coincidental collection of events within a destination and helps leverage the benefits of events (Ziakas, 2014; Ziakas & Costa, 2011). A portfolio approach favours a balanced development of occasional mega events, few periodic hallmark events, major one-time events as well as a wide range of regional and local events, thus forming a pyramid of events of different status, scale and reach as represented in Fig. 1 below (Andersson, Getz, & Mykletun, 2013; Getz, 2005; Getz & Page, 2016a).

The event tourism potential of different events within a portfolio has been considered in relation to event size or status and in relation to theme or content. In regards to size or status, particularly mega and hallmark events have received attention (Getz & Page, 2016a). Mega events are events of high tourist demand and value, such as the Olympic Games or the FIFA World Cup (Getz & Page, 2016a). Whilst there is some disagreement in the literature as to how large an event has to be to be classified as ‘mega’, these events are commonly defined in regards to the number of tourists attracted, media coverage generated, costs involved and transformative power on local environment (Müller, 2015). Mega events are often perceived to be a useful means for event tourism development (Florek & Insch, 2011).

Hallmark events do not have a clearly agreed definition, but, as aforementioned, are now commonly seen to be recurring events which are inextricably linked to their location (Getz et al., 2012; Todd et al., 2017). In fact, hallmark events can be large and share some characteristics with mega events, but their defining characteristic is that, whereas mega events tend to be peripatetic, successful hallmark events are long-standing events that contribute to or reflect the destination's identity (Getz et al., 2012). Whilst hallmark events successfully attract tourists, they moreover enjoy widespread acceptance and support amongst the local community; over time, hallmark events become taken-for-granted institutions (Getz & Andersson, 2008). In this sense, hallmark events can contribute to community building (Getz et al., 2012). It is suggested that, in comparison to one-time mega events,

successful hallmark events can be a more cost-effective tool for gaining long-term event tourism benefits whilst also catering to the needs and interests of the local community (Getz & Page, 2016a; Getz et al., 2012). However, hallmark status is not easily reached; it usually requires an evolutionary process that institutionalises the event through wide-ranging support and relationship building within the destination (Getz & Andersson, 2008). Therefore, events conceptualised as hallmark events may not materialise whilst other events may organically develop towards hallmark status. As discussed earlier, iconic events share similar characteristics with hallmark events and can be of equal significance within event portfolios (Getz, 2016), but have elevated symbolic significance on an international basis. Finally, regional and local events have the least power for achieving event tourism outcomes, although some events might have potential whereas others are deliberately protected from commercialisation and commodification and primarily carry meanings for the local community (Getz & Page, 2016a). Therefore, in terms of size and status, hallmark events and iconic events may be the most desirable and valuable elements within an event portfolio.

In regards to event theme or content, the event tourism literature is primarily focused on business events, sport events, festivals and cultural celebrations as well as entertainment events (Getz, 2008; Getz & Page, 2016a). For this paper, the role of festivals and other cultural celebrations for event tourism is particularly pertinent as Getz and Page (2016a) describe commemorations as a type of festival or cultural event. However, they primarily focus on past research on arts and music festivals as well as traditional cultural and religious celebrations (Getz & Page, 2016a). Such festivals have been considered for their event tourism potential, for example, in relation to attraction of tourists or marketing a destination, but also attract critical studies in relation to issues such as identity (e.g. Crespi-Vallbona & Richards, 2007; De Bres & Davis, 2001; Merkel, 2015) or politics (e.g. Atkinson & Laurier, 1998; Jeong & Santos, 2004; Merkel, 2014).

Overall, it can be seen that event tourism has emerged as a significant field of research but has so far neglected commemorative events. As work by Frost and Laing (2013) illustrated, these commemorative events are plentiful in the Western world and consequently, it is of interest to explore how they can become iconic and therefore significant within event tourism planning whilst also considering how such events may fit into a strategic event portfolio. The following sections of the literature review outline how existing research into commemorative events may help illuminate these issues.

2.2. Commemoration and commemorative events

When an event or a person is commemorated, it is given particular importance in a group's history (Schwartz, 1982). Turner (2006) argues that commemoration includes all devices through which a collective such as a nation negotiates and remembers its past. This repertoire of devices consists of public and private acts of remembrance, the construction of monuments, museums and other places of memory as well as associated debates over their meaning (Turner, 2006). Overall, the existing literature on commemoration is primarily rooted in social science disciplines such as sociology and anthropology and considers these practices predominantly for their social and political roles within communities such as the nation. Here, commemoration is seen as a key resource for the construction of (often contested) shared identities (e.g. Connerton, 1989; Elgenius, 2011b; Gillis, 1994; Jedlowski, 2001; Spillman, 1997; Zerubavel, 1995). This section explores the nature and purpose of commemoration with particular reference to commemorative events, before investigating in more detail how such events can play a role for event tourism.

Commemoration at places of historical significance differs from commemorative events in that these places permanently ‘fix’ collective memories by providing tangible links to the past they refer to and are available for people to visit at any time (Barthel, 1996; Foote & Azaryahu, 2007; Turner, 2006). In contrast to that, commemorative

events tend to mark crucial dates instead of places in a community's history. Furthermore, some argue that monuments can develop into unnoticed banal features of the urban landscape and can encourage forgetting more than remembering (Gapps, 2010; Turner, 2006), expressed aptly by Robert Musil: 'there is nothing so invisible as the monument' (cited in Kattago, 2015, p. 179). In contrast to this, ceremonies have the potential to generate a strong sense of belonging through creating a shared experience (Turner, 2006). Gapps (2010) also illustrates how events can create more widespread interest in historical events through focused attention on key anniversaries as well as through offering an immersive entertainment experience. However, their temporary nature might make these events easily forgettable, only involving short-term impacts. Furthermore, there is more scope for ambiguity in regards to the meaning of commemorative events, and places of permanent commemoration are often considered clearer and more direct in their messages through their 'fixed' nature (Gapps, 2010). It has to be acknowledged though, that the meaning of places of permanent commemoration is also by no means 'fixed', as meanings are subjective and can shift depending on context and interpretation (Foote & Azaryahu, 2007). Gapps (2010), however, argues that this may be a positive way forward for contemporary commemoration in that commemorative events can offer open-ended, inclusive and participatory approaches.

Getz (2007) states that commemorative events mostly take place in the context of national days, birthdays of kings or queens, battles or wars. Frost and Laing (2013) propose a broader view of commemorative events by incorporating a range of non-political events, such as cultural anniversaries (e.g. the bicentenary celebrations of writer Hans Christian Anderson in Denmark in 2005 studied by Liburd, 2003), anniversaries linked to the construction or completion of buildings and other structures (e.g. the 125th anniversary of the UNESCO inscribed Forth Bridge in Scotland in 2015), corporate and product anniversaries (e.g. the 50th birthday of the Barbie Doll in 2007) as well as anniversaries of various other historical events (e.g. the centenary of the sinking of the Titanic studied by Frost & Laing, 2013). However, as the fall of the Berlin Wall is at the core of this study, existing literature in relation to commemoration of political historical events is particularly relevant.

Just like commemorative practices more generally, commemorative events are often researched in relation to their social and political roles in the context of the nation. In this regard, Frost and Laing (2013) suggest that commemorative events are effective for promoting unity, loyalty and a sense of belonging. St-Onge (1991) states that particularly governments' interests include education and the fostering of social cohesion or national morale. Hobsbawm and Ranger's (1983) influential book on 'The invention of tradition' is of relevance here to understand the purpose of such events. Their approach examines the ways in which invented ceremonies communicate a presumed link to a meaningful past for communities such as the nation (White, 1997). Hobsbawm (1983) claims that invented traditions are 'responses to novel situations which take the form of reference to old situations, or which establish their own past by quasi-obligatory repetition' (p. 2). In particular, these invented traditions are used to provide structure to social life in a modern world of constant change and innovation (Connerton, 1989; Hobsbawm, 1983). Although they do not necessarily have to be of commemorative character, these invented traditions do imply continuity with the past. According to Hobsbawm (1983), there are three main purposes of invented traditions: to establish or symbolise social cohesion, to establish or legitimise authority, and to inculcate beliefs, values and behavioural conventions. Invented traditions such as the Scottish kilt or Coronation rituals are a key resource for constructing national identity (Billig, 1995). In line with this, commemorative events can be considered such invented traditions, existing for the purpose of fostering the imagining of the (national) community by evoking a shared past (see also Anderson, 2006; Gellner, 2006 or Smith, 1991 for influential work in this context).

In this regard, it is state-sponsored commemorative events of national significance that have again received a lot of attention in the literature. McDonald and Méthot (2006) look at the purpose of centennial celebrations in particular, stating that these events are often hosted to foster nationalism, especially in young nations. Bodnar (1992), Spillman (1997) and White (2004) further studied centennial and bicentennial celebrations in the United States and Australia as events which constructed national identity and fostered patriotism in relatively young nations. Gillis (1994) also observed that commemorative events are particularly used in fragile new nations. In support of this, Gilbert (1976) states that important anniversaries in a nation's history are marked in order to strengthen a sense of community and communicate shared values. Frost (2012) argues how celebrations of the founding of a nation in particular are used to foster national identity and pride. Authors such as Spillman (1997), Misztal (2003) and Hall, Basarin, and Lockstone-Binney (2010) support this stance. Spillman (1997) analyses the importance of the moment which is perceived as the foundation of the nation for the celebration of national identity in the United States and Australia. Misztal (2003) states that the myths surrounding such foundation moments are particularly powerful for strengthening unity within a group. Hall et al. (2010) investigated Anzac Day which is the national day of commemoration in Australia and New Zealand to remember those who fought at the Gallipoli battlefields during World War I. These authors emphasise that many attendees are attracted by the possibility to experience the birthplace of their nations.

Official annual national days are a related type of commemorative event of national significance that received particular attention in the literature in relation to their contribution to the construction of national collective memory and national identity (e.g. Elgenius, 2011a, 2011b; Frost & Laing, 2013; Fuller, 2004; McCrone & McPherson, 2009). Such national days are often also based on the founding myth related to political events such as independence, liberation, unification, the constitution and the formation of the state (Elgenius, 2011b). It can thus be seen that the social and political roles of commemorative events have been explored in quite some depth, whereas their incorporation in event tourism strategies is under-researched.

2.3. Event tourism at commemorative events

The literature on the role of commemorative events for event tourism development is limited and indeed such events are seen to be difficult to incorporate in these plans due to their presumed inward-focused nature (Frost & Laing, 2013). Even for places of permanent commemoration, the role of tourism is of emerging concern for academic research (e.g. West, 2010; 2015; Winter 2009; 2015) unless one considers this area of research to be part of existing bodies of literature in relation to, for example, heritage tourism, post-conflict tourism, dark tourism or battlefield tourism. In the context of Getz and Page's (2016a) five propositions of event tourism, the literature is very limited in regards to if and how these may apply to commemorative events. Indeed, it is primarily the first three propositions that have been investigated in relation to commemorative events as outlined below.

McDonald and Méthot (2006) stress that the potential for financial gain from centennial celebrations was detected as early as the second half of the 19th century through events such as 100th anniversary of the signing of the Declaration of Independence in 1876. This contributed to an increasing popularity of such events. However, they do not explicitly refer to event tourism as a cause for this economic gain. By analysing the role of commemorative events in former capitals, Frost (2012) underlines that economic benefits can be aimed for by using commemorative events to promote a destination for attracting tourists. Laws and Ferguson (2011) analysed a small-scale community-run commemorative event on Canadian National Day and outlined how the local community may benignly use the events for the construction of a certain destination image, but with limited reach and strategic

implementation. Work by Hall et al. (2010) shows that Anzac Day at Gallipoli in Turkey attracts a large number of tourists, although these are primarily from Australia and New Zealand and therefore constitute a limited international audience. Grundlingh (2004) outlines how the centenary of the South African War in 1999 was planned with hopes of increased tourist numbers, but that the celebrations only reached a niche market. Apart from political commemorative events, particularly historical re-enactment events have received academic attention (e.g. Carnegie & McCabe, 2008; Ryan & Cave, 2007). Research has further shown that cultural anniversaries and anniversaries of other ‘popular’ historical events (i.e. secular and non-political events) can be used specifically as a means to develop event tourism strategies as indicated by the bicentenary celebrations of Hans Christian Anderson (Liburd, 2003), the 50th anniversary of the Roswell UFO incident (Paradis, 2002) or the centenary of the sinking of the Titanic (Frost & Laing, 2013). Frost, Wheeler, and Harvey (2008) suggest that it is the potential for conflict over the meaning of such events that generally makes them difficult to be used for economic purposes and thus also event tourism as a whole. In line with this, commemorative events of political events such as the fall of the Berlin Wall have received particularly little attention in this context.

Overall, the event tourism potential seems to be limited to certain types of commemorative events. Due to limited research into commemorative events and event tourism, Frost and Laing (2013) speculate that the following types and formats of events may be able to attract tourists: international exhibitions, museum and gallery special exhibitions, historical re-enactments, national pageants, parades and ceremonies, diaspora events, and participatory events. Commemorative events held in national capitals that mark events of national significance may involve the spectacle required to attract tourists, although these may be primarily domestic (Frost & Laing, 2013). Consequently, many types of commemorative events, as argued by Frost and Laing (2013), may be subject to what they term a ‘tourism paradox’. This paradox entails the idea that in order to gain public funding many events nowadays are expected to bring along event tourism benefits, but commemorative events are primarily aimed at a local or national audience. Thus, these events may attract domestic tourists under the most favourable circumstances, but are of limited appeal to international visitors. Overall, Frost and Laing (2013) consider tourists as outsiders that mostly do not share the memories and identities that are reinforced at the events and thus may be difficult to attract. If ‘outsiders’ do attend or acknowledge such events, this primarily validates national identity by reinforcing the international standing of the country and the significance of the event commemorated (Frost & Laing, 2013; Spillman, 1997). Nevertheless, this argument does not apply to those commemorations that are of international audience and media recognition.

2.4. Iconic-historic commemorative events and their role for event portfolios

Due to the limited research into commemorative events and event tourism, there are no studies that consider how commemorative events might fit into or complement a managed event portfolio in event tourism planning. While it can be argued that all strategically planned events within a destination may be viable additions to any portfolio, this paper proposes that in certain contexts, commemorative events can have significant and considerable event tourism potential. It contends that specifically the defined category of iconic-historic commemorative events assume this role for destinations in the same way as valuable hallmark events.

As discussed earlier, Getz and Page (2016b) defined iconic events as those having high symbolic value on a global basis. Getz (2016) further argued such events are as valuable as hallmark events within event portfolios. The 20th and 25th anniversary events for the fall of the Berlin Wall can be viewed as archetypal iconic-historic events. As noted previously, the term iconic denotes something ‘significant’ and

‘admired’ whilst at the same time representing a set of beliefs, in line with Getz’s (2016) claim of these events having high symbolic value. Iconic-historic events are thus those unique events that commemorate a significant person or event from the past and through this commemorative effort, these events symbolically communicate a highly resonant set of values and beliefs.

It can be argued that, similarly to hallmark events, iconic-historic commemorative events are unique to their individual geographic and symbolic setting and by association become synonymous with this setting. They mark anniversaries of internationally, politically, and socio-culturally significant events, of both tangible and symbolic significance. They tend to be periodic, similarly to hallmark events. This can be seen in the present setting of the 20th and 25th anniversary of the fall of the Berlin Wall. Secondly, iconic-historic events are usually tied to a particular place – the place where the commemorated event occurred. Such ‘parent’ events may contribute to the identity of the place, and as such, their iconic-historic commemorative events do as well. This was illustrated, for example, by Paradis (2002) and his study of the link between the Roswell UFO incident and local place identity. It is particularly this uniqueness and co-branding with the destination that makes both hallmark events and iconic-historic commemorative events valuable devices, as in times of globalisation, many festivals and events are no longer inextricably linked with the community and place in which they arose and thus have become homogenised and placeless (Elias-Varotsis, 2006; MacLeod, 2006). The distinctiveness and attachment to a locality of both hallmark and iconic-historic commemorative events can thus add to the competitiveness of a destination. At the same time, commemorative events ideally carry meaning for the local community whose memories and identities are also reconstructed at the events. This is a commonly discussed characteristic of commemorative events outlined, for example, in work by Frost and Laing (2013), Connerton (1989) and Elgenius (2011a), particularly in relation to commemoration of political events of national significance.

Furthermore, some well-known hallmark events have their origins in what could be considered commemorative practices, for example, the catholic ritual background to the New Orleans Mardi Gras. Similarly, the Edinburgh International Festival was conceived in 1947 as a celebration of European high culture with the aim of reuniting the continent to mark the end of the Second World War (Jamieson, 2004) and could be seen as a commemoration of pre-war times. Furthermore, due to their recurring nature, hallmark events at some point become commemorations of themselves. Returning to Edinburgh, this was seen by the marked celebrations of the 70th anniversary of Edinburgh’s International, Fringe and Film Festivals in 2017. Another example was the 100th anniversary of the Calgary Stampede in 2012.

Based on the similarities pointed out in this section, certain commemorative events of an iconic-historic stature may be valuable devices within an event portfolio and of similar standing to hallmark events. Frost and Laing (2013) already suggest that some commemorative events can be developed as hallmark events within event portfolios, giving the example of Hastings Week in the United Kingdom. However, this is currently seen as a rare occurrence and limited to annual events, with the conceptual similarities between the two types of events not further explored. This study proposes a distinct type of commemorative events, namely iconic-historic events, and observes the similarities between these and hallmark events in event tourism management.

3. Research setting

This research focuses on the iconic-historic events that commemorated the 20th and 25th anniversary of the fall of the Berlin Wall in 1989 and therefore this section briefly introduces the development of Berlin Wall commemoration and the events that took place in 2009 and 2014.

Approximately the first fifteen years after unification of East and West Germany were characterised by a lack of public forms of commemoration of the Berlin Wall. As the Berlin Wall constituted

‘uncomfortable history’ (Harrison, 2011, p. 80) and a united city and nation had to be restored (Ladd, 1997; Tölle, 2010), there was very little public support for and even opposition to keeping parts of the Wall as memorial sites (Harrison, 2011; Ladd, 1997; Tölle, 2010). However, approximately fifteen years after unification, a change process in commemoration of the Berlin Wall commenced.

Starting in 2004, a variety of external pressures coming from actors such as the tourism industry or private commemorative efforts (Harrison, 2011; Tölle, 2010) caused the Senate to investigate the remains of the Berlin Wall. This led to the publication of the important ‘Overall concept of memorial plans for the Berlin Wall’ in 2006; a document that presents a strategy to connect all significant remains and places, aiming to tell a coherent story and to integrate the commemorative effort (Tölle, 2010). Existing remains were to be aligned to create an overall narrative that enables visitors to understand the meaning of the Wall (Flierl, 2006; Klemke, 2011). The official aims of the concept were to make the Wall visible again in public space and to establish appropriate forms of commemoration for its victims (Flierl, 2006; Klemke, 2011). Through this concept, the state-sponsored commemoration of the Wall within the city has become a managed landscape.

This development culminated in the 20th and 25th anniversary celebrations of the fall of the Wall in 2009 and 2014. The 20th anniversary saw the first large-scale celebration in the form of a theme year held throughout the city. Three main activities were included in the theme year: First, there was an open-air exhibition on the Alexanderplatz² focusing on the Peaceful Revolution, which opened on 7th May 2009 and, due to its popularity, remained there until October 2010. Secondly, there was a hybrid event called ‘Perspectives – 20 years of a changing Berlin’. This consisted of a combination of exhibitions and activities such as guided tours that showcased the changing nature of Berlin since the fall of the Berlin Wall at fourteen different locations throughout the city. These events also showcased changes in the city that were not directly related to the Wall, such as the plans for the presently still unfinished international airport. Finally, the anniversary on 9th November 2009 was celebrated with a commemorative event called the ‘Festival of Freedom’, taking place at the Brandenburg Gate. This was considered to be the big finale of the theme year and included the fall of painted domino stones along parts of the route of the Berlin Wall (please see Fig. 2) as well as speeches by international heads of government and various forms of entertainment. The dominoes had been painted by a large number of people – primarily school children – prior to the event in an initiative called the ‘Domino Campaign’. The ‘Festival of Freedom’ was attended by 250,000 people and was broadcast live on national and international television (Kulturprojekte Berlin GmbH, 2009a).

The 25th anniversary celebrations in 2014 were presented on a much smaller scale and the events focused on the anniversary weekend of 9th November. The celebrations were staged around a key element called the ‘Lichtgrenze’ (‘border of lights’). This was a 15 km-long installation through Berlin’s city centre which marked the former route of the Wall with illuminated white balloons from 7th to 9th November 2014 (see Fig. 3). In the run-up to this weekend, people were able to adopt balloons. On the evening of 9th November, these ‘balloon patrons’ attached personal messages and released their balloons in highly publicised and well-attended ‘balloon release event’. The ‘Lichtgrenze’ was accompanied by a variety of other elements. Yet again, there was an open-air exhibition, however, this year it was staged along the route of the balloons and presented anecdotes from times of division. Furthermore, there were various main locations along the ‘Lichtgrenze’ which functioned as visitor centres, with information points, short guided

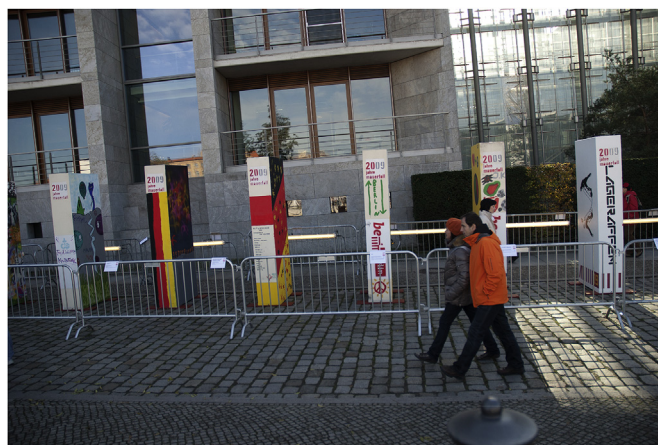


Fig. 2. The dominoes during the 20th anniversary celebrations (Image: ‘Berlin Dominoes 3’ by Thomas Quine licensed under CC BY 2.0³).

tours in the vicinity, shops selling souvenirs, as well as food and beverage outlets. Additionally, there were large screens which broadcast short films, for example, about various locations in Berlin to illustrate how they had changed by contrasting pre- and post-unification imagery. Another film briefly retold the history of the Wall from construction to its fall. These events in Berlin were furthermore accompanied by an online campaign called ‘Fall of the Wall 25’. This campaign encouraged people worldwide to share their personal stories or memories of both the Berlin Wall as well as other still existing literal and metaphorical walls. These stories were collected on social media and published on a dedicated website (Kulturprojekte Berlin GmbH, nd).

The events in both years were organised by four main institutions: The Berlin Senate, Kulturprojekte Berlin GmbH (a state-owned organisation which conceptualises and manages large-scale cultural events and cultural education projects in the city on behalf of the Senate), Robert-Havemann-Gesellschaft e. V. (an association which administers an archive of the citizens’ movement in the German Democratic Republic) and the Berlin Wall Foundation (administrators of the Berlin Wall Memorial at Bernauer Straße which is seen by the Senate to be the ‘official’ memorial site for the Berlin Wall). The Berlin Senate, and in particular the Cultural Affairs Office, played an important role for the events in both years, as it functioned as the key patron and sponsor of the events. The events thus had governmental approval and support, rather than being a private initiative.

4. Material and methods

This paper is based on qualitative research conducted from a constructionist philosophical perspective. It is believed that ‘[m]eaning is not discovered, but constructed’ (Crotty, 1998, p. 9). Constructionism is described by Lincoln, Lynham and Guba (2011) as a paradigm that employs a relativist ontology and a subjectivist epistemology. This means that the ontological position is that realities are assumed to be ‘multiple, intangible mental constructions’ (Guba & Lincoln, 1998, p. 206). Furthermore, the epistemological position of constructionism is that there is no objective knowledge of the social world which can be proven with facts, but knowledge is subjective and will be impacted by the researcher’s worldviews.

The paper is based on analysis of both primary and secondary data. More specifically, it draws on a thematic analysis of interviews with event organisers and documents authored by these organisers.

² A large square and important transport hub in the centre of Berlin. It was located in East Germany during times of division and large-scale protests took place here during the Peaceful Revolution in the run-up to the fall of the Berlin Wall.

³ The image can be found here: <https://flic.kr/p/cd84GU>, the CC BY 2.0 license terms can be found here: <https://creativecommons.org/licenses/by/2.0/>. No changes have been made to the original image.



Fig. 3. The 'Lichtgrenze' during the 25th anniversary celebrations (Image: Author's own, 2014).

Table 1

Overview of interviews conducted.

Event organiser	Further information	Referred to as
Berlin Senate – Cultural Affairs Department	This interview took place over the phone in October 2013 and is the only interview which took place prior to the 2014 events.	Interviewee 1–4 (for individual interviewees), not representing the order in which they are presented here.
Kulturprojekte Berlin GmbH	This interview took place over the phone in November 2014.	
Robert-Havemann-Gesellschaft e. V.	This interview took place face-to-face in a café in Berlin in November 2014.	
Berlin Wall Memorial	This interview took place face-to-face in the interviewee's office in Berlin in November 2014.	

Interviews can be defined as ‘a conversation with a purpose’ (Berg, 2004, p. 75) and are a useful method for approaching the social world from the interviewees' perspective. One representative from all four key event organisers was interviewed (see Table 1). All interviewees are considered senior managers of their respective institutions and were important decision-makers for the events.

The interviews were semi-standardised or semi-structured (Berg, 2004; Flick, 2014) and questions were both theory- and context-driven. The questions were deliberately left broad, but related to the idea that commemoration is political and that organisers have agendas which shape the commemorative effort (e.g. Barthel, 1996; Frost, 2012; Frost & Laing, 2013; Gillis, 1994; McDonald & Méthot, 2006; Spillman, 1997; Turner, 2006). The interviews aimed at further illuminating such agendas. Sample interview questions can be found in Table 2, but as interviews were semi-structured, these questions only constituted a rough guide and questions were altered or adapted slightly to tailor them to the interviewee. All interviews were audio-recorded and transcribed verbatim. For purposes of confidentiality, the interviewees are not associated with any of the institutions in the subsequent sections of the paper. For reasons of simplicity, the authors opted for the male pronoun to refer to the interviewees but this is not a reflection of the actual gender of the interviewees.

The analysis of documents constitutes an unobtrusive research method and a useful strategy for data collection and analysis (Berg, 2004). Two different types of documents were used in the analysis: Firstly, evaluative accounts published by the organisers after the 2009 theme year, and secondly, books that were produced by the organisers to accompany the events in both years as they were taking place. A total of six documents were included in the analysis which constitutes all such documents that existed at the time of the research (see Table 3). All documents used were openly and publicly available and access did not have to be negotiated. In fact, the books were sold as merchandise items at the events in both years, whereas the evaluative documents of the 2009 events were published on the event's website.

Table 2

Sample interview questions.

Sample interview questions
<ol style="list-style-type: none"> 1. Please elaborate on the role that you personally as well as your institution have played in the planning of the 2009 and 2014 commemorative events. 2. Please tell me about the origin of the ideas for the 2009 and 2014 events and how these ideas have developed. 3. What did the collaboration with the other partners look like? 4. What did you want to achieve with these events and were you successful? 5. Have the events had any impacts? What kinds of impacts? 6. What is particularly important for you and your institution in the planning and staging of these events? 7. Were there any messages you wanted to convey through these events? 8. Did you come across any challenges in the planning process? 9. With a diverse audience from local residents to people born after 1990 to international tourists – how do you balance the different expectations of such a diverse audience? 10. Has the wider context influenced the planning of the events? 11. There has been a debate within the city about appropriate Berlin Wall commemoration. How does your institution see this debate? 12. Are there going to be any further commemorative events in the future? If yes, what would you like these to look like based on your experiences in 2009 and 2014?

Both interviews and documents were analysed simultaneously using thematic analysis. Braun and Clarke (2006) define thematic analysis as ‘a method for identifying, analysing, and reporting patterns (themes) within data’ (p. 79). In this context, a theme can be defined as an important or recurring idea within the data (Braun & Clarke, 2006).

Thematic analysis is beneficial for the examination of a variety of qualitative data, including interviews and documents (Patton, 2002). As thematic analysis aims at exploring patterns and themes across data sets, it is a useful means for exploring the role of these commemorative events for event tourism across both primary and secondary data. The analysis can be inductive or data-driven (developing themes from the data) as well as deductive or theory-driven (analysing the data with pre-

Table 3
Overview of documents analysed.

Source	Brief description
'Documentation of the 2009 theme year' (Kulturprojekte Berlin GmbH, 2009a)	Overview of activities of the theme year, including informal evaluation (such as visitor numbers, media coverage)
'Peaceful Revolution 1989/90: Documentation of the open-air exhibition' (Robert-Havemann-Gesellschaft e.V. & Kulturprojekte Berlin GmbH, 2010)	An overview of the open-air exhibition as one of the three events of the theme year
'We are the people: Magazine for the exhibition Peaceful Revolution 1989/90' (publication accompanying the open-air exhibition) (Kulturprojekte Berlin GmbH, 2009d)	Overview of historical events from construction of the Wall to fall of the Wall and reunification with reference to the theme year and the open-air exhibition
'Domino book' (publication accompanying the 'Festival of Freedom') (Kulturprojekte Berlin GmbH, 2009c) [hard copy]	Overview of the 'Domino Campaign' with some information on the 'Festival of Freedom'
'Futures of Berlin' (publication accompanying the 'Changing Berlin' event) (Kulturprojekte Berlin GmbH, 2009b) [hard copy]	Overview of locations chosen for 'Changing Berlin' event
'Mauergeschichten – Wall Stories' (publication accompanying the 'Lichtgrenze' event) (Kulturprojekte Berlin GmbH, 2014) [hard copy]	Includes all 100 stories which were told in the exhibition along the 'Lichtgrenze' with some information about the 'Lichtgrenze' and the 'Balloon Campaign'

determined themes) (Patton, 2002). Notably, one analysis may employ both deductive and inductive approaches (Boyatzis, 1998). Furthermore, the analysis of themes can take place at two different levels: at the level of manifest or semantic themes or at the level of latent themes (Boyatzis, 1998; Braun & Clarke, 2006). The former is an analysis of explicit or surface meanings, whereas the latter focuses on underlying ideas, assumptions and ideologies that give shape to the semantic themes (Boyatzis, 1998; Braun & Clarke, 2006).

A series of steps were taken to develop and identify themes, and to write up the findings from the analysis. As there is no generally agreed process for conducting a thematic analysis, these steps are a combination of the description of the process of thematic analysis as outlined by Boyatzis (1998) and Braun and Clarke (2006). These authors' work was adapted for the purpose of this study with the process outlined in Table 4. NVivo software was used to help with the management and coding of data, although some documents were only available as hard copies (see annotations in Table 3) and had to be analysed manually with highlighter pens, using the same process and coding framework.

The relevant themes developed in Step 2 were 'rationale' (Why were the events planned in the first place?), 'priorities' (What did event organisers want to achieve with the events?), 'outcomes and impacts' (What kinds of outcomes or impacts were observed by the organisers?) as well as 'problems, challenges and criticisms' (What negative elements did organisers encounter during the planning process?). All themes led to a wide range of additional data-driven sub-themes in Step 4, not limited to but including the aspects relating to event tourism presented in this paper. For example, within the 'priorities' theme, the authors developed the data-driven sub-theme of 'branding' which corresponds with one of the five propositions. Relevant extracts from the rich description and discussion produced in the final two steps were edited for the purposes of this paper. The authors would like to point out that all textual data were in German and have been translated into English to the best of their knowledge.

5. Findings and discussion

This section presents and discusses the findings of the study. The first five subsections are structured using Getz and Page's (2016a) propositions of event tourism as a means of demonstrating how

Table 4
Steps of the thematic analysis.

1	Choice of sources of data and first familiarisation with data
2	Development of initial coding framework
3	First round of coding (theory-driven)
4	Second round of coding (data-driven)
5	Writing up of 'rich description' of semantic/manifest themes
6	Writing up of separate discussion of deeper meanings based on 'rich description'

commemorative event that fulfil iconic-historic definitions can play a significant role within event tourism. Following that, the potential gravity of iconic-historic commemorative events within event portfolio management is discussed. Finally, the proposed commemorative portfolio is presented and linked to the strategic event portfolio framework.

5.1. Iconic-historic commemorative events and tourists

The first and overarching proposition is that events can attract tourists and this can generate economic benefits (Getz & Page, 2016a). As aforementioned, all other propositions are subsequent to this prime claim, but commemorations of political events were seen to have little potential here in existing literature. It is very clear, however, that the events in Berlin in 2009 and 2014 successfully attracted tourists. Their iconic-historic stature ensured that the events appealed to an international audience due to their symbolic meaning and historical significance. In regards to the first large-scale commemorative event in 2009, the documents stated:

A year of remembering and celebrating is coming to an end. According to Berlin Tourismus Marketing GmbH (BTM), the theme year brought about 2 million tourists to Berlin. (Kulturprojekte Berlin GmbH, 2009a, p. 11)

The year 2009 was the most successful year for the tourism industry in Berlin up to then, with a total of 8.3 million domestic and international tourists, constituting an increase of 4.5% in visitor numbers (Berlin Tourismus Marketing GmbH, 2010). Total hotel nights in 2009 increased by 6.2% to a total of 18.87 million (Berlin Tourismus Marketing GmbH, 2010). Similar success stories were told by Berlin Tourismus and Kongress GmbH (2015) following the 25th anniversary celebrations:

One million guests came to Berlin on the weekend of the anniversary of the fall of the Berlin Wall alone. Overall, November 2014 was one of the strongest Novembers ever for Berlin tourism with 2.2 million hotel nights. The number of hotel nights increased by over 10% compared with the previous year. (Berlin Tourismus & Kongress GmbH, 2015, p. 9)

And further:

We are particularly happy about the continuing increase in international visitors. In the past year 43.6% of all hotel nights were generated by visitors from abroad [...] The celebrations for the 25th anniversary of the fall of the Berlin Wall contributed to this. The whole world looked at Berlin and hundreds of thousands used this occasion to visit our city. (Berlin Tourismus & Kongress GmbH, 2015, p. 6)

This information demonstrates that these iconic-historic commemorative events attracted domestic and international tourists, despite the assumptions in the existing literature that commemorative events have narrow appeal to tourists and limited potential for achieving economic benefits from tourism (Frost & Laing, 2013). It is clear that iconic-historic commemorative events fulfil this proposition

and are therefore of significance for event portfolios as well as worth being nurtured for event tourism development.

5.2. Iconic-historic commemorative events as tools for branding and positioning

Events can create positive images for a place and therefore contribute to branding and positioning efforts (Getz & Page, 2016a). The interviewees revealed that the Berlin Wall commemorative events were indeed used for branding and positioning purposes. There were three main interrelated ways in which these iconic-historic events were used to brand and position the city: as a city of rich contemporary history, as a city of change, and as a city of Western values such as freedom, democracy and human rights.

The first emphasis can be seen in the following quote:

With these events, we determine important topics for Berlin. And we are branding Berlin in the area of contemporary history, make people aware of what happened in the various places and how it is all connected and this way we make Berlin attractive for a lot of people who come to this city as the German capital and ask what happened here and where can I see it. [...] We don't have any mountains and we also don't have the sea, there are loads of lakes, but not the sea, and instead Berlin lives on its history. (Interviewee 4)

This branding priority was thus particularly important for Interviewee 4, who outlines the role the events played for the branding of Berlin as a place rich in contemporary history. This interviewee specifically refers to the demands of tourists to see evidence of this rich history. The interviewee argues that history is the city's most important resource for attracting tourists and the large-scale commemorative events are one way to make full use of this resource. The Berlin Wall in particular continues to attract tourists as the most recognisable reminder of a recent historical event with international consequences which are generally associated with positive change. The Wall thus remains one of the city's most famous and most emotive landmarks despite its absence, underpinning the inextricable link of such iconic-historic commemorative events with their location.

The second focus point for branding, the city of change, was also emphasised in the interviews:

And to showcase how Berlin has changed in the past 25 years, that is also very important to us. (Interviewee 1)

A priority was placed on presenting Berlin as a city of change which is no longer a divided city on the margins but an exciting place of change that is attractive to visit, live in and do business in. This emphasis was particularly visible in 2009 with the event 'Perspectives – 20 years of a changing Berlin', which aimed at illustrating the 'immense changes in Berlin since the fall of the Wall' (Kulturprojekte Berlin GmbH, 2009a, p. 10) and focused on places such as the new Central Train Station, the new governmental district or the completely re-built Potsdamer Platz, a former area of the inner-German border.

Finally, the historical events were used to brand the city as a role model in terms of freedom, democracy and human rights:

Although 25 years have passed since the fall of the Berlin Wall, the symbolism of this seismic event has not waned. That a Peaceful Revolution successfully overthrew a dictatorship and ended the division of Germany, Europe and the world, continues to inspire hope across the globe that other barriers and walls can be surmounted in a similar fashion. (Kulturprojekte Berlin GmbH, 2014, p. 148)

The organisers commonly transferred the symbolic meanings and values of the iconic-historic events to situations around the world by drawing parallels between injustice in the GDR and existing injustice elsewhere. By outlining the processes of heroic self-liberation from a suppressive government, the fall of the Wall is used as a moral message and potential role model, encouraging people around the world that

injustice can be overcome in a peaceful manner. As this process has already been completed in Berlin, the city presents itself as a positive example to people around the world that aspire to the same freedoms. In this way, Berlin is presented as an appealing, desirable place to be. This branding aspect is also emphasised by Berlin Tourismus and Kongress GmbH (2015) who state that 'the 'Lichtgrenze' consolidated the image of Berlin as a city of freedom' (p. 6).

Whilst successfully changing the reputation of a place through branding strategies is difficult (Anholt, 2009), positive iconic-historic events - the Peaceful Revolution and the fall of the Berlin Wall - are used to position Berlin positively in an international community. By presenting the striving for freedom, democracy and human rights as international goals, Berlin is presented as having achieved what others may want. What is more, these ideals and values were achieved by the power of the people and in a peaceful way. Thus, the positive associations with the historical events are leveraged (see also Florek & Insch, 2011) and the iconic-historic commemorative events are used to brand Berlin to a national and international audience. This illustrates that it is not just cultural or non-political anniversaries that can be successfully used for branding and positioning purposes, but anniversaries of events in political spheres as well.

5.3. Iconic-historic commemorative events as tools for place marketing

In close relation to the previous proposition, events can contribute to broader marketing efforts to make places more attractive (Getz & Page, 2016a). Whilst the events under investigation were successful in attracting visitors to the city, as mentioned in Section 5.1, they also contributed to longer term marketing benefits. In this case, the interviews outlined that the events helped with marketing communication efforts, particularly in relation to media publicity through extensive reporting of the events in the media. In this sense, the events generated significant national and international media coverage, emphasising the marketing potential of iconic-historic commemorative events. This helped to communicate the aforementioned branding and positioning efforts to an international audience:

The beginning was made in early summer in 2008 by the New York Times: Almost a year before the opening of the exhibition it recommended a visit to the open-air exhibition 'Peaceful Revolution 1989/90' to its readers. This report kicked off an overwhelming media response both nationally and internationally. (Robert-Havemann-Gesellschaft e.V. & Kulturprojekte Berlin GmbH, 2010, p. 44)

The media coverage generated in both years was recognised as a helpful marketing tool:

For us this media attention was ... We were in over 320 newspapers, media worldwide, we had over 40 reports on TV worldwide. [...] But that's a unique occurrence, I believe, and it was a major help. These images are worth more than any guidebook. (Interviewee 3)

Such coverage is a commonly discussed outcome of events where increased exposure in the media throughout the course of an event can enhance the profile of a destination, resulting in long-term event tourism benefits (Getz, 2007; Getz & Page, 2016a).

The potential to use commemorative events for the marketing of places is considered in the literature (Frost, 2012; Grundlingh, 2004; Laws & Ferguson, 2011; Liburd, 2003; Paradis, 2002), but rarely associated with commemoration of political events. In the case of the 20th and 25th anniversaries of the fall of the Berlin Wall, however, being the home to such a unique iconic-historic event helps present an appealing and attractive image of the city. Iconic-historic commemorative events such as those of the fall of the Berlin Wall therefore have significant long-term event tourism potential.

5.4. Iconic-historic commemorative events as animators for static facilities

The data showed that the iconic-historic commemorative events also fulfil Getz and Page's (2016a) fourth proposition, i.e. as animators of static facilities. The interviews revealed a strong link between the commemorative events and the permanent commemorative infrastructure in the city. Of particular relevance are the developments that occurred as part of the 'Overall concept', where the opening of new, extended or improved commemorative efforts was timed to coincide with the anniversary years:

We opened the 'Wall Information Space' in the subway station at Brandenburg Gate during the theme year, and as I said, the visitor centre [at the Berlin Wall Memorial] after only one year of construction, and the first part of the extension to the Berlin Wall Memorial, so that the people can see, things are really getting started now. (Interviewee 4)

This quote relates to what Getz (1991; 2005; 2008) and Getz and Page (2016a) describe as using events as animators for static sites to encourage visitation and enhance publicity under the overarching term of event tourism development. This is clearly visible in this case, for example, the opening of the new permanent exhibition at the Berlin Wall Memorial was timed to take place on 9th November 2014 so that the media and public attention for the 25th anniversary of the fall of the Berlin Wall could be leveraged. Additionally, the 50th anniversary of the construction of the Berlin Wall was also used for this purpose with the opening of a new extension to the Berlin Wall Memorial having been completed in 2011. Not surprisingly as well, the 2009 event 'Perspectives – 20 years of a changing Berlin' included the Berlin Wall Memorial and in 2014, a major focus point and visitor information centre along the 'Lichtgrenze' was located on memorial grounds. The use of events to animate permanent places of commemoration is therefore a common practice in Berlin.

5.5. Iconic-historic commemorative events as catalysts for future development

Evidence that the iconic-historic commemorative events fulfil the proposition of fuelling future development (Getz & Page, 2016a) can also be seen in this study. This is related to the aforementioned link between temporary and permanent forms of commemoration. These iconic-historic events were not only used to animate existing or newly opened places, but also to stimulate development for further places in Berlin:

Well, of course we want to create sustainable impacts with these theme years in that institutions are planned or completed, that places within the city are highlighted, that memorials are created, so that something remains from each year which continues to carry out this commemorative duty. (Interviewee 4)

Apart from the strategic use of the anniversaries for future development, the events also unintentionally stimulated debates over missing memorials and created demand for their development. This was particularly the case in relation to the Peaceful Revolution, which had not been commemorated before 2009:

The enthusiasm of the people illustrated that both Berliners as well as national and international visitors expect a presentation of recent German history, especially in the capital Berlin which was an important location of the Peaceful Revolution. The removal of the exhibition [on the Peaceful Revolution] leaves a gap which has to be filled. (Robert-Havemann-Gesellschaft e.V. & Kulturprojekte Berlin GmbH, 2010, p. 14)

Overall, emphasis is placed on 'sustainable commemoration', thus using the events as a catalyst for legacy purposes (Getz, 1991, 2005, 2008; Hall, 1992). An important question was what remains from such large-scale events. Frost and Laing (2013) argue that legacies in the

form of permanent places of commemoration can fulfil a variety of functions, such as constructing public space or providing places of pilgrimage. These functions, however, are also applicable for places of permanent commemoration that are created without the link to an anniversary. The question of why such legacies of events are important thus remains. A potential explanation is that these places are seen to more effectively anchor the historical events in collective memory and determine their meaning and status on the long-term (Barthel, 1996; Foote & Azaryahu, 2007; Gapps, 2010; Turner, 2006), whereas the meaning of events can be more fluid and impacts can be more short-term. Nevertheless, Gapps (2010) and Turner (2006) argue that such permanent places can become unnoticed banal features of the cityscape whereas commemorative events can more effectively capture people's attention and create lasting sociocultural impacts. However, socio-cultural event impacts are often intangible, abstract, highly subjective and difficult to measure (e.g. Bowdin, Allen, Harris, McDonnell, & O'Toole, 2011; Dwyer, Mellor, Mistilis, & Mules, 2000; Getz, 2007), potentially making them less meaningful for the organisers in the long-term and thus creating the need for places of permanent commemoration.

5.6. Iconic-historic commemorative events and event portfolios

This paper proposes that iconic-historic commemorative events display similar characteristics to hallmark events and, if they successfully attract tourists, may be nurtured to gain similar status within an event portfolio. It can be seen that the iconic-historic commemorative events of the fall of the Berlin Wall in 2009 and 2014 indeed display similar characteristics to hallmark events (Getz & Page, 2016a; Getz et al., 2012). First of all, the events in both years were large-scale events that managed to attract a significant number of domestic and international tourists. Secondly, the events contributed to the marketing, branding and positioning of the city. Thirdly, similarly to other commemorative events they have the potential to contribute to community building (Frost & Laing, 2013), although this research cannot comment on the extent to which this successfully took place. Fourthly, they are not one-off events, but take place periodically. Finally, the events are inextricably linked to the city of Berlin, with the Berlin Wall being an internationally recognised landmark of the city. This shows that, in certain contexts, such iconic-historic commemorative events have significant event tourism potential and could be nurtured to a status similar to hallmark events.

The key currently unfulfilled characteristic is whether the events will become permanent taken-for-granted institutions just as successful hallmark events (Getz & Andersson, 2008). With only two iterations of quite different format so far, it remains to be seen whether future events will take place. Indeed, the interviewees expressed some uncertainty about this. For example, when asked whether future events will be easier to stage or whether they will have to struggle for the required support, one interviewee said:

I think definitely the latter because it costs money and someone has to provide that money and they have to be willing to give it. And everyone that gives money is in a difficult situation because they are asked what they are giving money for. [...] it always depends on who is making decisions and what is the political constellation, in what kind of difficult situations are they. (Interviewee 2)

Another event organiser further noted that:

Whether there will be something of this scale in five years' time, we aren't able to predict that. After 2009 as well people had the feeling that because the project grew so much throughout the process especially in the run-up to 9th November and with this impact, people thought, 'Well, will it be possible to stage something which can keep up with this for 25 years after the fall of the Wall?' I think we succeeded in this with the 'Lichtgrenze' and the accompanying activities. But whether we do this

again for 30 years ... Perhaps it will only be this big for 50 years, we will see in the coming years and in three or four years we will think about how to deal with this for the 30th anniversary but it is a bit too early now. (Interviewee 1)

The above quote emphasises the idea that the event organisers had set very high standards with the theme year in 2009 which were difficult to achieve again or even to surpass. Although they consider the events in 2014 to be successful, it is uncertain whether something else of this scale can be organised again. This stresses the importance of the unique and novel programming in both anniversary years which cannot easily be repeated every five years. Interviewee 3 also discusses the difficulty of creating something meaningful and the potential discrepancies between the plans of the event organisers and actual experiences by attendees on the day of the event:

Yesterday there was a very interesting article in the Tagesspiegel⁴ about what happened. What actually happened there? And this distinction, I thought it was great, I thought it was very intelligent, they made a distinction between event and happening.⁵ [...] Well, there is this event which has been planned for a long time and it comes and makes BANG and it's gone. But this happening is something else. A happening simply happens. Whether you want it or not. Well, that it actually happens, you plan everything, you can plan Christmas, too, you can plan Christmas all year long but perhaps it doesn't happen. It takes place, but it doesn't happen, because the whole family is having a row again. Well, you can plan whatever you want but it doesn't happen. And that was the case here as well. All kinds of things were planned, but that is ... and that is the special thing and for me there was a very nice atmosphere. [...] And that's quite an achievement; I didn't think it was possible in this way. (Interviewee 3)

Thus, Interviewee 3 concludes that:

It's not that you can easily reproduce these kinds of events again and again. And it was something very special. (Interviewee 3)

This line of thought is reflective of the literature on event experience design. Getz (2007), for example states that it is impossible to plan, design or guarantee a particular event experience for attendees. There are elements that can be designed in an attempt to facilitate certain experiences, such as the theme or programme. However, in the end the nature of the experience depends very much on the audience, their interactions with the environment and each other, and their beliefs and dispositions (Berridge, 2007).

There are thus two key challenges in the development of these iconic-historic commemorative events to a status comparable to hallmark events, and these are reflective of the existing literature. First of all, wide-ranging support from all stakeholders is needed for the events to institutionalise and achieve taken-for-granted permanent status (Getz & Andersson, 2008), and this support seems questionable in the case under investigation. Secondly, the success of the events depends on the extent to which they resonate with the audience; the meaningful commemorative effort cannot be imposed on the people, however, it is needed for a successful event and subsequent event tourism benefits. In this case, the organisers appear to think that with each anniversary, a new unique idea that successfully facilitates the desired experiences is needed and that previous formats cannot be repeated.

Therefore, overall, the development of these events into events of permanent status similar to hallmark events is uncertain despite past success. Nevertheless, the study suggests that commemorative events of similar iconic-historic status to the fall of the Berlin Wall can be

desirable devices in an event portfolio and it should be considered whether they can be nurtured to become institutions.

5.7. The need for commemorative portfolios and their linkages with event portfolios

Whilst this paper argues that iconic-historic commemorative events can be as valuable for event portfolios as hallmark events, there are nevertheless several particularities of such events in considering their use for event tourism purposes. There are two key interrelated issues that relate to the process of commercialisation and links with permanent commemoration. In order to address these issues, the authors suggest the integration of iconic-historic commemorative events into both a commemorative portfolio and an event portfolio, where possible and appropriate.

In discussing the use of events for event tourism development purposes, Getz (1991) states that commercialisation is a common concern particularly with the use of cultural events. This concern is related to the commodification of cultural elements in the production of events explicitly aimed at tourists which may lead to a perceived lack of authenticity (Andrews & Leopold, 2013). Commodification and lack of authenticity may negatively influence the perceived meaning of the event (Andrews & Leopold, 2013). Authenticity, however, is a highly subjective concept and as such, the level of 'acceptable commercialisation' will differ from person to person. This management challenge of catering to a large number of visitors while at the same time trying to preserve the inherent meanings of commemorative events is pointed out by Hall et al. (2010). Furthermore, the increased usage of event portfolios for event tourism goals (e.g. Getz, 1991, 2005, 2008; Getz & Page, 2016a; Richards & Palmer, 2010) as well as an increased awareness of the importance to provide experiences (stemming from Pine and Gilmore's original discussion of the experience economy in 1998) led to what Jakob (2013) terms eventification of place: 'the process with which the consumption of products and space is turned into an event' (p. 449). Thus, what happens could be seen as an eventification or commodification of commemoration as part of wider event tourism strategies. This development is explicitly criticised by one organiser of the iconic-historic events under investigation:

I was very, very sceptical towards the whole thing. Because [...] I immediately see the eventification and exploitation of spaces. (Interviewee 3)

In contrast to this, another interviewee argued that staging the commemoration as an event does not necessarily imply any negative impacts on the profoundness or authenticity of the commemorative effort:

I think that it is okay to stage this, and it should be staged [...]. It doesn't mean you have to distort anything, and that's always this black and white thinking. [...] You don't have to lie. But that doesn't mean it can't be staged. (Interviewee 2)

In this interplay between temporary and permanent commemoration there is a level of disagreement among organisers in terms of what is most appropriate and what is most profound. Frost and Laing (2013) consider the question of when this eventification turns into disrespect, but also argue that the answer is highly subjective and that this may always be a resource for dispute.

Richards and Palmer (2010) argue that in line with processes such as event portfolio development, events increasingly challenge the dominance of static sites for cultural and economic development in cities. They further state that events can lead to more vibrant and stimulating experiences in urban spaces. Although the overall positive impact of the events is recognised among organisers, permanent commemoration nevertheless appears to carry the highest priority. In a city like Berlin which is highly dependent on its history for branding and (event) tourism development strategies, it is important to develop a

⁴ Tagesspiegel: A daily liberal newspaper with its headquarters and primary target audience in Berlin.

⁵ The words used in German are 'Event' and 'Ereignis', the former is exclusively used in German to refer to a planned event whereas the latter can refer to something unplanned and unexpected.

balanced commemorative portfolio consisting of both permanent and temporary forms.

The idea of a commemorative portfolio was also supported by one of the interviewees who argued that the events should add to the existing infrastructure:

[W]e are working with partners in the city, especially those who usually deal with coming to terms with the topic on a daily basis [...] that means we do not want to do anything to compete with them or repeat what they are already dealing with, but simply to create something supplementary that matches our partners' ideas. (Interviewee 1)

This portfolio should not only consider permanent and temporary forms of commemoration in regards to one particular historical event, such as the fall of the Wall, but needs to be more wide-ranging in scope. One interviewee explained that:

Because naturally there were voices in 2009 that said 'You are celebrating the fall of the Wall on such a large scale, but don't forget the anniversary of the November Pogroms⁶'. And that led to the idea to stage [another] theme year for the 75th anniversary of the November Pogroms. And that's how one topic leads to another. (Interviewee 4)

It can be argued that such conflicts over the meaning and interpretation of different events being commemorated are inherent to any act of commemoration (Gillis, 1994). Nevertheless, in recent decades many Western societies have seen a development towards more nuanced and plural commemorative efforts (Elgenius, 2011a, 2011b; Ryan, 2011). Therefore, iconic-historic commemorative events can be as valuable as hallmark events within event portfolios, but at the same time need to be in line with and embedded within a balanced overall commemorative portfolio of the place. This is to address concerns surrounding eventification and commercialisation, conflicts due to competing offers and conflicts with commemoration of other historical events. Iconic-historic commemorative events should therefore not be nurtured into a status similar to hallmark events within an event portfolio without consideration of the permanent commemoration as well as of other key events in the history of the place. Fig. 4 illustrates the proposed portfolio approach to commemoration and its links with the strategic event portfolio framework.

As can be seen in Fig. 4, the commemorative portfolio consists of a base of permanent commemorative infrastructure on a range of historical topics. Whilst Fig. 4 portrays three topics, this could be any number appropriate and relevant to a destination. This base consists of a wide range of memorials, monuments, museums, street names and other forms of permanent commemoration. Some of these may be of interest to tourists whilst others may primarily be of interest to the local community or special interest groups only. In addition to this base, a destination may stage commemorative events on anniversaries of historical events. As this research suggests, there are links between permanent and temporary commemorative efforts (illustrated through the dotted lines in Fig. 4) in that the events can be used to animate existing places as well as create demand for additional permanent commemorative infrastructure. Furthermore, organisers may place a high importance on the permanent infrastructure for long-term anchoring of memories as well as for avoiding a perceived commercialised approach to commemoration, therefore both permanent and temporary forms need to be considered for the portfolio. Similar to the event portfolio, the events staged in addition to the base of permanent commemoration can be of different scale and status. They can be local or regional, meaning they primarily carry meaning for local populations or small special interest groups and have little event tourism significance. Alternatively, such events can be of iconic-historic stature such as the

example in this paper and therefore be significant for event tourism. Finally, such events could be major large-scale anniversaries such as centenary celebrations, which, similarly to mega-events in the event portfolio, occur less frequently due to costs and efforts involved.

As this paper argues, as well as sharing similar characteristics, iconic-historic commemorative events can be as valuable as hallmark events within strategic event portfolios, and thus such temporary commemorative efforts from the commemorative portfolio can feed into the strategic event portfolio approach of a destination. This link between the two portfolio approaches is illustrated in Fig. 4, where the proposed commemorative portfolio can be seen, including the defined iconic-historic form of event. Therefore, whilst these are two separate frameworks for the planning and management of two aspects within a destination – events and commemoration – they are linked particularly through the event tourism significance of iconic-historic commemorative events. Thus these two portfolios should not be managed in isolation but should inform each other, which will require cooperation between different actors within destinations, such as destination planners and managers, city marketers, cultural policy makers and the managers and planners of commemorative efforts.

6. Conclusion

By first defining a new category of commemorative event, this paper explored how these iconic-historic commemorative events can function as event tourism devices. In doing so, it used the example of the 20th and 25th anniversaries of the fall of the Berlin Wall as archetypal examples of iconic-historic commemorative events. This concluding section states the theoretical contributions as well as management implications of this research. It further outlines limitations and potential areas for future research.

6.1. Theoretical contributions

In its first major contribution, this paper defines a new form of commemorative event as iconic-historic through the example of the 20th and 25th anniversary events of the fall of the Berlin Wall. It argues that such events are both iconic in stature and of considerable historical significance, whilst representing internationally appealing values and ideals. The paper also showed that these events have significant event tourism potential and share the key characteristics of sought-after hallmark events. In characterising iconic-historic events, another major contribution of this paper is to provide a new commemorative portfolio framework. This was linked with the strategic event portfolio, thus contributing to knowledge in the realm of event tourism planning. This is presented in Fig. 4 in this paper. In doing so, it illustrates how iconic-historic commemorative events may function as devices for event tourism strategies.

In the context of event tourism, commemorative events within political spheres are a largely unexplored phenomenon. The definition of iconic-historic events as a further form of commemorative event in this area and the understanding of such events in relation to how they are used for event tourism development thus adds to work published on commemorative events, such as the studies by Frost (2012), Frost and Laing (2013), Frost et al. (2008), Hall et al. (2010), Laws and Ferguson (2011) and McDonald and Méthot (2006) whilst also adding a new perspective to work on event tourism (e.g. Getz, 1991, 2008; Getz & Page, 2016a). Furthermore, this study shows that iconic-historic commemorative events do fulfil all of Getz and Page's (2016a) five core propositions of event tourism. Although this is a broad event tourism framework, it further suggests commemorative events have been overlooked for their potential as devices of event tourism. Table 5 summarises the theoretical contributions in this regard.

The paper illustrates that iconic-historic commemorative events are interpreted and staged as internationally appealing events with more than just a domestic audience. The literature suggests that

⁶ Also referred to as the 'Night of Broken Glass', the November Pogroms took place on 9th and 10th November 1938. They constituted attacks and riots aimed at Jews in Germany and were a key event in the lead up to the Holocaust.

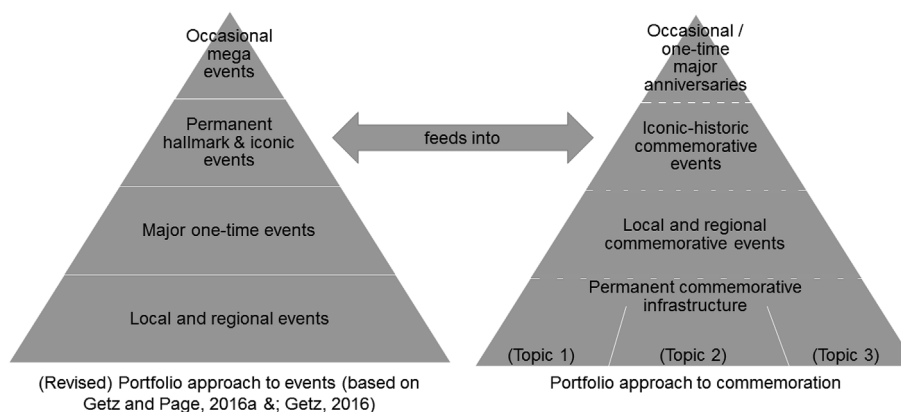


Fig. 4. Strategic event portfolio linked with the proposed commemorative portfolio.

Table 5

Theoretical contributions in relation to the five propositions.

Proposition (Getz & Page, 2016a)	Previous theoretical assumptions	Theoretical contributions of this research
1 Events can attract tourists which can create economic benefits.	Commemorative events have limited appeal to tourists and limited potential for achieving economic benefits from tourism (Frost & Laing, 2013)	Iconic-historic commemorative events can be interpreted and staged as internationally appealing events with much more than just a domestic audience.
2 Events can create positive images for the destination and help brand or re-position cities.	Cultural anniversaries and anniversaries of other ‘popular’ historical events can be used for branding or re-positioning purposes (e.g. Frost & Laing, 2013; Paradis, 2002), but political anniversaries were largely unexplored.	Positive associations with iconic-historic events can be leveraged to brand and re-position a destination, nationally and internationally.
3 Events contribute to place marketing.	The potential to use commemorative events for the marketing of places is considered in the literature (Frost, 2012; Grundlingh, 2004; Laws & Ferguson, 2011; Liburd, 2003; Paradis, 2002), but these ideas are rarely associated with commemoration of political events.	Iconic-historic commemorative events can generate significant positive media coverage worldwide, which can contribute to place marketing by highlighting the attractive nature of the destination.
4 Events animate cities, resorts, parks, urban spaces and venues of all kinds.	This proposition has been largely unexplored.	Iconic-historic commemorative events can be used strategically to encourage visitation at and enhance publicity for permanent forms of commemoration.
5 Event tourism acts as a catalyst for other forms of desired development.	Frost and Laing (2013) comment that commemorative events can provide a justification for funding permanent structures, but do not make the link to event tourism. Therefore, this proposition is largely unexplored.	Iconic-historic commemorative events can be used strategically to stimulate development of and demand for places of permanent commemoration.

commemorative events may have limited appeal to tourists (Frost, 2012; Frost et al., 2008; Frost & Laing, 2013; Grundlingh, 2004; Turner, 2006). However, the events in Berlin were clearly designed to appeal to an international audience by promoting iconic ideals of freedom and democracy and to educate attendees on what happened. This finding further highlights limitations of previous studies and suggests that tourists should not be considered as outsiders to commemoration but may be key drivers for these events to take place in the first place. Consequently, the dichotomy of locals and tourists which is common in studies of commemoration appears to be outdated. In interpreting the fall of the Wall as an event of international significance, this dichotomy is not applicable anymore. The existing literature is therefore too narrow in focus when discussing commemoration primarily in relation to political and social uses and contexts. Likewise, by assuming that commemorative events are primarily directed at a domestic audience, their event tourism potential has been overlooked. In line with this, Elgenius (2011b) and Frost and Laing (2013) comment on the festivities in Berlin on 9th November 2009 from a national day celebration perspective, when these events were clearly designed for broader purposes.

This study further suggests that it may be relevant to consider potential linkages between permanent and temporary forms of commemoration. Whilst some previous work in memory studies and event studies comments on such different forms (e.g. Frost & Laing, 2013; Gapps, 2010; Turner, 2006), to the best of the authors’ knowledge, there is no in-depth consideration of the interplay between them in the context of event tourism. Frost and Laing (2013) comment that commemorative events can provide a justification for funding new

permanent structures, but do not make the ensuing links to event tourism. In this study, the linkages between permanent and temporary forms of commemoration imply a further event tourism use of iconic-historic commemorative events as animators of and catalysts for static facilities that commemorate the same or related elements of the past. Such a linkage can help to increase visitor numbers and broaden public attention and thus augment commemoration at static sites. Nevertheless, iconic-historic commemorative events pose some key challenges in relation to concerns over commercialisation and conflicts over meanings and other historical narratives. The authors therefore introduce the commemorative portfolio which incorporates both permanent and temporary forms of commemoration on a range of historical topics and which can help planners to develop a balanced approach to commemoration taking into consideration commemorative efforts of different forms, topics and scales.

The paper argued that iconic-historic commemorative events share important characteristics with sought-after hallmark events in that they are unique and inseparably linked with their host destination, occur periodically and can contribute to place marketing as well as community building. Therefore, it was argued that such commemorative events can be desirable event tourism devices and possibly be nurtured to be of a status similar to hallmark events within an event portfolio. Whilst Frost and Laing (2013) have already proposed that this is the case in rare occasions, this paper adds to their work by illustrating the shared characteristics of the two types of events and thus encouraging the deliberate inclusion and nurturing of iconic-historic commemorative events in event portfolio development plans.

6.2. Management implications

For organisers of commemorative events as well as event organisers more broadly, destination marketers and policy makers, this study illustrates that iconic-historic commemorative events can be incorporated into event tourism development strategies. Indeed, these events should be considered as valuable devices and the potential to nurture such events should be explored. In destinations where there are no existing commemorative events that can be developed, new events may be created to celebrate suitable anniversaries. Particularly in geographical settings with events with a positive connotation, such as the overcoming of injustice in the case of the fall of the Berlin Wall, managers could identify the potential transfer of symbolic meanings and values from iconic-historic events.

In order to use iconic-historic events for event tourism purposes, it is necessary to overcome the traditional internal, domestic orientation of commemoration. The event which is being commemorated needs to be interpreted as an event of international significance so that tourists are not seen as outsiders. To reach more than a local or national audience, the commemoration might thus focus on the communication of the international outcomes of the historical event as well as internationally appealing iconic ideals and values. In the case of the fall of the Wall, the construction of such an international orientation is not difficult due to the far-reaching implications of the historical events.

Table 6 outlines all management implications of this paper in relation to Getz and Page's (2016a) core propositions.

Nevertheless, there are some particularities of using iconic-historic commemorative events for such purposes. It is important to consider potential fears of commercialisation and commodification of an 'authentic' or meaningful commemoration. In this context, the authors propose a portfolio approach to commemoration which should be carefully devised and feed into the strategic event portfolio approach. For practitioners, the commemorative portfolio approach can be helpful in navigating challenges in relation to commercialisation as well as conflicts with commemoration of other historical events. Furthermore, this study shows that the success of iconic-historic events is highly dependent on the experiences of the attendees which cannot be imposed on them due to the subjective nature of experiences. This poses challenges that managers will need to negotiate if wanting to nurture the events to become permanent institutions of status comparable to hallmark events elsewhere.

6.3. Limitations and future research

First of all, the findings of this research are not generalisable. Within the constructionist philosophy and a qualitative approach, generalisability

is not an intended research outcome; however, there are theoretical contributions and transferable managerial implications as illustrated above. Furthermore, in reference to their conceptual similarities with hallmark events, the specific iconic-historic commemorative events considered in this study are unique and tied to their physical host destination and symbolic position, in cultural, social and historical terms. The theoretical contribution of this research is therefore not in its transferability, but rather is of conceptual nature to the literature on event tourism and commemoration. Furthermore, it should be noted that organisers of other iconic-historic commemorative events might not have the same priorities as in Berlin. The authors of this paper therefore cannot claim that it is always desired or desirable to use iconic-historic commemorative events for event tourism development. Another limitation of the present study is it does not extend to consider the impacts and sustainability of commemorative events, either in the event tourism setting of Berlin and its stakeholder context, or in the generic sense.

Due to the uniqueness of iconic-historic commemorative events, it would be of interest to investigate further events from an event tourism perspective. Suitable events that might fulfil iconic-historic definitions are the upcoming centenary of the November 1918 Armistice that led to end of the First World War or the 500th anniversary of Martin Luther publishing his 95 Theses, observed in 2017. Furthermore, the potential symbolic value of iconic-historic events could be studied in particular geographical locations that are currently associated with more negative discourses of injustice, conflict and further human, political or natural phenomena. Examples here include the commemorations of the 9/11 attacks in New York City or the atomic bombings of Hiroshima and Nagasaki. Further research may contribute to a more in-depth understanding of the event tourism significance and associated challenges of commemorative events overall. This would provide additional insight into event tourism uses of commemorative events and thus partly address that the findings are not transferrable to other destinations. It would be of interest to explore whether the portfolio approach to commemoration, combining both temporary and permanent forms, is of relevance in other settings. Moreover, studies of potential future events commemorating the fall of the Berlin Wall can provide further understanding of the uses of these events and examine whether there are any developments from 2009 to 2014 and beyond. Such studies would also give further insight into the events' institutionalisation. Finally, as commemorative events remain under-researched, they could be investigated from a wide range of perspectives to provide additional insight, for example event planning, public policy, impacts and outcomes for destinations and stakeholders, as well as sustainability. Future studies could be from a theoretical perspective, or be situated in particular commemorative event management contexts.

Table 6
Implications of Getz and Page's (2016a) core propositions for the management of iconic-historic commemorative events.

Proposition (Getz & Page, 2016a)	Management implications
1 Events can attract tourists which can create economic benefits.	Organisers should not assume international tourists are outsiders with no interest in the iconic-historic commemorative event and emphasise the symbolic value as well as international implications of the historical event.
2 Events can create positive images for the destination and help brand or re-position cities.	The strategic development of iconic-historic commemorative events with positive connotations and high symbolic value can contribute to a destination's brand.
3 Events contribute to place marketing.	Organisers should be aware of the potential media interest and leverage media publicity for the city. This media publicity can help communicate the positive symbolic value of the event and make the place more attractive to a broader audience.
4 Events animate cities, resorts, parks, urban spaces and venues of all kinds.	Organisers may consider using iconic-historic commemorative events to encourage visitation of and creation of publicity for places of permanent commemoration. The (re)opening of new or refurbished places can be timed to coincide with major anniversaries.
5 Event tourism acts as a catalyst for other forms of desired development.	Organisers may decide to leverage the focused interest around key anniversary events to stimulate debate and support for future development of places of permanent commemoration.

Author's contribution

Dr Maren Viol is the first author of this paper. As such she designed and conducted all major stages of the research process, including literature review, data collection and data analysis. She developed the portfolio approach to commemoration and prepared all major versions of this paper.

Dr Louise Todd contributed to this paper as its second co-author by developing the conceptual framework of event tourism, strategic portfolio management, and iconic and hallmark events. She synthesised a series of key concepts and themes in these areas in relation to commemorative events, and in doing so, defined 'iconic-historic' commemorative events and their features. A further contribution was to the development of the strategic event portfolio framework, and links with the proposed commemorative portfolio (as presented in the paper). Louise wrote and edited a number of sections of the paper and contributed further by editing and proofreading the paper throughout the writing process.

Dr Eleni Theodoraki has overseen the development of the underpinning conceptual framework of this paper. Eleni further contributed in exploring the paper's socio-political context. She applied organisational and institutional perspectives, edited previous paper versions and helped develop the work following its review by the referees.

Dr Constantia Anastasiadou assisted with the initial conceptualisation of the paper and then again during the revision stages following the reviewers' feedback. She also contributed to the organisation and final editing of the paper and to the responses to reviewers' comments document.

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Reassessing the Export Competitiveness of Vietnam

Shashi Kant Chaudhary*, Nguyen Viet Khoi**

Abstract: In this paper, primarily the export specialisation pattern of Vietnam has been examined from the perspective of domestic value added exports. In addition, an effort has been made to identify presence of exaggeration in gross exports measures of industries level competitiveness. Empirical findings suggest that the export specialisation of Vietnam has reversed, and there is presence of exaggeration in the estimates of comparative advantage of ‘human capital and technology intensive’ industries that has also caused in ballooning up their shares in gross exports. Such pattern has arisen because intra-industry trade has become increasingly significant in Vietnam.

Keywords: Competitiveness; Domestic Value Added Exports; Revealed Comparative Advantage; Specialisation; Trade in Value Added; Vietnam.

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1. Introduction

The trade competitiveness in conventional way is analysed by using gross exports value, which in the world of fragmented production process suffers from multiple counting problems. Consequently, the gross exports value of a country that is located at the end of the fragmented production process, for example China, Mexico, and Vietnam, are found exaggerated by significant amount¹. Such exaggerations in gross exports may lead to noisy and misleading measurement of export competitiveness of an industry or sector.

The studies by Koopman et al. (2014) and Johnson (2013) clearly reveal how exaggeration in the gross exports may have serious repercussion in estimation of revealed comparative advantage for an industry or country², which in turn may also alter the industrial or trade policies since the policymakers may make incorrect decision while identifying the export sectors or products for export promotion. There are numbers of other analyses available that also show that the gap between domestic value

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¹ Xing and Detert (2010) have explained the issue of exaggerated gross export value very clearly in their study of iPhone 4, in which they show that of the US\$178.96 cost of production of an iPhone 4; Chinese contribution is merely US\$6.50.

² Based on gross exports value, Koopman et al. (2014) found that both China and India revealed strong comparative advantage in the ‘finished metal products’. However; when reassessing the same using domestic value added exports, India slipped from comparative advantage to comparative disadvantage, while there was a significant drop in the revealed comparative advantage ranking of China. In a similar way, Johnson (2013) using gross exports value found that China has a comparative advantage in ‘computers’; however, when it was assessed using domestic value added exports, this was no longer the case.

added exports and gross exports of an industry or a country is increasing.

A comparative approach to analysing these two series of exports in Vietnam shows that the gross exports value is exaggerated by significant amount, which is as much as of 36 percent; thus, giving a strong cause to suspect presence of noise in its conventional measures of revealed comparative advantages of the exporting industries. To identify presence of such noises, therefore it is necessary to reassess the export competitiveness of those exporting industries using domestic value added exports. In this regard, this paper focuses on re-computation of the revealed comparative advantage indices of various exporting industries of Vietnam using the 'domestic value added exports' and comparison of the outcomes with that of the conventional indices for the same industries in order to find presence of any noise. The rest part of this paper is organised as follow. Section 2 discusses the methodological framework that also includes some highlights on some earlier studies on developing revealed comparative advantage indices. Section 3 discusses empirical findings of the analysis followed by the concluding remarks and policy discussions in section 4.

2. Methodological framework

The concept of 'revealed comparative advantage' (RCA) was first introduced by Liesner in 1958; however, it was operationalized by Balassa in 1965 as a way to approximate the comparative advantages in autarky. Since then, the ways of measuring revealed comparative advantages have been revised and modified by several academicians viz. Donges and Riedel

(1977), Wolter (1977), Vollrath (1991), Lafay (1992), Dalum et al. (1998) etc. But, Balassa's index has been found more useful in many researches and policy applications, and has been adopted by some reputable institutions such as UNIDO (1986), World Bank (1994) and OECD (2011), and also by many academicians such as Aquino (1981), Crafts and Thomas (1986), Hulst et al. (1991), Lim (1997) etc. in their research works as a measure of the international trade competitiveness. However, there is a serious concern about the Balassa's index, that it assigns more weight above unity than below it i.e. Balassa's index distribution is not symmetrical. Hence, to overcome this problem, several other alternative indices have been developed including Lafay index (Lafay 1992), Revealed Symmetric Comparative Advantage index (Dalum et al. 1998), Revealed Weighted Comparative Advantage index (Proudman and Redding 2000), Revealed Additive Comparative Advantage index (Hoen and Oosterhaven 2006), Revealed Normalized Comparative Advantage index (Yu et al. 2009) etc.

In their study, Sanidas and Shin (2015) employed these indices to examine their significance and applicability in measuring revealed comparative advantages. But, they remained indecisive to recommend any one approach over the other. On the other hand, Laursen (1998) showed that Revealed Symmetric Comparative Advantage (RSCA) index meets the normality assumption more frequently than other indices by adopting a comparative approach among the Revealed Symmetric Comparative Advantage index, Michaely index and Chi-square. Considering these facts, researchers have adopted Balassa's index to reassess the export competitiveness of Vietnam. Researchers realised that there is an additional benefit of adopting Balassa's index for this purpose,

which is the fact that Balassa’s index can be incorporated into the RSCA index in order to overcome the problem of asymmetry³ in the Balassa’s RCA distribution. Hence, the research scheme is to apply Balassa’s approach to measure RCA indices of exporting industries of Vietnam based on domestic value added exports and gross exports series and make a comparative conclusion on the export competitiveness of those industries and Vietnam itself. Then to examine the pattern of export specialisation based on beta estimates of the Galtonian regression analysis on RSCA indices. These indices have been discussed briefly in the following sections.

2.1. Balassa’s index and RSCA index

Balassa’s index is the ratio of proportionate share of a given industry’s total exports in a nation’s exports (here Vietnam) to the proportionate share of the same industry in the World.

Mathematically, Balassa’s index can be represented as below:

$$(1) \quad BI_j = \frac{\frac{X^v_{jt}}{X^v_{Tt}}}{\frac{X^W_{jt}}{X^W_{Tt}}}$$

where BI_j stands for Balassa’s RCA index for industry j ; X stands for exports, t and T refer to year and total exports value, and ‘v’ and ‘W’ stand for the Vietnam and the World respectively such that-

X^v_{jt} = Vietnam’s exports of industry j in period t ,

X^v_{Tt} = Vietnam’s total exports value in period t ,

X^W_{jt} = World’s exports of industry j in period t ,

X^W_{Tt} = World’s total exports value in period t .

Numerical values of Balassa’s index can take anywhere between zero and infinity. Therefore, the guideline is that ‘Vietnam would have a comparative advantage in an industry only if BI value of this industry is greater than unity; and a comparative disadvantage in the industry if its BI value is smaller than unity’. However, as discussed earlier that demarcation at unity creates asymmetry in the RCA distribution, which makes it unsuitable for the purpose of statistical analysis to examine the pattern of export competitiveness of industries over time. Moreover, it may also result into unreliable t-statistic if a regression analysis is employed. Therefore, to overcome this problem, researchers have followed Dalum et al. (1998) to engage the concept of ‘revealed symmetric comparative advantage’ (RSCA), which is the ratio of (BI-1) to the (BI+1). As the value of RSCA falls between +1 and -1, its distribution is symmetric around zero. Hence, RSCA indices can also be used in the Galtonian cross-section regression to examine the specialisation pattern of Vietnam across industries in the world market. The regression equation is presented as below:

$$(2) \quad RSCA_{j,t} = \alpha_j + \beta_j * RSCA_{j,t-k} + \epsilon_{j,t}$$

where subscripts j , t and $(t-k)$ denote the industry, final year and initial year under consideration respectively. Thus, $RSCA_{j,t-k}$ stands for the revealed symmetric comparative advantage index of industry j in the initial year $(t-k)$ and $RSCA_{j,t}$ stands the

³ Vollrath (1991) though also suggests that application of logarithmic function on Balassa’s indices, i.e. LN(BI) would overcome this problem, however Dalum et al. (1998) points a methodological problem in this approach while using it on small RCA values. In specific, they argue that this approach would not differentiate between the impacts of a change in a RCA values from 0.01 to 0.02 and a change in the same from 50 to 100, and vice-versa.

same for final year t . α and β are regression parameters, and $\epsilon_{j,t}$ is a residual term which is assumed to be normally distributed.

The estimate of beta (β) in above equation has significant importance in interpreting the specialisation pattern of a country (here Vietnam) across industries between two periods under consideration. If beta equals unity ($\beta=1$), it means that the specialization pattern has remained unchanged between period $(t-k)$ and t . If beta is greater than unity ($\beta>1$), it means that the specialisation pattern has strengthened, that is Vietnam has specialised further in already specialised industries, and more de-specialised in already de-specialised industries. Likewise, if beta lies in between zero and unity ($0<\beta<1$), it means that the specialisation pattern has reversed, that is, more specialised industries have become less specialised and less specialised industries have become more specialised. The negative beta ($\beta<0$) is a special case of reversal and implies that industries whose RSCAs were initially below country's average in period $(t-k)$, are now above average in period t , and vice versa.

2.2 Data sources and study period

Two series of exports have been used in analysing the competitiveness of Vietnam, these are domestic value added exports (symbol DVA) and gross exports (symbol EXGR). Their values have been extracted from OECD TiVA database (2016 edition). Since the data on domestic value added exports were available for the period of 1995 to 2011 only, the study also covers the same period. Moreover, since the value added is a production based concept, the industries have been classified according to

ISIC (International Standard Industrial Classification of All Economic Activities) classification that includes 34 industries including 2 primary, 16 manufacturing, 14 services, 1 utility and 1 construction.

3. Empirical results

3.1. General findings

Empirical findings analysed upon domestic value added exports series suggest that Vietnam has comparative advantages in 10 industries in the World market that includes agriculture (ISIC01T05), foods and beverages (ISIC15T16), textiles and footwear (ISIC17T19), wood products (ISIC20), rubber and plastic products (ISIC25), non-metallic mineral products (ISIC26), manufacturing n.e.c. (ISIC36T37), wholesale and retail trade (ISIC50T52), hotels and restaurants (ISIC55), and transport and storage (ISIC60T63). While looking at those 10 industries from the perspective of level of labourer's skill and technology used in the production process; agriculture, foods and beverages, wood, rubber and plastics, and non-metallic minerals are all 'natural-resource intensive' industries and rests are 'low-skilled labour intensive' industries. The 'human capital and technology intensive' industries such as machinery and equipment (ISIC29), computer and electronics (ISIC30T33X), electrical machinery (ISIC31), and transportation (ISIC34T35) have failed to reveal comparative advantages in the world market (table 1).

Table 1: RCA indices of selected industries in the World market, 1995 and 2011

1995			2011	
RCA_DVA	RCA_EXGR	Industries	RCA_DVA	RCA_EXGR
<u>1.80</u>	<u>1.67</u>	Agriculture (C01T05)	<u>3.96</u>	<u>3.39</u>
<u>2.30</u>	<u>2.31</u>	Mining (C10T14)	0.84	0.76
<u>2.75</u>	<u>2.43</u>	Foods and beverages (C15T16)	<u>4.45</u>	<u>3.92</u>
<u>2.65</u>	<u>2.88</u>	Textile and footwear (C17T19)	<u>2.72</u>	<u>2.66</u>
<u>1.06</u>	0.91	Wood products (C20)	<u>2.84</u>	<u>3.08</u>
0.16	0.17	Paper products (C21T22)	0.37	0.41
0.22	0.37	Petroleum products (C23)	0.42	0.54
0.08	0.12	Chemicals (C24)	0.26	0.41
0.41	0.42	Rubber and plastics (C25)	<u>1.08</u>	<u>1.51</u>
0.74	0.83	Other non-metallic minerals (C26)	<u>1.74</u>	<u>1.74</u>
0.05	0.08	Basic metals (C27)	0.30	0.54
0.27	0.38	Metal products (C28)	0.86	<u>1.14*</u>
0.06	0.09	Machinery and equipment (C29)	0.15	0.30
0.27	0.39	Computer and electronics (C30T33X)	0.55	0.88
0.37	0.48	Electrical machinery (C31)	0.96	<u>1.46*</u>
0.01	0.01	Motor vehicles (C34)	0.16	0.19
0.10	0.15	Other transport equipment (C35)	0.28	0.39
0.81	<u>1.01*</u>	Manufacturing nec (C36T37)	<u>1.84</u>	<u>1.77</u>
<u>1.05</u>	<u>1.15</u>	Wholesale and retail trade (C50T52)	<u>1.08</u>	<u>1.01</u>
<u>1.39</u>	<u>1.32</u>	Hotels and restaurants (C55)	<u>2.08</u>	<u>1.73</u>
0.55	0.60	Transport and storage (C60T63)	<u>1.13</u>	<u>1.04</u>
<u>2.24</u>	<u>2.21</u>	Post and telecommunications (C64)	0.43	0.36
<u>4.21</u>	<u>4.04</u>	Financial intermediation (C65T67)	0.17	0.14

Source: Adapted and computed from OECD TiVA database (2016 edition).

DVA = domestic value added exports; and EXGR = gross exports

(Underlined numbers are RCA > 1 indices. * indicates the RCA exaggerated by gross exports)

On the other hand, the comparative advantage of mining (ISIC10T14) industry, which is a 'low-skilled labour and natural-resource intensive' industry has been found slackening since beginning of the study period, and finally became uncompetitive since 2010. The reason for weakening of its comparative advantage is not very clear yet. However, at first sight, it seems that this industry is possibly exporting raw minerals

which by nature generate low value added in comparison to the processed minerals. As a result, the export value of Vietnam's mining industry is growing at slower rate than that of the world, causing loss in competitiveness. Nonetheless, of those 10 'low-skilled labour and natural-resource intensive' industries; agriculture, foods and beverages, textiles and footwear, wood products, wholesale and retail trade, and

hotels and restaurants fall into the ‘specialised’ category⁴ that means they have been showing comparative advantages in the World market consistently since 1995. The other four industries viz. rubber and plastic products, non-metallic mineral products, manufacturing n.e.c., and transport and storage fall into the ‘strengthening’ category, which means that they have shown a notable improvement in terms of their competitiveness resulting a shift from comparative disadvantage in 1995 to comparative advantage in 2011. Vietnam does not reveal comparative advantage in ‘human capital and technology intensive’ industries at all since 1995 (table 2). This leads to conclude that ‘Vietnam has specialised in low-skilled labour and natural-resource intensive industries’. Interestingly, despite being uncompetitive, the accumulated contribution of computer and electronics, and electrical machinery in exports value is 13 percent in terms of gross exports, however only 4 percent in terms of domestic value added exports. Such a large gap between gross exports and domestic value added exports is a clear indication that imports to exports (I2E), aka ‘assembly’ process has been taking place in those industries. That’s why, the gross exports which also include the value of imported intermediates has swollen up.

⁴ wherever ‘pattern of specialisation’ is analysed, four terms as mentioned below have been introduced to describe the observation between 1995 and 2011:

- ‘RCD-RCD’ (labelled as ‘de-specialised’ industries)
- ‘RCD-RCA’ (labelled as ‘strengthening’ industries)
- ‘RCA-RCA’ (labelled as ‘specialised’ industries) and
- ‘RCA-RCD’ (labelled as ‘weakening’ industries)

where RCD stands for Revealed Comparative Disadvantage and RCA stands for Revealed Comparative Advantage.

3.2. Comparing industries’ competitiveness as revealed by RCA_DVA and RCA_EXGR

This section takes a comparative approach on industries’ competitiveness as revealed by two separate series on exports i.e. domestic value added exports (DVA) and gross exports (EXGR) in the world market in order to identify presence of any noise in their competitiveness as measured by gross exports. For convenience, researchers have introduced two abbreviations namely RCA_DVA and RCA_EXGR in the text afterwards, where RCA_DVA is the RCA indices based on ‘domestic value added exports’ and RCA_EXGR is the RCA indices based on ‘gross exports’.

Empirical findings suggest that these two sets of RCA indices have similar conclusions about the competitiveness of 10 industries as discussed above in revealing comparative advantages (table 1). However, they differ on the competitiveness of fabricated metal products (ISIC28) and electrical machinery (ISIC31), and about the ‘pattern of specialisation’ of wood products (ISIC20) and manufacturing n.e.c. (ISIC36T37). The RCA_DVA identifies the wood products as ‘specialised’ industry, while RCA_EXGR identifies it as ‘strengthening’ industry, hence gross exports has underestimated the intensity of competitiveness of wood products. On the other hand, manufacturing n.e.c. is categorised as ‘strengthening’ industry by RCA_DVA, while the RCA_EXGR categorises it as ‘specialised’ industry, hence overestimating the intensity of competitiveness of manufacturing n.e.c. (appendix). Though both wood products and manufacturing n.e.c. industries have shown comparative advantages under both sets of export flows, however presence of noise in

the pattern of specialisation is more likely to mislead the policy makers while prioritizing them. For instance, of these two industries, it is manufacturing n.e.c. (specifically furniture) that requires special attention by policy makers to make it ‘specialised’ to reap full benefits of this industry. However, the gross export based measure of competitiveness (RCA_EXGR) would direct

such priority to the wood products which in fact does not require it. In addition, the gross exports have also exaggerated the comparative advantages of fabricated metal products (ISIC28) and electrical machinery (ISIC31), which have in fact revealed comparative disadvantage under domestic value added exports.

Table 2: Pattern of specialisation by industries in the World market (1995-2011)

Specialised industries (RCA-RCA)	Strengthening industries (RCD-RCA)
<ul style="list-style-type: none"> - Agriculture (ISIC01T05)* - Foods and beverages (ISIC15T16)* - Textiles and footwear (ISIC17T19)* - Wood products (ISIC20) - Wholesale & retail trade (ISIC50T52)* - Hotels and restaurants (ISIC55)* 	<ul style="list-style-type: none"> - Rubber and plastic products (ISIC25) - Non-metallic mineral products (ISIC26) - Manufacturing n.e.c. (ISIC36T37)* - Transport and storage (ISIC60T63)*
Weakening industries (RCA-RCD)	De-specialised industries (RCD-RCD)
<ul style="list-style-type: none"> - Mining (ISIC10T14)* - Post and telecommunications (ISICC64) - Financial intermediation (ISIC65T67) 	<ul style="list-style-type: none"> - Paper products (ISIC21T22) - Petroleum products (ISIC23) - Chemicals (ISIC24) - Basic metals (ISIC27) - Fabricated metal products (ISIC28) - Machinery and equipment (ISIC29) - Computer and electronics (ISIC30T33X)* - Electrical machinery (ISIC31)* - Motor vehicles (ISIC34) - Other transport equipment (ISIC35)

[* indicates that these industries have more than 1 percent shares in the domestic value added exports in year 2011]

3.3 Examining the export specialisation pattern of Vietnam

In order to have insight into the pattern of export specialisation of Vietnam, the Galtonian cross-section regression equation (as in equation 2) was run separately for RSCA_DVA and RSCA_EXGR distributions in the World market, considering 1995 as initial year and 2011 as the final year. The normality of these regression models has been diagnosed and validated by applying Breusch-Godfrey serial correlation LM test, in which the

‘observed R- square’ value was found insignificant at 5 percent level, which implies that ‘there is no serial correlation in the residual of the models’ (table 3). Moreover, the value of betas in both distributions are positive but smaller than unity ($0 < \beta < 1$), which implies that ‘in the World market the export specialisation of Vietnam has reversed’, that is more specialised industries have become less specialised and less specialised industries have become more specialised. Such reversal pattern is the indication of increasing intra-industry trade in the

economy. As the intra-industry trade is the simultaneous imports and exports of goods in the same industry, an increase in intra-

industry trade means that specialization in a certain industry has decreased.

Table 3: Results of Galtonian cross-section regression (1995 and 2011), World market

Index distribution	α	β	Obs. R-squared	Prob. Chi-square
RSCA_DVA	0.00	0.59***	1.004168	0.3163
RSCA_EXGR	-0.05	0.52***	2.581145	0.1081

*** indicates significant at 1 percent level

4. Concluding remarks and policy discussion

In this paper, an effort was made to identify the competitive industries and to examine the export specialisation pattern of Vietnam from the perspective of domestic value added exports. It also attempted to identify presence of any exaggeration in gross exports measures of competitiveness. Empirical findings suggest that Vietnam has had comparative advantages in 10 industries in the world market viz. agriculture, foods and beverages, textiles and footwear, wood products, rubber and plastic products, non-metallic mineral products, manufacturing n.e.c., wholesale and retail trade, hotels and restaurants, and transport and storage. These are mainly 'low-skilled labour and natural-resource intensive industries' and have failed to reveal comparative advantage in 'human capital and technology intensive industries'. Moreover, two separate measures of export competitiveness i.e. RCA_DVA and RCA_EXGR have yielded very similar conclusions on industries level competitiveness, despite some evidences of exaggeration and underestimation present in the RCA_EXGR. In general, researchers observed three patterns: (i) gross exports value has underestimated the comparative

advantages of natural resource intensive industries (e.g. mining, wood products, petroleum products), (ii) it has exaggerated the comparative advantages of human capital and technology intensive industries (e.g. computers and electronics, electrical machinery), and (iii) gross exports and domestic value added exports have similar conclusions on comparative advantages of low skilled labour intensive (e.g. foods and beverage, textile and footwear), and services industries (e.g. trade, hotels and restaurants). Of these, the first two patterns are really of special concern for the policy debates in terms of identifying the industries that can contribute to the sustainable export-led growth of Vietnam.

The natural resource intensive industries' products add high domestic value in their exports, which is a well suited feature to shift the country's position up in the value chains so that bigger chunks of benefits from exports can be brought in. This means these industries can play pivotal role in the export-led growth strategy of Vietnam. However, it requires adoption of 'product upgrading' and 'densification of domestic firms' as in present time these industries export products that are either in raw form or as intermediate products. On the other hand, the assembly activities in the human capital and technology intensive industries

has contributed more in ballooning up their shares in gross exports, while their contributions in domestic value added exports is comparatively lower⁵. Therefore, greater emphasis on the exports of human capital and technology intensive industries' products can simply be considered as a strategy to create more employment opportunities in the economy, and assimilation of the technological spillover effects. That is why; there is a big gap between gross exports and the domestic value added exports in this sector. Nonetheless, comparative advantage is not a static variable, instead the industrial and trade policies of a country can play crucial role in improving the competitiveness of an industry in the long run, for example, through updating mandatory product standards, encouraging technological innovation and promoting competition and consumer's protection. However, competitiveness in the long term is subjected to further analysis, although upon said achievements in terms of knowledge, know-how, and skills, it is possible to achieve competencies in few more regional markets such as North America and European Union with which Vietnam has initiated to sign PTAs (Preferential Trade Agreements).

In case of low skilled labour intensive industries, there are still a couple of challenges that Vietnam needs to overcome to reap the benefits of exports. For instance, foods and beverages require improvement in the quality, and disprove the prejudice for low quality 'Vietnamese products' both in domestic and international markets. Likewise, Vietnam's apparel and footwear businesses currently depend on foreign traders mostly from Hong Kong, Taiwan,

and South Korea which supply the products to the foreign enterprises, thus Vietnamese domestic enterprises have almost remained unconnected with the end-users. The retail businesses mainly with European Union, Japan and the United States are also through international brands, supermarkets, wholesale stores and retail stores. This is a result of weak marketing and distribution activities in this sector. Therefore, its reliance on foreign companies for exports and its engagement in low value added process are the primary challenges in textile and footwear industry. Therefore, to remain competitive in those industries in the long term, Vietnam would need to upgrade in the service related functions such as sourcing, supply chain management, design, product development, marketing, and branding (i.e. functional upgrading). It also would need to shift the foreign suppliers based backward linkage to the domestic one.

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⁵ For instance, 17 percent shares in gross exports while only 5 percent shares in value added terms in 2011.

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Appendix: RCA indices of Vietnam in the World market

SN	Industries	ISIC code	RCA_DVA				RCA_EXGR			
			1995	2000	2005	2011	1995	2000	2005	2011
1	Agriculture	01T05	1.8	3.0	3.7	4.0	1.7	2.8	3.3	3.4
2	Mining	10T14	2.3	1.7	1.7	0.8	2.3	1.6	1.7	0.8
3	Foods and beverages	15T16	2.8	4.1	4.1	4.4	2.4	3.8	3.8	3.9
4	Textile and footwear	17T19	2.7	2.2	2.4	2.7	2.9	2.8	3.1	2.7
5	Wood products	20	1.1	1.6	1.2	2.8	0.9	1.4	1.5	3.1
6	Paper products	21T22	0.2	0.2	0.2	0.4	0.2	0.2	0.3	0.4
7	Petroleum products	23	0.2	0.1	0.1	0.4	0.4	0.2	0.1	0.5
8	Chemicals	24	0.1	0.1	0.1	0.3	0.1	0.2	0.2	0.4
9	Rubber and plastics	25	0.4	0.4	0.6	1.1	0.4	0.5	0.8	1.5
10	Other non-metallic mineral products	26	0.7	0.9	0.8	1.7	0.8	0.9	1.1	1.7
11	Basic metals	27	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.5
12	Metal products	28	0.3	0.2	0.6	0.9	0.4	0.3	0.9	1.1
13	Machinery and equipment	29	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
14	Computer and electronics	30T33X	0.3	0.2	0.3	0.5	0.4	0.4	0.3	0.9
15	Electrical machinery	31	0.4	0.5	0.7	1.0	0.5	0.6	1.0	1.5
16	Motor vehicles	34	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.2
17	Other transport equipment	35	0.1	0.1	0.2	0.3	0.1	0.2	0.2	0.4
18	Manufacturing nec	36T37	0.8	0.9	1.5	1.8	1.0	1.1	1.8	1.8
19	Wholesale and retail trade	50T52	1.0	1.1	1.1	1.1	1.1	1.2	1.1	1.0
20	Hotels and restaurants	55	1.4	1.8	1.8	2.1	1.3	1.7	1.6	1.7
21	Transport and storage	60T63	0.5	0.5	0.8	1.1	0.6	0.6	0.8	1.0
22	Post and telecommunications	64	2.2	1.3	1.0	0.4	2.2	1.3	0.9	0.4
23	Financial intermediation	65T67	4.2	2.1	1.5	0.2	4.0	2.0	1.3	0.1

Source: Researchers' estimates.

Price Elasticity of Sectoral Lending in Nepal

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and
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Abstract

During 2015 to 2019, there was a significant upsurge observed in the lending rate in Nepalese credit market. Interestingly, the lending amount also went up significantly in this period showing an anomalous relationship between lending and lending rate. This paper is an attempt to analyse this observed anomaly. We have estimated and examined the degree of elasticity of sectoral lending with lending rate in Nepalese context undertaking panel regression analysis covering all 28 commercial banks in operation in Nepal till mid-July 2019. The results show a positive and inelastic relationship to exist between sectoral lending and lending rate during the study period despite decreasing Herfindahl-Hirschman index in the same period, which means that level of competition is increasing in Nepalese banking industry. Our scenario analysis indicates syphoning of funds, and the changed role of bankers as major causes for this anomalous relationship.

Key Words: Banks, credit, elasticity, lending rate, Nepal, sectoral lending

JEL Classification: E43, E51, G12, G21

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I. INTRODUCTION

In the recent past, commercial banks in Nepal literally jumped into ‘interest rate war’ against each other in order to attract fresh deposits, which has had significant effect on pushing the deposit rates up. Since the cost of fund is a significant component in the base rate calculation, the lending rate escalated significantly¹ after the interest rate war. This can be seen in the higher weighted average lending rate in the recent years (over 12 percent in 2019 and 2018). This rate was 11.4 percent in 2017 and 8.8 percent in 2016 (NRB, 2019). Upsurge in the lending rate obviously raises concerns over the causes that are driving it up. In the mean time, it also poses question on the efficiency of Nepalese bankers in managing funds. Interestingly, despite such a significant upsurge in the lending rate during this period, the lending amount also went up significantly (from NRs 1.392 trillion in 2016 to NRs 2.497 trillion in 2019, NRB, 2019). As believers on the classical theory of interest, we had expected a negative relationship to exist between them. That means, after upsurge in the lending rate, the lending amount should have fallen or have stalled. But this pattern was not seen in the nominal values of lending, which made us mull over other factors that might have affected the lending behaviour of commercial banks in Nepal. There are some recent empirical works analysing the lending behaviour of commercial banks in Nepal though viz. Bhattarai (2019), Bajracharya (2018), Puri et al. (2018), Timsina (2016a & 2016b), Bhattarai (2016), etc. but explanation of this observed anomalous behaviour in credit lending has not occupied place into their analyses. Thus, we saw a clear gap in literature in context of Nepal that motivated us to estimate the degree of elasticity of sectoral lending with lending rate (also known as price elasticity) and use the estimated price elasticity to analyse the anomalous relationship observed between them. The rest of this paper has been organised as follows. Section two presents the recent status of sectoral credit lending while section three presents research methodology that we have undertaken in this work.

¹ The Himalayan Times (17 August 2018) reported that 21 out of 28 banks have had base rate above 10 percent. The news is available at: <https://thehimalayantimes.com/business/base-rate-of-21-banks-above-10pc/>, accessed on 29 December 2019.

Section four presents the empirical findings of the work which is followed by the discussion and concluding remarks in section five.

II. RECENT STATUS OF SECTORAL CREDITS

Commercial banks in Nepal float loans over 16 key areas of economic activities, also known as sectors. As on mid-July 2019, the total credit lending of commercial banks grew by 18.3 percent to reach NRs 2.497 trillion from NRs 2.112 trillion in mid-July 2018, mainly led by NIC bank, Rastriya Banijya bank, Nabil bank, Nepal Investment bank and Global bank that together share 27.1 percent of total lending. Meanwhile, lending pattern has continued to concentrate on FOUR² major sectors, viz. (i) wholesale and retail; (ii) non-food production related; (iii) construction; and (iv) finance, insurance, and real estate sharing about 54 percent together (Figure 1). Interestingly, in those four concentrated sectors, larger banks of Nepal (defined as the banks that have asset shares larger than the average value of 4 percent of the aggregate assets of the commercial banks) viz. Agriculture Development bank, Everest bank, Global bank, Nabil bank, Nepal Investment bank, NIC bank, and Rastriya Banijya bank (indicated by asterisks in Figure 1) have major chunks in lending. Among those quoted banks as above, Agriculture Development bank, Nabil bank, and Rastriya Banijya bank have higher concentration risk in their sectoral portfolios along with Standard Chartered bank, NMB bank, and Nepal SBI bank, each has HH index above 1500 score. Other 22 banks have had HH index below 1500 (Figure 2, & Appendix B).

² In fact, the 'others (12.3 percent)' sector comprises of third largest share in the total lending, however, as the components of this sector are not known, we have excluded it from discussion.

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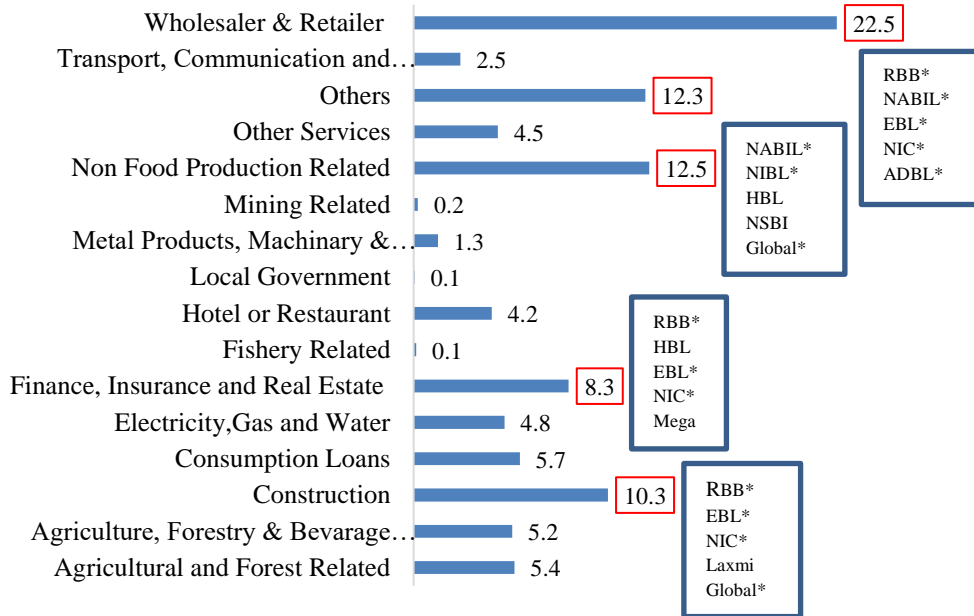


Figure 1: Commercial banks' sector-wise lending, 2019

Data source: NRB (2019)

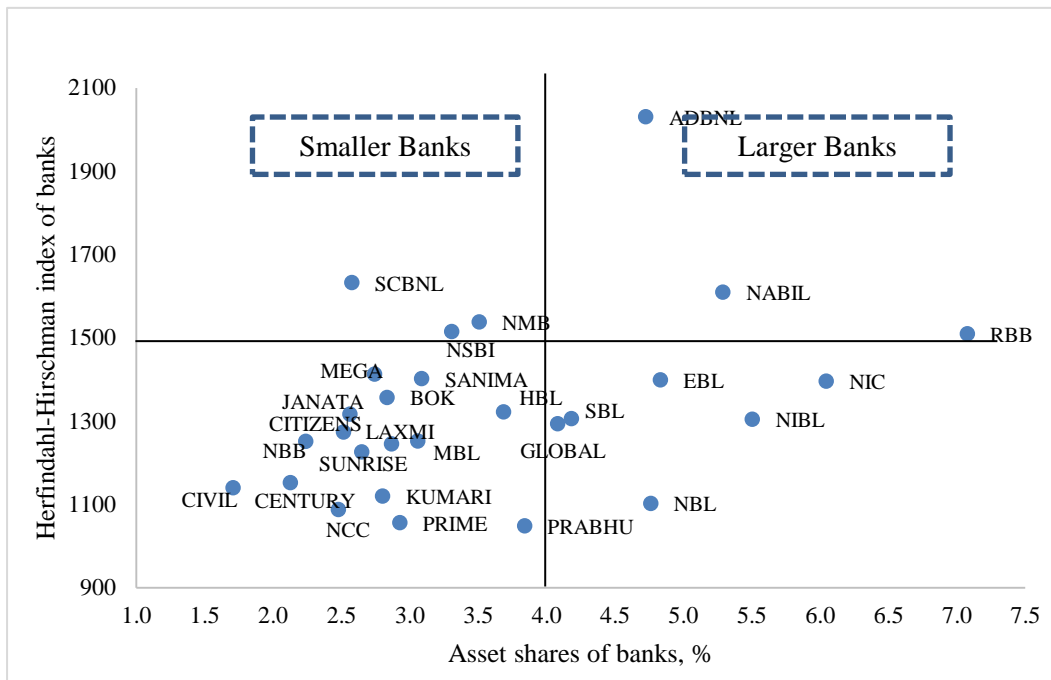


Figure 2: Banks' size and sectoral portfolio concentration, 2019

Data source: NRB (2019) and researchers' estimate (2020)

Thus, banks have shown a mix of moderate to low levels of concentration in their sectoral lending portfolios. Literature shows varying consequences of having high concentration in lending portfolios. For instance, Ben-Zekry (2007) argues that high concentration levels will increase profits for the dominant banks within the industry, which will insulate them from economic shocks. Acharya et al. (2006) and Tabak et al. (2010) argue that banks by focusing lending to certain sectors acquire expertise in those sectors and thus improve the loan quality, which reduces the risk of credit default. Moreover, Beck et al. (2003) found that high concentration leads to high stability in the banking industry. However, negative effects of higher concentration have also been reported- higher level of bank concentration in only a few sectors may cause higher interest rates in those sectors which may harm investors. In addition, large banks will focus on the most profitable niches and may neglect less profitable ones (Ben-Zekry, 2007) very similar to the airline industry where large airlines company normally prefer to fly to the most profitable sectors. High sectoral concentration also exposes a bank to credit risk due to higher default correlations within those sectors.

So far, none of the commercial banks in Nepal have revealed their stances on any of these arguments, either profitability or efficiency or stability is the driving factor to exposing to high level of concentration in their lending portfolios. Nonetheless, NRB in its recent financial stability report has stated that ‘... concentration of lending to a few sectors would expose bank to credit risk’ (NRB, 2018: p. 20), which is very similar to the conventional view in banking. Such stance of NRB implies that the regulator is more concerned about ‘credit default and bank failure aspects’ of introducing high concentration in lending portfolios. Surprisingly, there is no explanation in place whether such concentration exists because of ‘supply driven factors’ or ‘demand driven factors’ or ‘capricious ones’- neither from the central bank nor the commercial banks.

When we applied the ‘sectoral concentration measure (SCM)’³ in order to measure the ‘sectoral concentration’ of a bank in its sectoral lending portfolio, and filter them based on top 5 highest SCM score, the findings justified why the

³ See appendix A for details.

sectoral lending is concentrated to only four sectors. All 28 banks have prioritised wholesale and retail sector for the lending followed by non-food production related (25 banks), construction (20 banks) and finance, insurance and real estate (19 banks) (Figure 3). Of those sectors, the ‘wholesale and retail’ falls under highly concentrated sector (SCM - 2898), and the ‘non-food production related’ falls under moderately concentrated sector (SCM - 1513) (Appendix C).

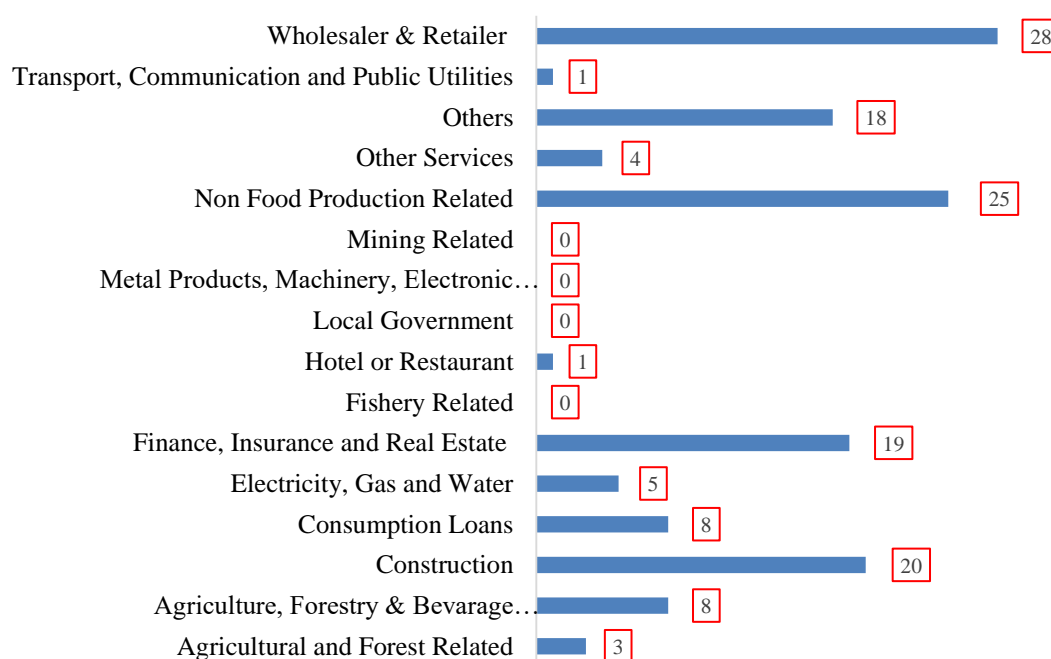


Figure 3: Number of banks based on their priorities for sectoral lending, 2019

Source: Researchers' estimate (2020)

Therefore, there are several relevant side questions that also seek answers viz. (a) why remaining sectors do not fall in the priority lending of commercial banks? (b) Is there less demand for credit in remaining sectors? (c) Is there higher profit margin for banks in those concentrated sectors? (d) Are less concentrated sectors highly elastic to lending rate? (e) Are concentrated sectors less elastic to lending rate? etc. Nonetheless, in this work, we have focussed on the discussion relevant to price elasticity of sectoral lending and have skipped questions (a) to (c). We have answered questions (d) and (e) in section four based on our empirical estimates.

III. METHODOLOGY

To propose a suitable model, it was necessary to identify and understand explanatory variables besides lending rate that may well describe the lending behaviour of banks. In context of Nepal, we came across five main research works viz. Bhattarai (2019), Bajracharya (2018), Puri et al. (2018), Timsina (2016a & 2016b) and Bhattarai (2016) that have analysed the lending behaviour of commercial banks in Nepal employing quantitative approaches. Those researchers have used a range of explanatory variables to examine the lending behaviour of banks (Table 1). Selection of those explanatory variables are consistent with many other empirical works, a few to quote are Malede (2014), Obamuyi (2013), Imran and Nishat (2013), Olusanya et al. (2012), Constant and Ngomsi (2012), Olokoyo (2011), Kashyap et al. (1993), etc.

Table 1: Summary of empirical works on determination of lending behaviour of commercial banks in Nepal

Researchers	Explanatory variables used	Most significant explanatory variables to explain changes in lending
Timsina (2016a)	volume of deposits, interest rate, cash reserve ratio, liquidity ratio, inflation, exchange rate, gross domestic product	gross domestic product, liquidity ratio
Timsina (2016b)	cash reserve ratio, open market operations, bank rate, assets, capital, liquidity	assets, liquidity, capital, open market operations, cash reserve ratio
Bhattarai (2016)	bank size, liquidity, investment portfolio, cash reserve ratio and deposit to capital ratio	bank size, liquidity, investment portfolio, cash reserve ratio
Bajracharya (2018)	bank size, volume of deposit and cash reserve requirement ratio liquidity ratio Inflation rate GDP	bank size, volume of deposit, cash reserve ratio
Puri et al. (2018)	bank size, volume of deposits, cash reserve ratio, liquidity ratio, lending rate, non-performing loans, gross domestic product, inflation rate	bank size, lending rate, volume of deposits, liquidity ratio
Bhattarai (2019)	Interest rate spread, statutory liquidity ratio, inflation, exchange rate	Statutory liquidity ratio, interest rate spread, exchange rate

Source: Researchers' contribution (2020)

The list of explanatory variables used in those works include internal variables of the banks such as liquidity ratio, assets, bank size, etc. as well as external variables such as GDP, exchange rate, inflation, and regulatory instruments. Since we have had panel data of all 28 commercial banks in Nepal in operation till mid-July of 2019, we believed that the distinguished variables associated with individual banks would matter more than the external common factors in examining the lending behaviour and estimating the elasticities of explanatory variables. And, also in the light of works mentioned above we considered interest rate, liquid funds, volume of deposits, capital, and total assets into our proposed model (supply-side variables). In the meantime, we also kept into our consideration that the robustness of the model should not get compromised because of employing too many explanatory variables into the model. Therefore, we combined liquid fund and volume of deposit to construct ‘liquidity ratio’. Likewise, we combined capital and total assets to construct ‘capital to asset ratio’. These ratios have been interpreted in the sub-section (3.1). Interest rate, which is basically the weighted average of interest rates of all types and maturity of loans granted in specific years, has been used intact.

3.1 Model

We have proposed the following semi-log model to estimate price elasticity of sectoral lending and to examine the observed anomaly in the lending-lending raterelationship:

$$LOG(LEND_SN_{i,t}) = \alpha + \beta_1 * WALR_SN_{i,t} + \beta_2 * LIQ_RATIO_{i,t} + \beta_3 * CTA_{i,t} + \varepsilon_{i,t}$$

Where LEND_SN is credit lending amount (in millions NRs) for sector N; WALR_SN is weighted average lending rate (in percent) for sector N; LIQ_RATIO is liquidity ratio defined as the ratio of liquidity funds to total deposits (in percent); and CTA is the capital to asset ratio (in percent) of commercial banks as on the point of time into consideration (mid-July). (i,t) indicates identity for individual bank and year into consideration.

Of those explanatory variables, the lending rate (WALR_SN) is considered as the price of lending and the expected sign for its coefficient is negative.⁴ This expectation is based on general perception. Nonetheless, Hense (2015) argues that ‘... occasionally during the times of strong economic growth or recession or in the short run, lending and lending rate may move in same direction, hence the coefficient may be positive because of counteracting supply or demand factors.’

Another explanatory variable, liquidity ratio (LIQ_RATIO) refers to the amount that banks need to maintain in liquid form to meet their immediate financial obligation. Hence higher liquidity ratio means lower funds available for lending, hence the sign of its coefficient is expected to be negative. The third explanatory variable, capital to asset ratio (CTA) measures sufficiency of capital with the bank. Higher the CTA value, higher lending is expected, thus its coefficient is expected to have positive sign, other things remaining unchanged.

We have applied the proposed model to 14 equations, 13 are among the 16 sectors (except fishery related, mining related and local government as their shares in total lending are very small, hence excluded from analysis) while one is the aggregate value.

3.2 Data and Methods

This study is based on panel regression analysis of the data obtained for 28 commercial banks in Nepal that were in operation till mid-July 2019. The dataset covers the annual values of four variables as discussed into section (3.1) for the period of mid-July 2015 to mid-July 2019, thus total of 140 observations for each variable. The dataset of most variables has been extracted from the ‘Banking and Financial Statistics’(various issues) reports published by Banks and Financial

⁴ This relationship has been considered from demand side based on assumption that banks’ sectoral lending equals effective sectoral demand for it. Because of existence of diligent procedures and regulations in place to be followed by both banks and potential borrowers to make lending transactions happen, existence of overdemand for borrowing will not affect the lending rate. That means, a potential borrower has no control over interest rate, instead s/he/it can respond to the existing lending rate through adjustment in her/his/its demand for borrowing.

Institution Regulation Department of Nepal Rastra Bank (BFIRD-NRB). However, we found that BFIRD-NRB has discontinued publishing data on weighted average lending rates by banks in the study period. Hence, we requested for it and upon our request, BFIRD-NRB agreed to provide the dataset for this variable for the purpose of undertaking this research work only.

Once panel dataset for all variables into consideration was obtained, we examined three models viz. (i) random effect model, (ii) fixed effect model, and (iii) pooled OLS regression model; and found that the fixed effect model is the best suited in our undertaking. While undertaking the panel data analysis, the first step was to choose between random effect model and fixed effect model. For this, we estimated random effect model first and then applied Hausman test to determine suitability of one of these two models depending upon the significance of 'Hausman chi-square statistic'. In this test, the null hypothesis is 'random effect model is appropriate', and the decision criterion is to reject null hypothesis if the 'Hausman chi-square statistic' is found significant at accepted level of significance. Otherwise, accept the null hypothesis. The alternate hypothesis in this test is 'fixed effect model is appropriate'. The Hausman test validated suitability of fixed effect model except for 'sector 16 - others' for which random effect model is suitable.

In case fixed effect model is appropriate as above, the next step was to choose between fixed effect model and pooled OLS regression model, for which we undertook Wald test on pooled OLS estimates introducing 27 dummy variables on banks (one dummy variable was excluded to avoid perfect multicollinearity). In Wald test, the null hypothesis is 'pooled OLS regression model is appropriate (i.e. all dummy variables equal zero)' and the alternate hypothesis is 'fixed effect model is appropriate (i.e. all dummy variables do not equal zero)'. In our undertaking, the probability of 'Wald test Chi-square value' was found significant at 1 percent, thus rejecting the null hypothesis. In this way, we have validated the suitability of fixed effect model in our work.

IV. EMPIRICAL FINDINGS

The estimates of the panel regression analysis for the 14 equations as mentioned above have been presented in Table 2. The chi-square statistics for Hausman test are found significant within 5 percent except for ‘sector 12’ which is significant at 10 percent, while ‘sector 16’ is found to be insignificant. If we consider, the case of sector 12 a bit loosely, the fixed effect model is appropriate for all the sectors into consideration except sector 16 for which random effect model is appropriate. Moreover, for those sectors to which fixed effect model is appropriate, chi-square statistics for Wald test are found strongly significant at 1 percent, thus validating the acceptance of fixed effect model.

4.1 Discussion on Estimated Coefficients

There are nine cases in which the coefficients of lending rate have been found significant within 5 percent level of significance, and one case (eq.5) within 10 percent level of significance. The remaining four cases (equations 2, 4, 6, & 7) are found not significant within 10 percent level of significance. Nonetheless, sign of all coefficients is positive which are not as expected and thus requires appropriate justification. The absolute value of coefficients among the significant cases ranges from 0.04 (for ‘non-food production’ sector) up to 0.16 (for ‘agriculture and forestry’ sector) which can be interpreted as ‘one percent rise (fall) in weighted average lending rate would cause 0.04 percent rise (fall) in the lending of ‘non-food production’ sector and 0.16 percent rise (fall) in the lending of ‘agriculture and forestry’ sector. We consider it a low response of sectoral lending to sectoral lending rate. In terms of elasticity, the lending rate elasticity (or price elasticity) of ‘non-food production’ sector is 0.04 while that of ‘agriculture and forestry’ sector is 0.16. The price elasticities of other sectors lie in between these two values. The price elasticity of aggregate sector is 0.11 (Table 2). Such low values of sectoral and aggregate price elasticity are not consistent with the finding of Herfindahl-Hirschman (HH) index which shows the level of competition is increasing in Nepalese banking industry (as the value of HH index is well below 1500 and falling since 2016) (Appendix B2). We have analysed this anomaly in section five.

The coefficients of liquidity ratio and capital to asset ratio for ‘non-food production’ and ‘agriculture and forestry’ sectors are (-0.02 & 0.04) and (-0.03 & 0.09) respectively (Table 2). The signs of these coefficients are as expected and supported by our explanation in sub-section (3.1). These coefficients can be interpreted in a similar fashion as above.⁵ Once again, ‘agriculture and forestry’ sector lending is more responsive to liquidity ratio and capital to asset ratio in comparison to ‘non-food production’ sector lending, though not very high. Nonetheless, the highest liquidity ratio elasticity is 0.05 for ‘hotel and restaurant’ sector, while that of the capital ratio is 0.12 for ‘electricity, gas and water’ sector.

Now we are able to answer the two questions (d) and (e) that we raised earlier in section two about concentration of loans and price elasticity. The price elasticity of highly concentrated sectors (sector 5, 6, 10, 11 & 16) ranges from 0.03 to 0.07 while that of less concentrated sectors ranges from 0.02 to 0.16. Most of them have elasticities above that of the concentrated sectors. Hence, we can conclude that price elasticity varies across the sectors, and concentrated sectors are less elastic than less concentrated sectors.

4.2 Discussion on Validity of Estimated Equations

Out of 14 estimated equations, there are six equations (equations 1, 3, 8, 10, 11 & 14) in which coefficients of all three explanatory variables are found significant within 5 percent level of significance, while in two equations (equations 5 & 12) the coefficients of interest rate or liquidity ratio respectively, are found significant within 10 percent level of significance. Thus, there are eight equations that can be considered valid based on significance of coefficients. The F-statistics for all those equations are found highly significant at one percent level of significance, thus confirming the appropriateness of relation among variables. The adjusted R-square values for those equations are above 0.555 up to 0.775, which can be interpreted as the explanatory power of the explanatory variables for the changes

⁵ One percent rise (fall) in liquidity ratio would cause a fall (rise) of 0.02 percent in the lending of ‘non-food production’ sector and 0.03 percent in the lending of ‘agriculture and forestry’ sector. Likewise, one percent rise (fall) in capital to asset ratio would cause a rise (fall) of 0.04 percent in the lending of ‘non-food production’ sector and 0.09 percent in the lending of ‘agriculture and forestry’ sector.

in the dependent variable. For instance, the adjusted R-square value for 'agriculture and forestry' sector (equation 1) is 0.555, which means 55.5 percent changes in the lending in this sector can be explained by those three employed variables. Such explanatory power of these explanatory variables is 77.5 percent in 'other services' sector. The Durbin-Watson (DW) statistics are fairly above 1.5 and below 2.0 in seven equations other than equation (10) for which DW statistic is 1.40 (Table 2). Thus, except equation (10), in other seven equations DW statistics are acceptable to conclude absence of autocorrelation in the residuals. In equation (10), there may be little concern over presence of autocorrelation.

Thus, in the light of significance of individual coefficients of explanatory variables, F-statistics, adjusted R-square values and DW statistics, there are seven equations (equations 1, 3, 5, 8, 11, 12 & 14) that are found appropriate in terms of explaining the sectoral lending behaviour of commercial banks in Nepal. These equations represent the lending behaviour of the following sectors respectively: (i) agriculture and forestry, (ii) non-food production, (iii) electricity, gas and water, (iv) wholesaler and retailer, (v) other services, (vi) consumption loans, and (vii) aggregated lending.

Table 2: Panel Regression Estimates

Eq.	Dep. Variable (log form)	Coefficients				F statistic	Adj. R ²	DW stat.	Hausman Test (Chi-Sq. stat.)	Wald Test (Chi-Sq. stat.)	Selection of model
		Constant	WALR_SN _i	LIQ_RATIO	CTA						
1	LEND_S01	5.1635*** (0.5033)	0.1677*** (0.0374)	-0.0320** (0.0153)	0.0989*** (0.0310)	6.7101***	0.555	1.67	21.3794***	167.7149***	FEM is appropriate.
2	LEND_S04	7.7753*** (0.3625)	0.0257 (0.0277)	-0.0297** (0.0115)	0.0471* (0.0240)	5.5040***	0.496	1.57	20.1175***	153.3688***	FEM is appropriate.
3	LEND_S05	8.1760*** (0.2367)	0.0472** (0.0185)	-0.0230*** (0.0077)	0.0487*** (0.0164)	9.1317***	0.640	1.65	14.6937***	226.7160***	FEM is appropriate.
4	LEND_S06	7.2065*** (0.5585)	0.0357 (0.0362)	-0.0112 (0.0168)	0.1087*** (0.0315)	5.3038***	0.485	1.66	23.7832***	155.5936***	FEM is appropriate.
5	LEND_S07	5.2678*** (0.7484)	0.1314* (0.0671)	-0.0359** (0.0169)	0.1281*** (0.0338)	9.9103***	0.661	1.69	15.1152***	203.3634***	FEM is appropriate.
6	LEND_S08	4.4587*** (0.6406)	0.0671 (0.0482)	-0.0119 (0.0190)	0.1263*** (0.0391)	6.1405***	0.529	1.54	17.1010***	176.2280***	FEM is appropriate.
7	LEND_S09	6.2299*** (0.5192)	0.0130 (0.0413)	-0.0204 (0.0148)	0.1013*** (0.0315)	9.1099***	0.639	1.87	13.5849***	240.5229***	FEM is appropriate.
8	LEND_S10	8.4952*** (0.2892)	0.0705*** (0.0225)	-0.0244*** (0.0089)	0.0519*** (0.0191)	9.5183***	0.650	1.73	22.9431***	251.9445***	FEM is appropriate.
9	LEND_S11	7.3742*** (0.4069)	0.0774*** (0.0269)	-0.0223 (0.0145)	0.0522* (0.0302)	6.5214***	0.547	1.80	16.7378***	159.1343***	FEM is appropriate.
10	LEND_S12	5.7025*** (0.5789)	0.1391*** (0.0466)	-0.0563*** (0.0165)	0.0935*** (0.0338)	9.5186***	0.654	1.40	7.7108*	175.3849***	FEM is appropriate.
11	LEND_S13	5.8442*** (0.3438)	0.1579*** (0.0288)	-0.0189** (0.0094)	0.0394* (0.0200)	16.7761***	0.775	1.87	9.1127**	309.1134***	FEM is appropriate.
12	LEND_S14	6.4557*** (0.4653)	0.1144*** (0.0330)	-0.0230* (0.0136)	0.0648** (0.0271)	8.3394***	0.616	1.90	11.1754**	218.3341***	FEM is appropriate.
13	LEND_S16	7.5400*** (0.4741)	0.0702** (0.0306)	-0.0226 (0.0139)	0.0489* (0.0284)	7.5045***	0.123	1.18	5.6622	Not applicable	REM is appropriate.
14	LEND_TOT	9.5250*** (0.2307)	0.1085*** (0.0187)	-0.0181** (0.0069)	0.0496*** (0.0147)	11.3948***	0.691	1.85	48.6363***	265.7078***	FEM is appropriate.

***, ** & * indicate significance at 0.01, 0.05 and 0.1 level respectively. The number in parentheses represents standard error estimates. FEM stands for Fixed Effect Model and REM stands for Random Effect Model. Details of sectors are provided in appendix B1.

Source: Researchers' estimate (2020)

V. DISCUSSION AND CONCLUDING REMARKS

In our attempt to estimate price elasticity of sectoral lending with respect to lending rate, in combination with liquidity ratio and capital to asset ratio being other explanatory variables in the model, we found a positive and weak relationship between sectoral lending and lending rate during 2015 to 2019, the degree of price elasticity ranging from 0.04 to 0.16. Considering the fact that the level of competition is increasing in banking industry in Nepal as shown by decreasing value of HH index, the observed direction and degree of this relationship do not align with the normal perception. Therefore, we need to answer firstly, what factor has caused them to move together in context of Nepal, and secondly, why price elasticity is low despite competitive banking industry. To understand the background of such anomaly, we attempted to dig further into some prominent literature such as Hense (2015), Reinhart and Rogoff (2009), Gambacorta (2004), Saunders and Schumacher (1997), Kashyap et al. (1993), Ho and Saunders (1981), etc. In the light of facts and arguments we came across, we have assessed following three scenarios:

(i) Perception of strong economic growth:

Hense (2015) and Kashyap et al. (1993) argue that in times of strong economic growth, there may be upsurge of profitable projects (expected net present value may be significantly positive) thus causing increase in demand for credit. The confidence and the prospects of attractive financial return overshadows the restraining effect of the higher cost of obtaining those returns, higher interest rates can actually even increase borrowing demand, a case of behavioural bias such as 'this time is different' as argued by Reinhart and Rogoff (2009). Keeping these arguments into consideration, we examined credit disbursement of Nepalese banks in production related activities. What we found that a significant amount has been disbursed to the packaging and processing activities, which normally do not add much value to the economy, instead generates some profits for packagers and processors because of prevalence of price differentials in geographically separated markets. Moreover, '... a borrower investing in a new project such as manufacturing product, development, energy investment, etc. and intending to

repay the loan out of cashflows of the project may be very sensitive to minor variations in interest rates' (Hense, 2015). However, in our context, the price elasticity is very low, hence, we are reluctant to accept that there is perception of strong economic growth in context of Nepal.

(ii) Syphoning of fund:

During the study period, significant lending has been disbursed to 'wholesale and retail' and 'others' sectors which are comparatively less regulated sectors. The swelling up of their shares in credit portfolio is an important indication of syphoning of fund. Bank Supervision Reports (NRB, 2016 & 2017) have also highlighted 'mismatch of loan types and purpose of loans and credits extended without proper assessment of financials' among the major observations of on-site examination, thus indicating existence of this possibility. This is very similar scenario as discussed by Hense (2015) that '...a borrower pushing for projects where expectations of asset or property price inflation are strongly embedded in the investment decision will potentially be less affected and respond far less sensitive by even quite large increases in interest rate.' Therefore, we strongly consider possibility of syphoning of fund from less regulated activities to highly regulated activities such as share market investment and real estate investment which are guided by speculation of investors.

(iii) Role of bankers as risk-averse dealers:

According to the 'dealership model of interest margin' by Ho and Saunders (1981), "banks if turn to become risk averse dealers may cause lending rate to be sticky-down." Prevalence of consistent high lending rate in Nepalese context is a strong indication that bankers might have turned to become risk averse dealers. This argument is reinforced by the event of the so called 'gentlemen's agreement' among the CEOs of Nepalese commercial banks, going against the market principle, and forming an informal cartel.

In the light of our estimates, we conclude two things- firstly, highly concentrated sectors have less price elasticity in comparison to less concentrated sectors, and secondly, interest rate may have ambiguous link to lending in the short run. The

second conclusion is similar to that of Hence (2015), that a positive relationship between loans and lending rate may exist because of dominance of supply effects in the short run. Based on our assessment of the given scenarios, there are strong bases to believe that syphoning of fund, and the changed role of bankers should have played key roles to make the sectoral lending and lending rate relationship anomalous during the study period. Nonetheless, as our study covers a period of only five years, it is also likely that borrowers might have not been able to adjust their borrowing demand in response to increased rate.

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APPENDICES

Appendix A: Herfindahl-Hirschman Index

Herfindahl-Hirschman (HH) index is one of the most common and widely used approach to measure the portfolio concentration. Mathematically, HH index in sectoral portfolio context is defined as ‘the sum of square of shares of individual sector within the sectoral credit portfolio of a given bank for a specific time-period.’ Thus -

$$(Eq. A1) \quad HH_p = \sum_{q=1}^n s_{p,q}^2$$

Where HH_p stands for Herfindahl-Hirschman index for a given bank p ; q stands for the individual sector within the given sectoral credit portfolio (for instance q represents each of the individual 16 sectors in the ‘sectoral credit’ category), thus $s_{p,q}$ stands for the share of q sector in the sectoral credit portfolio of bank p .

The interpretation of HH index has been done in accordance with the guideline provided by DoJ & FTC (2010)⁶, hence (a) if HH index for a bank lies below 1500, the portfolio is less concentrated; (b) if HH index for a bank lies between 1500 and 2500, the portfolio is moderately concentrated; and (c) if HH index for a bank lies above 2500, the portfolio is highly concentrated.

However, HH index is better in showing a bank’s concentration in a specific portfolio category and does not tell us about its degree of specialisation in any individual sector. Hence, we have deployed ‘sectoral concentration measure’ (henceforth SCM) in a similar fashion with the ‘loan concentration measure (LCM)’ as proposed by Regehr and Sengupta (2016)⁷, in order to measure the ‘sectoral concentration’ of a bank in our context. Mathematically, SCM has been measured by multiplying the ‘shares by sector in aggregate lending’ of each bank by its respective HH index. Thus-

$$(Eq. A2) \quad FCM_{p,q} = HH_p * ss_{p,q}$$

Where $FCM_{p,q}$ is the sectoral concentration of bank p in sector q , and $ss_{p,q}$ is the sector q ’s share of bank p in the sectoral aggregate lending.

⁶ DoJ & FTC. 2010. *Horizontal merger guidelines*. US Department of Justice and the Federal Trade Commission.

⁷ Regehr, K. and R. Sengupta. 2016. “Sectoral Loan Concentration and Bank Performance (2001-2014)”. *Research Working Paper RWP 16-13*, The Federal Reserve Bank of Kansas City.

Appendix B1: HH Index of Nepalese Banking Industry based on Aggregate Sectoral Lending Portfolio

Sectors	Sectoral lending share as on mid-July, %				
	2019	2018	2017	2016	2015
S01 - Agricultural and Forest Related	5.4	4.7	4.3	4.2	4.3
S02 - Fishery Related	0.1	0.1	0.1	0.1	0.1
S03 - Mining Related	0.2	0.2	0.2	0.2	0.2
S04 - Agriculture, Forestry & Beverage Production	5.2	5.8	6.3	6.4	6.5
S05 - Non-Food Production Related	12.5	11.6	11.6	11.8	13.3
S06 - Construction	10.3	10.3	10.4	10.2	10.3
S07 - Electricity, Gas and Water	4.8	4.0	3.5	2.8	2.4
S08 - Metal Products, Machinery & Electronic Equip. & Assemblage	1.3	1.4	1.3	1.2	1.0
S09 - Transport, Communication and Public Utilities	2.5	2.7	3.0	2.9	2.3
S10 - Wholesaler & Retailer	22.5	23.2	23.1	22.6	21.9
S11 - Finance, Insurance and Real Estate	8.3	8.8	8.7	8.0	7.8
S12 - Hotel or Restaurant	4.2	3.8	3.3	2.8	2.9
S13 - Other Services	4.5	4.5	4.6	4.2	4.6
S14 - Consumption Loans	5.7	6.9	7.8	7.1	7.2
S15 - Local Government	0.1	0.1	0.1	0.1	0.2
S16 - Others	12.3	12.0	11.9	15.4	14.9
S01 – S16 Total	100.0	100.0	100.0	100.0	100.0
Aggregate Herfindahl-Hirschman Index	1149	1162	1164	1208	1201

Source: Researchers' estimate (2020)

Appendix B2: HH Index of Commercial Banks based on their Sectoral Lending Portfolios

Commercial Banks	Herfindahl-Hirschman (HH) Index				
	2019	2018	2017	2016	2015
NBL - Nepal Bank Ltd	1102	1378	1331	1467	1548
RBB - Rastriya Banijya Bank	1509	1573	1554	1534	1506
NABIL - Nabil Bank	1609	-	1630	-	-
NIBL - Nepal Investment Bank Ltd	1304	1283	1396	1387	1561
SCBNL - Standard Chartered Bank Nepal	1632	1803	1636	1711	1686
HBL - Himalayan Bank Ltd	1322	1229	1271	1415	1399
NSBI - Nepal SBI Bank	1515	1726	1823	1742	1855
NBB - Nepal Bangladesh Bank	1251	1234	1431	1474	1586
EBL - Everest Bank Ltd.	1398	1341	1378	1385	1441
BOK - Bank of Kathmandu	1356	1309	1342	1534	1529
NCC - Nepal Credit & Commerce Bank	1087	1161	1130	1165	1169
NIC - Nepal Industrial & Commercial Bank	1395	1488	1531	1438	1392
MBL - Machhapuchhre Bank Ltd	1252	1242	1213	1133	1239
KUMARI - Kumari Bank	1120	1414	1318	1197	1339
LAXMI - Laxmi Bank	1245	1231	1276	1367	1407
SBL - Siddhartha Bank Ltd	1305	1290	1319	1328	1407
ADBNL - Agriculture Development Bank	2030	1963	1822	1389	1386
GLOBAL - Global Banks	1293	1326	1433	1581	1499
CITIZENS - Citizens Bank	1273	1353	1342	1474	1458
PRIME - Prime Bank	1056	1337	1493	1391	1377
SUNRISE - Sunrise Bank	1225	1265	1289	1333	1280
NMB - NMB Bank	1537	1455	1274	1438	1385
PRABHU - Prabhu Bank	1048	1112	1185	-	1203
JANATA - Janata Bank	1316	1333	1312	1104	1336
MEGA - Mega Bank	1412	1462	1494	1152	1178
CIVIL - Civil Bank	1139	1248	1384	1421	1401
CENTURY - Century Bank	1152	1165	1159	1684	1753
SANIMA - Sanima Bank	1401	1432	1368	1346	1437
Aggregate Herfindahl-Hirschman Index	1149	1162	1164	1208	1201

Source: Researchers' estimate (2020)

Appendix C: Sectorial Concentration Measure (SCM) of Banks

Banks	S01	S04	S05	S06	S07	S08	S09	S10	S11	S12	S13	S14	S16
NBL	263	221	595	487	280	74	94	852	311	125	109	538	424
RBB	709	404	531	1031	260	136	220	2898	903	525	242	1134	153
NABIL	241	534	1513	74	524	67	50	2261	507	251	186	281	1782
NIBL	327	441	1351	395	524	42	189	1330	373	484	467	187	296
SCBNL	197	256	436	869	2	122	13	986	172	64	23	352	133
HBL	270	510	1136	232	66	117	185	915	631	216	211	194	230
NSBI	166	453	863	209	179	175	64	1226	330	222	92	80	1125
NBB	127	141	233	267	123	33	65	468	239	100	654	104	209
EBL	284	188	651	1101	264	115	150	1656	688	176	131	233	542
BOK	196	216	576	224	178	63	91	1133	448	177	307	405	119
NCC	150	171	410	369	141	66	119	472	179	98	126	79	440
NIC	639	262	492	1300	81	19	26	2058	781	542	253	659	1478
MBL	174	222	560	329	178	26	123	988	413	103	301	170	398
KUMARI	71	237	558	382	170	86	140	496	234	126	148	180	454
LAXMI	153	249	381	815	216	115	215	753	285	119	180	164	48
SBL	290	255	672	396	257	61	374	1171	410	207	181	226	1178
ADBNL	1682	235	383	526	557	34	93	2425	132	270	274	88	2558
GLOBAL	206	316	769	847	381	64	56	1436	330	263	313	323	750
CITIZENS	118	167	353	175	240	10	101	558	232	60	197	271	872
PRIME	152	68	392	458	322	19	79	381	451	169	138	351	292
SUNRISE	279	90	338	632	124	45	14	729	290	183	184	193	395
NMB	136	361	859	708	359	74	90	1778	451	121	165	192	284
PRABHU	238	85	443	564	187	18	129	633	397	264	321	264	279
JANATA	167	221	530	289	201	14	135	849	260	134	157	87	529
MEGA	126	269	433	191	119	28	59	1040	632	204	133	225	669
CIVIL	98	79	312	127	143	21	45	413	255	80	88	163	158
CENTURY	104	210	453	279	137	52	31	496	344	113	96	182	327
SANIMA	109	244	461	445	267	48	300	878	207	170	178	124	1228
Overall SCM	1682	534	1513	1300	557	175	374	2898	903	542	654	1134	2558

Note: Highlighted cells show the top 5 lending priority of the given bank among those sectors (read along a given row).

Source: Researchers' estimate (2020)

Appendix D: Shares in Total Sectoral Lending by Banks, as on mid-July 2019

Banks	TOT	S01	S04	S05	S06	S07	S08	S09	S10	S11	S12	S13	S14	S16
NBL ^{big}	4.0	0.2	0.2	0.5	0.4	0.3	0.1	0.1	0.8	0.3	0.1	0.1	0.5	0.4
RBB ^{big}	6.1	0.5	0.3	0.4	0.7	0.2	0.1	0.1	1.9	0.6	0.3	0.2	0.8	0.1
NABIL ^{big}	5.1	0.1	0.3	0.9	0.0	0.3	0.0	0.0	1.4	0.3	0.2	0.1	0.2	1.1
NIBL ^{big}	4.9	0.3	0.3	1.0	0.3	0.4	0.0	0.1	1.0	0.3	0.4	0.4	0.1	0.2
SCBNL	2.2	0.1	0.2	0.3	0.5	0.0	0.1	0.0	0.6	0.1	0.0	0.0	0.2	0.1
HBL	3.7	0.2	0.4	0.9	0.2	0.1	0.1	0.1	0.7	0.5	0.2	0.2	0.1	0.2
NSBI	3.4	0.1	0.3	0.6	0.1	0.1	0.1	0.0	0.8	0.2	0.1	0.1	0.1	0.7
NBB	2.2	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.4	0.2	0.1	0.5	0.1	0.2
EBL ^{big}	4.4	0.2	0.1	0.5	0.8	0.2	0.1	0.1	1.2	0.5	0.1	0.1	0.2	0.4
BOK	3.1	0.1	0.2	0.4	0.2	0.1	0.0	0.1	0.8	0.3	0.1	0.2	0.3	0.1
NCC	2.6	0.1	0.2	0.4	0.3	0.1	0.1	0.1	0.4	0.2	0.1	0.1	0.1	0.4
NIC ^{big}	6.2	0.5	0.2	0.4	0.9	0.1	0.0	0.0	1.5	0.6	0.4	0.2	0.5	1.1
MBL	3.2	0.1	0.2	0.4	0.3	0.1	0.0	0.1	0.8	0.3	0.1	0.2	0.1	0.3
KUMARI	2.9	0.1	0.2	0.5	0.3	0.2	0.1	0.1	0.4	0.2	0.1	0.1	0.2	0.4
LAXMI	3.0	0.1	0.2	0.3	0.7	0.2	0.1	0.2	0.6	0.2	0.1	0.1	0.1	0.0
SBL ^{big}	4.4	0.2	0.2	0.5	0.3	0.2	0.0	0.3	0.9	0.3	0.2	0.1	0.2	0.9
ADBNI ^{big}	4.6	0.8	0.1	0.2	0.3	0.3	0.0	0.0	1.2	0.1	0.1	0.1	0.0	1.3
GLOBAL ^{big}	4.7	0.2	0.2	0.6	0.7	0.3	0.0	0.0	1.1	0.3	0.2	0.2	0.2	0.6
CITIZENS	2.7	0.1	0.1	0.3	0.1	0.2	0.0	0.1	0.4	0.2	0.0	0.2	0.2	0.7
PRIME	3.1	0.1	0.1	0.4	0.4	0.3	0.0	0.1	0.4	0.4	0.2	0.1	0.3	0.3
SUNRISE	2.9	0.2	0.1	0.3	0.5	0.1	0.0	0.0	0.6	0.2	0.1	0.1	0.2	0.3
NMB	3.6	0.1	0.2	0.6	0.5	0.2	0.0	0.1	1.2	0.3	0.1	0.1	0.1	0.2
PRABHU	3.6	0.2	0.1	0.4	0.5	0.2	0.0	0.1	0.6	0.4	0.3	0.3	0.3	0.3
JANATA	2.7	0.1	0.2	0.4	0.2	0.2	0.0	0.1	0.6	0.2	0.1	0.1	0.1	0.4
MEGA	2.9	0.1	0.2	0.3	0.1	0.1	0.0	0.0	0.7	0.4	0.1	0.1	0.2	0.5
CIVIL	1.7	0.1	0.1	0.3	0.1	0.1	0.0	0.0	0.4	0.2	0.1	0.1	0.1	0.1
CENTURY	2.5	0.1	0.2	0.4	0.2	0.1	0.0	0.0	0.4	0.3	0.1	0.1	0.2	0.3
SANIMA	3.4	0.1	0.2	0.3	0.3	0.2	0.0	0.2	0.6	0.1	0.1	0.1	0.1	0.9
Total	100.0	5.4	5.2	12.5	10.3	4.8	1.3	2.5	22.5	8.3	4.2	4.5	5.7	12.3
CV	31.0	81.6	43.0	45.6	59.6	51.2	62.6	71.3	46.9	44.1	59.5	62.3	74.5	75.2

Note: Highlighted cells show they are part of the top 5 lending shares for the given sector (read along a given column).

Source: Researchers' estimate (2020)

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Existence results for functional first order coupled systems and applications

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Abstract

This paper is concerned with the existence of solutions of the first order fully coupled system with coupled functional boundary conditions. These functional boundary conditions generalize the usual boundary assumptions and may be applied to most of the classical cases.

The arguments used are based on the Arzela Ascoli theorem and Schauder's fixed point theorem.

An application to a mathematical model of the thyroid-pituitary interaction and their homeostatic mechanism is included.

2010 Mathematics Subject Classification:

Keywords: Coupled nonlinear systems, functional boundary conditions, Schauder fixed point theory, thyroid-pituitary homeostatic mechanism, mathematical modelling.

1 Introduction

This paper is concerned with the study of a fully nonlinear coupled system of equations

$$u'_i(t) = f_i(t, u_1(t), \dots, u_n(t)), \quad (1)$$

with $i = 1, 2, \dots, n$, $t \in [a, b]$ and $f_i : [a, b] \times \mathbb{R}^n \rightarrow \mathbb{R}$ are L^1 -Carathéodory functions, subject to the nonlinear functional boundary conditions

$$u_i(a) = L_i(u, u(b), u^*(a)) \quad (2)$$

where $i = 1, 2, \dots, n$, $L_i : (C[a, b])^n \times \mathbb{R}^n \times \mathbb{R}^{n-1} \rightarrow \mathbb{R}$ are continuous functions with properties later to be defined, and

$$\begin{aligned} u &= (u_1, \dots, u_n) \\ u(b) &= (u_1(b), \dots, u_n(b)), \\ u^*(a) &= (u_1(a), \dots, u_j(a), \dots, u_n(a)), \quad j = 1, \dots, n, \quad j \neq i. \end{aligned}$$

Systems of differential equations are very popular in mathematical modelling due to their high applicability in diverse areas like population dynamics, finance, medicine, biotechnology, physics, etc. Some examples of these applications can be seen in [12, 14].

There are not many cases available in the literature dealing with coupled systems of equations, one can point [1, 2, 3], however this paper generalizes some of the results presented there as it deals with both coupled equations. Moreover, to the best of our knowledge, it is the first time where coupled systems are considered with coupled functional boundary conditions. This feature allows to generalize the classical boundary data in the literature, such as two-point or multi-point, nonlinear, nonlocal, integro-differential conditions, among others. Indeed, the functional part can deal with global boundary assumptions, such as with minimum or maximum arguments, infinite multi-point data, integral conditions, ..., on the several unknown functions. More details on functional problems can be seen in [4, 5, 7, 8, 10, 9] and the references therein.

The technique used is based on the Arzèla-Ascoli theorem and Schauder's fixed point theorem. An application of (1)-(2) to the mathematical model describing the thyroid-pituitary homeostatic mechanism is shown, to illustrate the applicability of the problem discussed. In addition, an example is presented to emphasize the huge potential of applications from functional boundary conditions used and, consequently, from the main existence result.

2 Definitions and assumptions

Along this work we consider the space of continuous functions in $[a, b]$, $(C[a, b])$, equipped with the norm $\|u\| = \max \{\|u_i\|, i = 1, \dots, n\}$ where $\|u_i\| = \max_{t \in [a, b]} |u_i(t)|$.

As it is well known, in this way, $C[a, b]$ is a Banach space.

The functional boundary functions verify the assumption:

- (H1) $L_i : (C[a, b])^n \times \mathbb{R}^n \times \mathbb{R}^{n-1} \rightarrow \mathbb{R}$ are continuous functions. Moreover $L_i(\eta, x, y)$ are uniformly continuous when (η, x, y) are bounded., and decreasing on η , for $i = 1, \dots, n$.
- (H2) The functions $L_i : (C[a, b])^n \times \mathbb{R}^n \times \mathbb{R}^{n-1} \rightarrow \mathbb{R}$ are decreasing in the i^{th} variable and nonincreasing in the $(i + n)^{\text{th}}$ variable.

Condition (H2) will depend both on the number of equations considered (n) and i . As a clarification, for instance when $n = 1$, we require that on L_1 the first variable is decreasing and the second variable to be nonincreasing. If $n = 2$, we have both L_1 and L_2 . In L_1 the first variable is decreasing and the third variable is nonincreasing, whereas in L_2 the second variable is decreasing and the fourth variable is nonincreasing. A similar analogy is used for the other values of n .

The admissible functions for our work will be the L^1 -Carathéodory functions, according the following definition:

Definition 1 *The functions $f_i : [a, b] \times \mathbb{R}^n \rightarrow \mathbb{R}$, $i = 1, \dots, n$, are L^1 -Carathéodory if they verify*

- (i) *for each $(y_1, \dots, y_n) \in \mathbb{R}^n$, $t \mapsto f_i(t, y_1, \dots, y_n)$ are measurable on $[a, b]$, for $i = 1, \dots, n$;*
- (ii) *for almost every $t \in [a, b]$, $(y_1, \dots, y_n) \mapsto f_i(t, y_1, \dots, y_n)$ is continuous in \mathbb{R}^n , for $i = 1, \dots, n$;*
- (iii) *for each $L > 0$, there exists a positive function $\psi_{iL} \in L^1[a, b]$, $i = 1, \dots, n$, such that, for $\max \{\|y_i\|, i = 1, \dots, n\} < L$,*

$$|f_i(t, y_1(t), \dots, y_n(t))| \leq \psi_{iL}(t), \text{ a.e. } t \in [a, b], \text{ } i = 1, \dots, n.$$

Schauder's fixed point theorem will be an important tool to guarantee the existence of fixed points for our operator:

Theorem 2 ([13]) *Let Y be a nonempty, closed, bounded and convex subset of a Banach space X , and suppose that $P : Y \rightarrow Y$ is a compact operator. Then P has at least one fixed point in Y .*

3 Main result

In this section, we present and prove the main existence result for (1)-(2), given by the following theorem:

Theorem 3 *If f_i are L^1 -Carathéodory functions, for $i = 1, \dots, n$, and (H1), (H2) hold, then the problem (1)-(2) has at least one solution $u \in (C[a, b])^n$.*

Proof. Let us consider the integral system given by

$$u_i(t) = L_i(u, u(b), u^*(a)) + \int_a^t f_i(s, u_1(s), \dots, u_n(s)) ds \quad (3)$$

and the operator

$$T : (C[a, b])^n \rightarrow (C[a, b])^n$$

defined by

$$T(u_1, \dots, u_n) = (T_1(u_1, \dots, u_n), \dots, T_n(u_1, \dots, u_n)), \quad (4)$$

where $T_i : (C[a, b])^n \rightarrow C[a, b]$, $i = 1, \dots, n$, given by

$$T_1(u_1, \dots, u_n) = L_1(u, u(b), u^*(a)) + \int_a^t f_1(s, u_1(s), \dots, u_n(s)) ds. \quad (5)$$

As the fixed points of T are fixed points of T_i , $i = 1, \dots, n$, and vice-versa, we will use the Arzèla-Ascoli theorem and Schauder's fixed point theorem to prove that the problem (1)-(2) has at least one solution.

For clarity, we consider several claims:

Claim 1 - $TD \subset D$, for some $D \subset (C[a, b])^n$ a bounded, closed and convex subset.

Consider

$$D = \{(u_1, \dots, u_n) \in (C[a, b])^n : \|(u_1, \dots, u_n)\| \leq k\}$$

where

$$k := \max \left\{ k_i + \int_a^t \psi_{iL}(s) ds, \quad i = 1, \dots, n \right\} < \infty,$$

and, by (H1),

$$k_i := \max \{L_i(u, u(b), u^*(a)), \quad i = 1, \dots, n\}.$$

Then,

$$\begin{aligned} \|T(u_1, \dots, u_n)\| &= \max \{ \|T_1(u_1, \dots, u_n)\|, \dots, \|T_n(u_1, \dots, u_n)\| \} \\ &= \max \left\{ \max \left| \begin{array}{c} L_i(u, u(b), u^*(a)) \\ + \int_a^t f_i(s, u_1(s), \dots, u_n(s)) ds \end{array} \right|, i = 1, \dots, n \right\} \\ &\leq \max \left\{ k_i + \int_a^t \psi_{iL}(s) ds, \quad i = 1, \dots, n \right\} = k, \end{aligned}$$

proving Claim 1.

Claim 2 - *The operator T is completely continuous.*

To prove that the operator T is completely continuous it is sufficient to show that T is uniformly bounded and T is equicontinuous.

Applying the above arguments, it can be proved that T_i are uniformly bounded, for $i = 1, \dots, n$, and therefore T is uniformly bounded.

In order to show that the operator T is equicontinuous, let us consider $t_1, t_2 \in [a, b]$, such that, without any loss of generality, $t_1 < t_2$.

Then for T_i , $i = 1, \dots, n$, we have

$$\begin{aligned} &|T_i(u_1(t_2), \dots, u_n(t_2)) - T_i(u_1(t_1), \dots, u_n(t_1))| \\ &\leq \int_{t_1}^{t_2} |f_i(s, u_1(s), \dots, u_n(s))| ds \leq \int_{t_1}^{t_2} \psi_{iL}(s) ds \rightarrow 0, \end{aligned}$$

as $t_1 \rightarrow t_2$. So, each operator T_i is equicontinuous and, hence, the operator T is equicontinuous.

Therefore, by Arzèla-Ascoli's theorem, the operator T is compact and using Schauder's fixed point theorem, we obtain that T has a fixed point, that is, the problem (1)-(2) has at least a solution $u \in (C[a, b])^n$. ■

4 The thyroid-pituitary homeostatic mechanism

In [6], the authors develop a mathematical model of the thyroid-pituitary interaction. This model is based on the fact that the anterior lobe of the pituitary gland produces the hormone thyrotropin, under the influence of a thyroid releasing factor (TRF), a releasing hormone secreted by the hypothalamus. The hormone thyrotropin causes the thyroid gland to produce an enzyme, which when activated, produces the hormone thyroxine. This hormone has a negative feedback effect on the secretion of thyrotropin from the pituitary gland. This mechanism can be seen in more detail in [11] and the following mathematical model is suggested

$$\frac{dP}{dt} = \begin{cases} c - h\theta - gP, & \theta \leq \frac{c}{h} \\ -gP, & \theta > \frac{c}{h} \end{cases}, \quad (6)$$

$$\frac{dE}{dt} = mP - kE,$$

$$\frac{d\theta}{dt} = aE - b\theta$$

where P , E and θ represent the concentrations of thyrotropin, activated enzyme and thyroxine respectively, b , g and k represent the loss constants of thyroxine, thyrotropin and activated enzyme, respectively, a , h , m are constants expressing the sensitivities of the glands to stimulation or inhibition; c is the rate of production of thyrotropin in the absence of thyroid inhibition. All constants are assumed to be positive.

We consider, for $t \in [0, T]$, with $T > 0$, the differential equations (6) coupled with the boundary conditions

$$P(0) = \min_{t \in [0, T]} \theta(t),$$

$$E(0) = \int_0^T E(T)E(s)ds, \quad (7)$$

$$\theta(0) = \max_{t \in [0, T]} P(t).$$

These functional boundary conditions fully reflect the considerations and conclusions presented on [11]. As the concentrations of thyrotropin and thyroxine are based on a negative feedback effect, when one is at its maximum,

the other will be at its minimum and vice-versa. The concentration of the activated enzyme, E , is considered to be, at its initial moment, a weighted average of the amount present on the system, weighted by the final value of the activated enzyme, E , at T . Functional boundary conditions allow these assumption to be considered in full, as they allow for operators to be considered as boundary conditions. The minimum concentration of thyrotropin at start is illustrated by the first condition, the average concentration of the activated enzyme by the second and the maximum concentration of thyroxine is described by the last condition.

This model can now be presented in the form of (1)-(2), where $u_1 = P$, $u_2 = E$ and $u_3 = \theta$,

$$f_1(t, u_1, u_2, u_3) = \begin{cases} c - hu_3 - gu_1, & u_3 \leq \frac{c}{h} \\ -gu_1, & u_3 > \frac{c}{h} \end{cases},$$

$$f_2(t, u_1, u_2, u_3) = mu_1 - ku_2,$$

$$f_3(t, u_1, u_2, u_3) = au_2 - bu_3,$$

$$L_1(u_1, u_2, u_3, u_1(T), u_2(T), u_3(T), u_2(0), u_3(0)) = \min_{t \in [0, T]} u_3,$$

$$L_2(u_1, u_2, u_3, u_1(T), u_2(T), u_3(T), u_1(0), u_3(0)) = \int_0^T u_2(T)u_2(s)ds,$$

$$L_3(u_1, u_2, u_3, u_1(T), u_2(T), u_3(T), u_1(0), u_2(0)) = \max_{t \in [0, T]} u_1.$$

It is clear to see that f_1, f_2 and f_3 are L^1 -Carathéodory functions such that, for $\max\{\|u_1\|, \|u_2\|, \|u_3\|\} < L$,

$$\begin{aligned} |f_1(t, u_1, u_2, u_3)| &\leq c + hL + gL := \psi_{1L}(t), \\ |f_2(t, u_1, u_2, u_3)| &\leq mL + kL := \psi_{2L}(t), \\ |f_3(t, u_1, u_2, u_3)| &\leq aL + bL := \psi_{3L}(t), \end{aligned}$$

and that the boundary conditions L_1, L_2 and L_3 satisfy (H1). Therefore, by Theorem 3, the system (6)-(7) has at least one solution $(u_1, u_2, u_3) \in (C[0, T])^3$.

A similar approach can be taken in several other models, allowing global conditions to be considered as boundary conditions, highly increasing the level of applicability of these models.

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CORPORATE GOVERNANCE SYSTEM IN INDIA

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ABSTRACT

The root of the word corporate governance is from ‘gubernate’ which means to steer. Corporate governance would mean to steer an organization in the desired direction. Corporate governance is a system by which organization are directed and controlled, it is a process by which company objectives are established, achieved and monitored. So, it is concerned with relationship and responsibilities between the boards, management and stake holders within a legal and regulatory frame work.

The primary objective of this paper is to study the corporate governance policies and practices and system in India .Goodness of corporate governance is checked on the basis of five basic parameters i.e. transparency, ownership structure, board procedure, investor rights and governance strategies.

During the study it was observed that, in India the legislative and regulatory framework for the corporate governance is sound but the implementation part is poor. There is a huge gap between what is de-jure and de-facto.The state is still lagging behind when it comes to particularly private sector small and medium size industries. Major part of industrial set up is just their production units. The government has also set up various committees, passed various regulations for the development of the industries in the country. There is a further need to strengthen the existing governance policies.

Key words: Corporate governance, Productivity, National growth, Cost of capital,

The root of the word corporate governance is from ‘gubernate’ which means to steer. Corporate governance would mean to steer an organization in the desired direction. Corporate governance is a system by which organization are directed and controlled, it is a process by which company objectives are established, achieved and monitored. So, it is concerned with relationship and responsibilities between the boards, management and stake holders within a legal and regulatory

frame work. Corporate governance in India can be evident from the koutaliya's arthshastra, which maintain that for good governance all administrators including king were considered as servants of the subjects. Good governance and stability goes hand in hand.

The primary objective of this paper is to study the corporate governance policies and practices and system in India .Goodness of corporate governance is checked on the basis of five basic parameters i.e. transparency, ownership structure, board procedure, investor rights and governance strategies.

During the study it was observed that, in India the legislative and regulatory framework for the corporate governance is sound but the implementation part is poor. There is a huge gap between what is de-jure and de-facto.The state is still lagging behind when it comes to particularly private sector small and medium size industries. Major part of industrial set up is just their production units. The government has also set up various committees, passed various regulations for the development of the industries in the country. There is a further need to strengthen the existing governance policies.

Secondary objectives being

- a) To study the concept of corporate governance
- b) To brief the historical development of corporate governance.
- c) To study the role of corporate governance in National Development.
- d) To study the problem areas of corporate governance.
- e) To suggest the solution to the corporate governance problems.

CONCEPT OF CORPORATE GOVERNANCE

The root of the word corporate governance is from 'gubernate' which means to steer. Corporate governance would mean to steer an organization in the desired direction. The responsibility to steer lies with the board of directors/governing board. Governance is concerned with the intrinsic nature, purpose, integrity and identity of an organization with primary focus on the entity's relevance, continuity and fiduciary aspects.

Contrary to popular misconception about corporate governance in modern times, the roots of corporate governance are not besmirched in negative trail. That is to say, corporate governance did not have its raison d'être in the negative happenings in the corporate world. Looking at corporate governance from that perspective is to undermine its creative, positive, regenerative and prosperous aspects. Good governance has been an eternal source of inspired thinking and dedicated action.

EVIDENCE OF CORPORATE GOVERNANCE FROM THE ARTHASHASTRA

Kautilya's Arthashastra maintains that for good governance, all administrators, including the king were considered servants of the people. Good governance and stability were completely linked. There is stability if leaders are responsive, accountable and removable. These tenets hold good even today.

Kautilya elaborates on the fourfold duty of a king as

- raksha,
- vridhi,
- palana,

- yogakshema.

The substitution of the state with the corporation ,the king with the CEO or the board corporation , and the subjects with the shareholders, bring out the quintessence of corporate governance, because central to the concept of corporate governance is the belief that public should ahead of private good and that the corporation's resources cannot be used for personal benefit.

- (i) Raksha - literally means protection, in the corporate scenario it can be equated with the risk management aspect.
- (ii) Vriddhi - literally means growth in the present day context can be equated to stakeholder value enhancement.
- (iii) Palana - literally means maintenance/ compliance, in the present day context it can be equated to compliance to the law in letter and spirit.
- (iv) Yogakshema - literally means well being and in kautilya's Arthashastra it is used in context of a social security system. In the present day context it can be equated to corporate social responsibility.

Arthashastra talks self –discipline for a king and the six enemies which a king should overcome-- -lust, anger, greed, conceit, arrogance and foolhardiness. In the present day context, this addresses the ethics aspects of businesses and the personal ethics of the corporate leaders.

REVIEW OF THE LITERATURE

There is no universal definition of corporate governance. In the narrowest sense, Noble laureate Milton Friedman defined corporate governance as “the conduct of business in accordance with shareholders’ desires, which generally is to make as much money as possible, while conforming to the society embodied in law and local customs.”

Some of the definitions of corporate governance are given below:-

Monks and Minow have defined corporate governance as “Relationships among various participants in determining the direction and performance of a corporation”.

The primary participants in a corporation are the tripod of shareholders; management-led by the CEO and the Board of Directors .There are other participants as well such as the employees, customers, suppliers, creditors and the community. Keeping in view the interests of various stakeholders in a company, corporate governance is concerned with effective management of relationships. It requires the formulation of the value framework, the ethical framework and the moral framework which will guide the decision-making process.

According to James D.Wolfensohn, President of World Bank, "Corporate Governance is about promoting corporate fairness, transparency and accountability”.

Standard & Poor's has defined Corporate Governance as “the way a company is organised and managed to ensure that all financial stakeholders (shareholders and creditors) receive their fair share of a company's earnings and assets.”

According to Tricker “Corporate Governance is concerned with the way corporate entities are governed , as distinct from the way business within those companies are managed. Corporate Governance addresses the issues facing Board of Directors, such as the interaction with top management and relationships with the owners and others interested in the affairs of the company”.

OECD has defined corporate governance as “A system by which business corporations are directed and controlled”. Corporate Governance structure specifies the distribution of rights and responsibilities among different participants in the company such as board, management,

shareholders and other stakeholders, and spells out the rules and procedures for corporate decision making. By doing this, it provides the structure through which the company's objectives are set along with the means of attaining these objectives as well as for monitoring performance.

Cadbury Committee, U.K. has defined corporate governance as follows:

“(It is) the system by which companies are directed and controlled”.

It may also be defined as a system of structuring, operating and controlling a company with the following specific aims: -

- (i) Fulfilling long-term strategic goals of owners;
- (ii) Taking care of the interests of employees;
- (iii) A consideration for the environment and local community;
- (iv) Maintaining excellent relations with customers and suppliers;
- (v) Proper compliance with all the applicable legal and regulatory requirements.

Confederation of Indian Industry (CII) – Desirable Corporate Governance Code defined Corporate Governance as follows:

“Corporate Governance deals with laws, procedures, practices and implicit rules that determine a company's ability to take informed managerial decisions vis-a-vis its claimants-in particular, its shareholders, creditors, customers, the State and employees. There is a global consensus about the objective of ‘good’ corporate governance: maximizing long-term shareholder value.”

SIGNIFICANCE OF GOOD CORPORATE GOVERNANCE

Although instituting corporate governance is clearly beneficial for firms and countries, the rapid pace of globalization has made the need urgent. Doing so requires that firms and national governments make some fundamental changes. Companies must change the way they operate, while national governments must establish and maintain the appropriate institutional framework.. Under such conditions business becomes nothing but casino capitalism where investments are simply bets: bets that people will keep their word, bets that the firms are telling the truth, bets that employees will be paid, and bets that debts will be honored. What corporate governance is all about in larger terms is how a structure can be set up that allows for a considerable amount of freedom within the rule of law. Some of the key changes involve adopting international standards of transparency, clarity, and accuracy in financial statements so that investors and creditors can easily compare potential investments.

"Good corporate governance:

- reduces risk
- stimulates performance
- improves access to capital markets
- enhances the marketability of goods and services
- improves leadership
- Demonstrates transparency and social accountability."

"Corporate Governance is concerned with holding the balance between economic and social goals and between individual and communal goals. The corporate governance framework is there to encourage the efficient use of resources and equally to require accountability for the

stewardship of those resources. The aim is to align as nearly as possible the interests of individuals, corporations and society" (Sir Adrian Cadbury in 'Global Corporate Governance Forum', World Bank, 2000)

HISTORICAL DEVELOPMENTS

Ever since the concept of corporate entity was recognized, corporate governance in various manifestations has been in existence. The Foreign Corrupt Practices Act, 1977 (USA) made specific provisions regarding establishment, maintenance and review of systems of internal control. In 1979, US Securities Exchange Commission prescribed mandatory reporting on internal financial controls. Due to high profile failures in the US, the **Treadway Commission** constituted in 1985 highlighted the need of putting in place a proper control environment, desirably of constituting independent boards and its committees and objective internal audit function. As a consequence, the committee of Sponsoring organizations took birth. It produced and stipulated in 1992, a control framework. After the Enron debacle of 2001, came other scandals involving large US Companies such as World Com, Qwest, Global Crossing and the auditing lacunae that eventually led to the collapse of Andersen. These developments triggered another phase of reforms in the area of corporate governance, accounting practices and disclosures-this time more comprehensive than ever before. In July 2002, less than a year from the date when Enron filed for bankruptcy, the **Sarbanes-Oxley Act** popularly called SOX was enacted. The Act made fundamental changes in virtually every aspect of corporate governance in general and auditor independence, conflict of interests, corporate responsibility, enhanced financial disclosures and severe penalties for willful default by managers and auditors, in particular.

A spate of scandals and financial collapses in the UK in the late 1980s and early 1990s made the shareholders and banks worry about their investments. This led the UK Government to recognize insufficiency of existing legislation and role of self-regulation as a measure of controlling scandals and financial collapses. Some of the corporate disasters took place primarily due to insufficiency of implementable governance practices. To prevent the recurrence of such business failures, the Cadbury Committee was set up by the business failures; the Cadbury Committee was set up by the London Stock Exchange in May 1991 inter alia to help raise standards of corporate governance.

The Cadbury Report-1992

The Committee on Financial aspects of Corporate Governance was the first CG code developed in the UK was incorporated in the London Stock Exchange Listing Rules. It was set up under the chairmanship of Sir Adrian Cadbury. The important recommendations were-

- Separation of the role of CEO & Chairman
- Balanced composition of BOD
- Selection process for NED

The Greenbury Report-1995

The report of the committee is popularly called the Greenbury Report. It included a code of Best Practices and its recommendations. The confederation of British Industry set up a group under the Chairmanship of Sir Richard Greenbury. It was set up to examine the remuneration of the directors, particularly compensation packages, large pay increases and share options. The important recommendation was the establishment of Remuneration Committee composed of

Non-Executive Directors which would be responsible for deciding the remuneration of executive directors. The majority of the recommendations of the Committee were incorporated in the Listings Rules of the London Stock Exchange.

The Hampel Report-1998

The Hampel Committee was set up to review the extent to which the Cadbury Committee Report and the Greenbury Committee Report had been implemented and whatever their purposes of recommendations were being achieved. The Hampel Committee's recommendations and further consultations by the London Stock Exchange became the combined Code on Corporate Governance.

The Turnbull Report

The original Combined Code Required companies to include a narrative statement in their Annual Report of how internal control provisions had been applied. However, the combined code did not have guidelines of how the provisions should be applied by the companies. This led to the establishment of a Working Group under the Chairmanship of Nigel Turnbull. The resulting Internal Control Guidance for Directors on Combined Code was issued.

Higgs Report, Smith Report & Tyson Report

Following the review of the Company Law, a review of the Combined Code was commenced in July 2002. The subject was Review of the role and effectiveness of non-executive directors. It was conducted by Derek Higgs.

A group under the chairmanship Sir Robert Smith was set up to develop Guidance Audit Committee in the Combined Code. The Tyson Report was commissioned on the Recruitment and Development of Non-executive Directors. All the three provided recommendation for the revised combined code which emerged in 2003.

Combined Code on Corporate Governance (2008)

The Combined Code on Corporate Governance sets out standards of good practice in relation to issues such as board composition and development, remuneration, accountability and audit and relations with shareholders.

All companies incorporated in the UK and listed on the main market of the London Stock Exchange are required under the listing Rules to report on how they have applied the Combined Code in their annual Report and accounts.

DEVELOPMENTS IN INDIA

The initiatives taken by the Government in 1991, aimed at economic liberalisation and globalisation of the domestic economy, led India to initiate reform process in order to suitably respond to the developments taking place world over. On account of the interest generated by Cadbury Committee Report, the confederation of Indian Industry (CII), the Associated Chambers of Commerce and industry (ASSOCHAM) and, the Securities and Exchange Board of India (SEBI) constituted Committees to recommend initiatives in Corporate Governance.

CII'S DESIRABLE CORPORATE GOVERNANCE CODE

Confederation of Indian Industry (CII) took a special initiative on Corporate Governance, the first institution initiative in Indian Industry. The objective was to develop and promote a code for Corporate Governance to be adopted and followed by the Indian companies, whether in the

Private Sector, the Public Sector, Banks or Financial Institutions, all of which are corporate entities. The final draft of the said Code was widely circulated in 1997. In April 1998, the Code was released. It was called Desirable Corporate Governance Code.

KUMAR MANGALAM BIRLA COMMITTEE

Following CII's initiative, the Securities and Exchange Board of India (SEBI) set up a committee under the chairmanship of Kumar Mangalam Birla to promote and raise standards of corporate governance. This Report was the formal and comprehensive attempt to evolve a Code of governance in Indian companies, as well as the state of capital markets at that time.

The recommendations of the Kumar Mangalam Birla Committee, led to inclusion of clause 49 in the Listing Agreement in the year 2000. These recommendations aimed at improving the standards of Corporate Governance, are divided into mandatory and non-mandatory recommendations. The said recommendations have been made applicable to all listed companies with the paid-up capital of Rs.3 crores and above or net worth of Rs.25 crores or more at any time in the history of the company. The ultimate responsibility for putting the recommendations into practice lies directly with the Board of Directors and the management of the company.

NARESH CHANDRA COMMITTEE

The Enron debacle of 2001 involving the hand-in-glove relationship between the auditor and the corporate client, the scams involving the fall of the corporate giants in the U.S. like the WorldCom, Qwest, Global Crossing, Xerox and the consequent enactment of the stringent Sarbanes Oxley Act in the U.S were some important factors which led the Indian Government to wake up and in the year 2002, Naresh Chandra Committee was appointed to examine and recommend inter alia amendments to the law involving the auditor-client relationships and the role of independent directors.

N.R.NARAYANA MURTHY COMMITTEE

In the year 2002, SEBI analyzed the statistics of compliance with the clause 49 by listed companies and felt that there was a need to look beyond the mere systems and procedures if corporate governance was to be made effective in protecting the interest of investors. SEBI therefore constituted a Committee under the Chairmanship of Shri N.R.Narayana Murthy, for reviewing implementation of the corporate governance code by listed companies and issue of revised clause 49 based on its recommendations

DR. J J IRANI EXPERT COMMITTEE ON COMPANY LAW

In 2004, the Government constituted a committee under the Chairmanship of Dr.J.J.Irani, Director, Tata Sons, with the task of advising the Government on the proposed revisions to the Companies Act, 1956 with the objective to have a simplified compact law that would be able to address the changes taking place in the national and international scenario, enable adoption of internationally accepted best practices as well as provide adequate flexibility for timely evolution of new arrangements in response to the requirements of ever-changing business models.

Obstacles in improving Corporate Governance:

Shareholding patterns in the countries like United Kingdom and United States of America is scattered in the nature. It is in such a way that no single individual investor can hold above a specific mentioned limit of stocks of a particular company. But the conditions in the rest of the world are not the same. Developing countries like India are still suffering from the problems of

concentrated ownership, agency problems and expropriation problems. Some of the main reasons behind poorly defined corporate governance in these countries are:

- a) Resistance to change.
- b) Distributional Carters.
- c) Principal-Agency Problems.
- d) Strategic Oligopolistic Rivalry.
- e) Poorly designed Corporate Governance Institutions.
- f) Poor political Governance.

The creation of corporate regulation is often linked to perceived failures of corporations and their management to behave in the way society expect them to. Corporate governance is not an exception to this trend, and, as with accounting, different countries may well experience difficulties at different times. For example, the development of British codes of best practice, which began with the Cadbury Committee, can be related to governance scandals such as **Polly Peck and Coloroll** in the late 1980s and early 1990s. However, the wave of corporate scandals, mostly in the USA, at the turn of the century has been marked not only by the number of cases but also by the effect they have had on investor confidence and market values worldwide.

The combined impact of various US corporate scandals caused the **Dow Jones Index** to drop from a high for 2002 of 10,632 on 19 March to 7,286 on 9 October, wiping out trillions of dollars in market value. Investor confidence in the fairness of the system and the ability of corporations to act with integrity was ebbing. According to a poll in July 2002, 73 per cent of respondents said that Chief Executive Officers (CEOs) of large corporations could not be trusted (Conference Board, 2003). Amongst the many negative effects of this was a worsening of the pension funding crisis caused by the dramatic drop in the value of pension fund assets. It also increased the cost of capital and caused a virtual cessation in new securities offerings. The International Federation of Accountants (IFAC) claims that while there has been a lot of strategic guidance for business, there has been too little said about the need for good corporate governance. These authors emphasize the fact that successful companies were visionary companies, with a long track record of making a positive impact on the world. They did more than focus on profits; they focused on continuous improvement. They took a long-term view and realised that they were members of society with rights and responsibilities.

Adelphia manipulated its earnings figures for every quarter between 1996 and 2002 to make it appear to meet analysts' expectations. Some of the better known cases of financial irregularities are summarised in following table.

In terms of corporate governance issues, A hold, Enron and WorldCom all suffered from

- Questionable ethics
- Behavior at the top
- Aggressive earnings management
- Weak internal control
- Risk management
- Shortcomings in accounting and reporting

REASONS FOR CORPORATE GOVERNANCE FAILURE

However, the long-term view is something of a rarity in many companies. A critical factor in many corporate failures was:

- Poorly designed rewards package
- Including excessive use of share options (that distorted executive behavior towards the short term)
- The use of stock options, or rewards linked to short-term share price performance (led to Aggressive earnings management to achieve target share prices)
- Trading did not deliver the earnings targets, aggressive or even fraudulent accounting tended to occur. This was very apparent in the cases of Ahold, Enron, WorldCom and Xerox (IFAC, 2003).

CORPORATE GOVERNANCE AND THE NATIONAL DEVELOPMENT

The corporate governance has a very important role to play in the national development. It's significance was ignored for many decades. The East-Asian financial crises of 1997-98 drew attention to it and the problems of "crony capitalism" in the growing economies.

Corporate Governance and Productivity growth-

Paul Krugman predicted in 1994, by comparing East and South East Asia to Soviet model that 'it is not impossible for any country to achieve and sustain high rates of output and income growth for a long period of time even for decades by massive mobilisation of factors of production. It can be achieved through various kinds of forced savings, significant and sustained investments in the education of the country's population, high rates of rural-urban migration, by more involvement of female population into modern manufacturing, agri-business and service sectors and so on.

Corporate Governance and Cost of capital-

Good corporate governance ensures the regular supply of funds to the investors, as the traditional resources are not enough to meet the requirements. The good governance also lowers the costs of financial resources.

CONCLUSION

Role of corporate governance in the development:

Corporate Governance has a major role to play in not only the national development of the developing economies, but also development at state level as a unit of a nation.

Need for good governance:

The recent trends show a significant flow of Portfolio investment to developing nations, mainly by the financial institutions and the big pension funds etc. It further necessitates the need for improvements in the corporate governance.

Development of basic financial infrastructure:

A proper attention must be given to strengthen the banking sector and countries financial institutions. Institutions for corporate governance must be fair, transparent and effective in the country.

Chairman and CEO: It is considered good practice to separate the roles of the Chairman of the Board and that of the CEO. The Chairman is head of the Board and the CEO heads the management. If the same individual occupies both the positions, there is too much concentration of power, and the possibility of the board supervising the management gets diluted.

Audit Committee: Boards work through sub-committees and the audit committee is one of the most important. It not only oversees the work of the auditors but is also expected to independently inquire into the workings of the organization and bring lapse to the attention of the full board.

Independence and conflicts of interest: Good governance requires that outside directors maintain their independence and do not benefit from their board membership other than remuneration. Otherwise, it can create conflicts of interest. By having a majority of outside directors on its Board.

Flow of information: A board needs to be provided with important information in a timely manner to enable it to perform its roles. A governance guideline of General Motors, for instance, specifically allows directors to contact individuals in the management if they feel the need to know more about operations than what they are being told.

Too many directorships: Being a director of a company takes time and effort. Although a board might meet only four or five times a year, the director needs to have the time to read and reflect over all the material provided and make informed decisions. Good governance, therefore, suggests that an individual sitting on too many boards looks upon it only as a sinecure for he or she will not have the time to do a good job.

Good governance parameters: In order to have good corporate governance in the organization the firm must ensure:

- Transparency in the organization
- Sound board structure
- Defined board procedure
- Investor right protection
- & Good governance strategy.

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Plagiarism in higher education: classification, causes and controls

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Summary

Despite advances in software such as Turnitin, which can assist in the detection of plagiarism, new technologies have made it easier than ever for university students to plagiarise assessments. In this paper, a number of classifications and causes of plagiarism are discussed alongside potential intervention strategies in an attempt to highlight key research showing how institutions can tackle this significant threat to academic integrity. A focus is made on discussions of more complicated and subtle forms of plagiarism, such as plagiarism with technical manipulations, back-translation, and contract cheating, alongside intervention strategies, which may be helpful in these cases. We recommend the use of text matching software to be coupled with targeted interventions, faculty judgment, and institutional support in order to eliminate the barriers against the detection and reporting of these complex plagiarism cases.

Keywords

Academic misconduct, plagiarism, Turnitin, contract cheating, back-translation

1. Introduction

Although plagiarism and academic misconduct are not new concerns for higher education institutions, the last decade has brought with it a rise in the access to the Internet and new information technologies on a global level, and along with this, a rise in the seriousness and number of plagiarism and academic misconduct cases (Aaron & Roche, 2014; Baggaley & Spencer, 2005; Bagraim, Goodman, & Pulker, 2014; Duggan, 2006; Heckler, Forde, & Bryan, 2013; Heckler, Rice & Hobson-Bryan; 2013; Jones, 2011; Joyce, 2007; Kakkonen & Mozgovoy, 2010; McLafferty & Foust, 2004; Mozgovoy, Kakkonen & Cosma, 2010; Park, 2004).

Further clouding the true nature of plagiarism is the potential under-reporting or under-detection of plagiarism cases by faculty. This may occur due to a number of reasons; including not requiring students to submit work through text-matching software such as Turnitin, a lack of knowledge by faculty as to what constitutes plagiarism, or choosing to deal with infractions in ways that do not involve the official university reporting channels (De Jager & Brown, 2010). Furthermore, there may be institutional barriers to reporting, as detecting and following up with plagiarism cases may lead to negative student feedback for the faculty which influences tenure, contract renewal and promotion decisions.

Even if we are to assume that there has been no marked increase in plagiarism cases in recent years, throughout the paper we will see that students have developed various novel ways to try and evade systems which universities put in place to reduce instances of plagiarism.

Fortunately, new information technologies have also allowed for a more detailed and technical examination of assignments submitted by students in an effort to detect cases of plagiarism. Although there is a range of software aimed at assisting in this task, based on the empirical work we highlight below, Turnitin appears to be the most widely utilised. Although Turnitin was initially accompanied with student frustration and

intimidation due to referencing problems (Dahl, 2007), it is a very widely used tool amongst universities with a higher number of advantages than that of disadvantages. In the past decade, the mere introduction of Turnitin to marking made a difference in terms of the number of academic misconduct cases identified (Heckler, Rice & Hobson-Bryan; 2013), as studies show that when students are told that their papers are to be checked using Turnitin, their tendency to plagiarise decreases (Batane, 2010; Ledwith & Rísquez, 2008).

As the initiatives to avoid and discourage plagiarism and academic misconduct develop, we offer a contribution through this paper by providing a summary of the current state of the literature in this area. The aim is to inform readers about some of the different forms of plagiarism in existence, and provide examples of successful anti-plagiarism initiatives. We pay particular attention to the problem of ‘second generation threats’ (Malesky Jr., Baley & Crow, 2016) to academic integrity such as contract cheating, back-translation and technical manipulation, and discuss some potential solutions for dealing with these more complex problems.

2. Plagiarism Classification

To enable a discussion on this subject, a detailed characterization and definition of plagiarism is required, however, many authors have differing views about the precise definitions of this term. In order to provide some clarity to this discussion, Table 1 summarises a range of activities which have been proposed in the literature as constituting plagiarism in some form. It also categorises the activity as either ‘simple plagiarism’ or ‘complex plagiarism’. We define ‘simple plagiarism’ as plagiarism which can be readily identified using text matching software, and ‘complex plagiarism’ as plagiarism which is more subtle and difficult to detect. This second form of plagiarism is discussed in more detail in the following section.

This distinction between the two forms of plagiarism is important when discussing this issue, as the initiatives that may be helpful for one category may not be helpful for the other.

Activity	Author	Category
Copying work without acknowledgement	Park (2004); Walker (2010); Bennett, Behrendt, and Boothby (2011); Mozgovoy, Kakkonen and Cosma (2010)	Simple plagiarism
Resubmitting assessed material for more than one course, AKA self-plagiarism/duplication plagiarism ¹	Park (2004); Bennett, Behrendt, and Boothby (2011)	Simple plagiarism
Copying and submitting the work of another student, with or without consent	Park (2004); Walker (2010); Bennett, Behrendt, and Boothby (2011)	Simple plagiarism
Presenting directly copied or slightly edited work as an incidence of paraphrasing	Walker (2010); Bennett, Behrendt, and Boothby (2011); Mozgovoy, Kakkonen and Cosma (2010)	Simple plagiarism
Quoting, paraphrasing or summarising without a correct citation and reference, AKA paraphrasing plagiarism	Bennett, Behrendt, and Boothby (2011), Mozgovoy, Kakkonen and Cosma (2010)	Simple plagiarism

¹ Bennett, Behrendt, and Boothby (2011) note that there are disagreements among faculty as to whether recycling one’s own work (duplication plagiarism, i.e. submitting the same or similar paper for two different courses) should be considered as plagiarism or not. Jones (2011) observes that this confusion is also present among students.

Paraphrasing work or ideas without acknowledgement	Park (2004); Mozgovoy, Kakkonen and Cosma (2010)	Complex plagiarism
Collusion with others	Park (2004)	Complex plagiarism
Plagiarism of translated text	Mozgovoy, Kakkonen and Cosma (2010)	Complex plagiarism
Secondary source plagiarism (e.g. referring to articles cited in an article as if the cited articles were directly accessed)	Mozgovoy, Kakkonen and Cosma (2010)	Complex plagiarism
Technical tricks exploiting weaknesses of text-matching software	Mozgovoy, Kakkonen and Cosma (2010)	Complex plagiarism
Contract cheating	Park (2004); Bennett, Behrendt, and Boothby (2011); Mozgovoy, Kakkonen and Cosma (2010)	Complex plagiarism

Table 1: Summary of plagiarism activities

Viewing the table above, we see that what is considered as plagiarism by one author may not necessarily be considered as plagiarism by another. The multiple, and at times overlapping, definitions provided in the current literatures serve to demonstrate that there is currently a lack of agreement as to what is considered by the term ‘plagiarism’, and that readers should be cautious as to the specific definitions of this term being used by authors. Some authors have also broadened the concept of plagiarism to include activities and behaviours which do not relate directly to the submission of written pieces of work, and instead refer more broadly to areas of academic (mis)conduct. These cases are highlighted later in our discussion.

Because of this lack of consensus in the literature, and to aid future researchers, we provide our own definition of plagiarism which we will use for the remainder of this paper:

‘Misrepresenting the effort that has been carried out by the author of a written document’

This definition is broad enough to comprise the activities shown in Table 1, whilst excluding other activities which may be considered as broader ‘academic misconduct’ such as attempts to cheat in examinations.

3. Complex Plagiarism

Turnitin and other text matching software provide tools which identify the proportion of text that has been found in the submission which is similar to that available in the database of the software, but this in itself is not necessarily accurate measure of whether plagiarism has taken place (Razi, 2015), and authors have critiques Turnitin for not providing a perfect solution to plagiarism problems (Heckler, Forde, & Bryan, 2013; McKeever, 2006; Scheg, 2012). Turnitin is not always successful in the detection of plagiarism, and is often faced with Type 1 (false positive) and Type 2 errors (false negative). The software settings dealing with how small matches in similarity are dealt with will also influence the ability of the software to provide an accurate rating of plagiarism, as this is chosen by the administrator of each assignment. Although Turnitin is developing a new tool called ‘Authorship Investigate’ which they claim utilises linguistic analysis and Natural Language Processing (NLP) in order to assist faculty with complex plagiarism, the use of software to deal with this issue of complex plagiarism is an imperfect solution by itself. Therefore, Turnitin should be considered as a support tool for university faculty, rather than a plagiarism cure. The ultimate arbiter of whether or not plagiarism has occurred still needs to be made by a human judgment (Ledwith & Rísquez, 2008; Walker, 2010).

We now highlight the various sub-categories of the more challenging aspects of plagiarism which are not so easily dealt with through the use of text matching software such as Turnitin. These forms of plagiarism include the use of contract cheating services by students, and related business such as assignment polishers,

the technical manipulation of documents to deceive text matching software, and the back-translation of assignments written in a language other than English.

3.1 Contract cheating

Fee-based services that provide students with a paper to submit as their own are not a new concept, and have been discussed in the academic literature for many decades (cf: Stavisky, 1973; Hawley, 1984). However, information technology has increased the ability of students to access custom written papers from organizations and individuals from all over the world, and so an additional focus must now be paid to this topic. The difficulty of detecting the use of such services is shown in a number of more recent papers. Lines (2016) reports on a quasi-experiment, whereby the researcher contacts a 'paper mill' as a customer, pays for the papers, submits them to Turnitin, and receives a pass from the faculty who did not notice that it was a case of contract cheating. Another paper by Malesky Jr., Baley & Crow (2016) focuses on yet another form of contract cheating: paying a company to complete an entire online course in the name of the customer/student. This is an interesting case study because the researchers pay the company to carry out all elements of an online course on behalf of the student, including completing weekly quizzes, assignments and exams. As the course was created specifically for the research project, the instructors were aware that cheating would occur, yet still could not detect the contract cheating service, even with the use of Turnitin. The customer received an 'A' for the course. These quasi-experimental studies show how it is not necessarily possible to detect cases of contract cheating, even when experienced faculty are actively searching for it. They also demonstrate that if the number of students enrolled in some form of accredited online or distance learning programs rises, serious consideration must be given by these providers as to how this particular threat can be combatted.

3.2 Technical manipulations of text

Another difficult to detect form of plagiarism stems from the use of technical manipulations to the files submitted to text matching software. Kakkonen and Mozgovoy (2010), and Heather (2010) present studies where they attempt to deceive a variety of text matching software (including Turnitin) by submitting completely plagiarised texts with technical manipulations such as "*fake characters, fake spaces and scanned text*" (Kakkonen & Mozgovoy p.144) or the use of characters in a white font and the manipulation of the machine readable text without altering the appearance of the viewable text (Heather, 2010). Another form of technical manipulation is the replacement of certain letters with those of another language. For example, if students replace the English letter 'O' with the Russian 'О' in their submission, Turnitin cannot easily match the submitted text. This is due to how a Russian 'О' is coded differently, even though the difference will not be noticed on screen or on paper. The same is true for letters such as 'C' and 'P' (Kakkonen & Mozgovoy, 2010). In these two studies, although Turnitin found the manipulated texts suspicious and provided error messages, it could not identify any potential text matches in these manipulated files (Heather, 2010; Kakkonen & Mozgovoy, 2010).

Other similar examples may come from inserting text as an image into a document, or using characters such as quotation marks in a colour that matches the background, which may cause software to ignore certain sections of text.

3.3 Translated submissions

Another difficult to detect form of plagiarism is the use of translated submissions by students with multiple language capabilities (Jones & Sheridan, 2015; Meuschke & Gipp, 2013). Although there have been some advances in detecting this form of plagiarism through the use of specialist tools involving machine translation for specific languages (cf: Kent & Salim, 2010; Pataki, 2012), it is not currently possible for Turnitin or other commercially available software to detect a paper translated from a foreign language into the language of submission and then submitted as an original piece of work. Jones and Sherridan (2015) demonstrate how this technique can be used to take an original submission in English, translate it into another language, and then translate it back to English. Despite advances in translation technology, they show it is possible to change the structure and language of the original text enough to render the plagiarism undetectable.

3.4 Second-generation threats to academic integrity

The subtler, difficult to detect types of plagiarism detailed above are described by Malesky Jr., Baley and Crow (2016) as “second-generation threats” to academic integrity and are not currently addressed by the existing text matching software widely available in higher education (Meuschke & Gipp 2013). This is quite alarming for academic integrity as a whole (Aaron & Roche, 2014), as it highlights that even if faculty are actively engaged in plagiarism detection, this is not just a simple case of relying on text matching software, but instead requires a more involved approach from schools and individual faculty. Thus, although it may be considered easier to detect plagiarism via new software (McKeever, 2006), it is highly likely that many incidences of these subtler types of plagiarism have gone undetected in the past, and that this academic misconduct will continue until universities are able to implement more advanced detection methods. Continued upgrades to text matching software may assist in overcoming the technical manipulation of documents, and perhaps translated plagiarised documents, but are unlikely to effectively identify incidences of contract cheating. Therefore, alternative methods aimed at combatting these challenging threats to academic integrity, alongside a more holistic approach to reducing, detecting and punishing plagiarism are required. Such potential initiatives are discussed in the following section.

4. Factors affecting plagiarism

We now present a review of previous studies exploring why students commit plagiarism offences in submitted work.

In an empirical study with hospitality students, Goh (2015) identifies 6 key factors provided by students in order to explain cases of extreme plagiarism (defined as similarity scores provided by Turnitin of 75% or higher). These explanations are: “(a) poor time management, (b) fear of failure, (c) improve grade point average, (d) personal/family problems, (e) poor level of English, and (f) unsure about referencing and plagiarism policy” (p.80). They find that: “senior students plagiarise for self-actualization needs (to improve their grade point average), whereas Year 1 students tend to engage in extreme plagiarism because of their poor level of English and uncertainty about referencing and plagiarism policies” (p.80).

4.1 English language abilities

When English is the language of assessment, authors have also sought to explore how the English Language (ELA) ability of students may be a contributing factor to plagiarism offences. Where studies have examined a combination of Native English Speaking (NES) students and Non-Native English Speaking (NNES) students, English language ability has appeared as one reason behind plagiarism, but not the main reason (Goh, 2015; Walker, 2010). When the focus shifts to exploring NNES student populations, the lack of language ability is given as the primary reason (Bretag, 2007; Chen & Ku, 2007; Currie, 1998). Other studies exploring this relationship and finding similar results include: Li (2015), Marshall & Garry (2006), Pennycook (1996), Perkins, Gezgin and Roe (2018) and Walker & White (2014).

4.2 Personality traits

In their empirical study on how plagiarism is affected by self-perceptions of degrees of individualism-collectivism, Martin (2011) found that individualists (as defined as a personality dimension rather than a cultural dimension) plagiarise more often than collectivists. However, Payan, Reardon & McCorkle’s (2010) findings diverge from Martin’s (2011) findings and show that collectivists are more likely to cheat than individualists do. However, this result may be due to a difference in definitions, as Payan, Reardon & McCorkle’s (2010) study focuses more on the broader notion of academic dishonesty, as opposed to plagiarism of submitted assessments which we have focused on so far. For example, within their definition, they also include cheating in exams, which shows that their findings may not be directly comparable to Martin’s (2001) study. Methodological issues may also have confounded the results, as their research instruments shows that they measured university wide student perceptions of academic dishonesty (e.g. “This happens a lot at our school: Copying and pasting material from the Internet for papers or projects.” p. 283) rather than asking students about their own involvement in plagiarism.

4.3 Student experience and education on plagiarism

Although some proportion of academic misconduct can be attributed to new students' inexperience, Walker (2010) finds that final year students plagiarise more than any other group. Thus, plagiarism may not just be a matter of orientation to the new culture that students face when entering university.

In a similar study, Jones (2011) lists the following reasons ordered in terms of percentage of student responses:

“grades (want or need to make better grades); procrastination; too busy, not enough time to complete assignments or study for the test; lack of understanding or unable to comprehend information; no interest in the subject or assignment; workload/schedule (too many classes); everyone does it and gets away with it; no big deal (does not matter to professor); and peer pressure” (p.144).

In Batane's (2010) study, laziness was found to be the number one reason reported by students, while tolerant plagiarism policies appeared to act as an encouragement to students. Okoro (2011) also found that students sometimes plagiarise due to problems with time management.

In their research conducted through interviews with faculty, Walker & White (2014) noted the following factors given as reasons behind plagiarism: *“low levels of confidence, time pressures resulting from juggling paid employment, poor language skills, cultural and family pressures in addition to an excessive proliferation of online sources of information (...)”* (p.679). However, in their survey conducted on both students and faculty, Aaron & Roche (2014) found *“pressure to succeed, laziness, procrastination, [and] lack of respect for learning”* (p.186) as the main reasons for committing plagiarism. However, there is a clear methodological problem with asking university faculty to infer reasons behind why students commit plagiarism: they are not the ones actually carrying out the offences. Although these studies provide a valuable counterpoint to the student perspectives explored in other cases, they cannot be relied upon for anything other than this.

5. Anti-plagiarism interventions

The literature presents and discusses a number of interventions and proposals to counter plagiarism challenges. Aside from the use of text-matching software, there are two major categories of anti-plagiarism interventions discussed in the literature: those that are technology based, and those which are not. Firstly, we consider the technology-based examples.

5.1 Technology based anti-plagiarism initiatives

A number of authors advise promoting self-control approaches to plagiarism, rather than punitive methods. Belter and Du Pre (2009) report the positive impacts of the use of an online academic integrity module to reduce the occurrence of plagiarism in written assignments. The module used in Belter and Du Pre's (2009) class consists of four sections: *“(a) Plagiarism Defined and Strategies to Avoid It, (b) Cheating Defined and Strategies to Avoid It, (c) Penalties for Academic Misconduct, and (d) Academic Integrity Evaluation”* (p.259). They also point out those submissions with high levels of plagiarism are also of poor quality, which implies that plagiarism is employed as a strategy to compensate for poor academic performance. Curtis et al. (2013) also investigates the effect of the completion of an online academic integrity module on *“students' awareness of plagiarism and their perception of the seriousness of plagiarism”* (p.282) and reports positive results.

Likewise, Stetter (2013) reports the positive outcomes of a web-based module with a blended method on plagiarism involving paraphrasing exercises. Powell & Singh (2016) share the positive role of an intervention program against academic misconduct. O'Donnell (2011) developed an online quiz about how to avoid plagiarism consisting of 28 multiple choice or 'true or false' questions through Blackboard, which reduced the number of academic misconduct cases occurring in a module. It is recommended by Davis (2011) that an online anti-plagiarism assignment is carried out in an effort to reduce incidences of misconduct. Although no empirical results are reported, anecdotal evidence is given suggesting that these initiatives are successful in improving the writing skills of the students, and reducing incidences of misconduct.

Bradley (2015) considers the use of computer simulations and games as a preventative measure. They present and discuss ten free games and simulations employed by various universities against plagiarism: Goblin Threat, Cheats and Geeks, Frenetic Filing, Murky Misconduct, Decisions on Deadline, The Cite is Right, Plagiarism Match Game, Plagiarism Choose Wisely Game, Xtreme Plagiarism, and Planet in Peril: Plagiarism. Bradley (2015) also suggests promoting digital literacy skills in an attempt to reduce the knowledge gap shown to be a cause of improper citation or unintentional plagiarism.

Stowers & Hummel (2011) discuss software tools which may assist students in reducing the amount of simple plagiarism in their work by allowing them to check for potential problems in their own work before they submit their assignments. These tools may assist students and faculty alike by identifying to students where simple plagiarism may be identified in their work, either by accident, or by design, and allow them to adjust their work accordingly. This is a regular practice encouraged by faculty in an attempt to reduce the number of academic misconduct cases before submission occurs (Probett, 2011). In other words, the focus of anti-plagiarism initiatives shifts to one of prevention and education rather than punishment (Bradley, 2015; Graham-Mateson & Starr, 2013; Ledwith & Rísquez, 2008; McLafferty & Foust, 2004; Park, 2004). As this approach relies on the use of text matching software, it cannot effectively deal with the issue of complex plagiarism.

All of the above initiatives rely on the use of technology, whether these are online modules, quizzes, games or software. In certain instances, the use of these techniques may not be possible (e.g. in institutions where the investment in these tools is not possible), therefore, we must also consider examples of suitable techniques to deal with plagiarism that could be used by these institutions either by themselves or in conjunction with the methods described above.

5.2 Anti-plagiarism initiatives not reliant on technology

One way to discourage and potentially reduce plagiarism would be setting assignments that specifically refer to lecture content or are unique to each student, rather than generic essays (Davis, 2011; McLafferty & Foust, 2004; Probett, 2011). Another way would be to use alternative forms of assessment such as exams, oral presentation (Lines, 2016), internship experience, and field trip-based reports, as part of a holistic assessment methodology (Goh, 2015). Numerous authors have also suggested incorporating assessments that involve critical thinking and personal involvement with the course content, as it is easier to identify plagiarism in these types of assignments (Heckler, Forde, & Bryan, 2013; McLafferty & Foust, 2004; Probett, 2011;). Setting similar types of assignments every semester can encourage plagiarism (Batane, 2010; Walker & White, 2014), so changing the style of assignment each semester could reduce the risk of plagiarism between student cohorts. The inclusion of ‘ethics-related modules’ in a degree program has been shown as a factor which reduces incidences of plagiarism in an empirical study using advanced statistical methods (Guo, 2011).

Voelker, Love & Pentina (2012) identified knowledge gaps about plagiarism among business students at graduate and undergraduate levels, which could be effectively eliminated through face-to-face sessions, or by using student handbooks, module handbooks, and other related materials. These gaps may partially explain the distinction between intentional and unintentional plagiarism (Kaposi & Dell, 2012; Park, 2004). Chao, Wilhelm & Neureuther (2009) agree with this viewpoint and highlight improving students’ paraphrasing and citation skills as a key element to focus on. Using a past submission on Turnitin as an example of what the students are not supposed to do in terms of paraphrasing and citation made a significant difference compared to the control group in their research.

De Jager & Brown (2010) report that in the University of Cape Town, South Africa, students have to sign a statement about plagiarism on all the assignments they submit, while in Lancaster University, UK, students were required to sign such a form every year (Park, 2004). There are many other examples of the use of written statements to fight academic misconduct and plagiarism, although their use has not necessarily proven to be successful.

Unfortunately, while the interventions listed above may reduce the percentage of certain kinds of academic misconduct cases, most of them would not be able to decrease the risk of ‘second generation threats’ (Malesky Jr., Baley & Crow, 2016) to academic integrity such as contract cheating, technical manipulations and back-translation. In order to tackle these issues, more sophisticated interventions are required. As this review has highlighted, the case of contract cheating is a particularly difficult example of plagiarism to detect, even with the help of appropriate software. However, the ‘voice’ of a submission may reveal potential plagiarism due to literary incongruence; copied sections can differ from those written by the student (McLafferty & Foust, 2004), and even if this is not picked up by software, it could indicate a section drawn from the work of another, whether this is due to traditional plagiarism, collusion, contract cheating, or partial back-translation. A potential prevention and detection strategy for these types of plagiarism is collecting a writing sample from all students to check for any incongruence between student’s academic levels and writing styles in the sample and those in the submission (Davis, 2011; Jones & Sherridan, 2015; Kakkonen & Mozgovoy, 2010; McLafferty & Foust, 2004; Perkins, Gezgin & Roe, 2018). This could be carried out manually, or with the use of analysis software (Jones & Sherridan, 2015). Although this method may not be accurate enough to ascertain for certain whether or not contract cheating has occurred, it could be enough to warrant further investigation of the student; for example, requesting they attend a viva voce to defend their work. Maurer and Zaka (2007) highlight Cloze software, in which students must fill in the correct word from their edited submission, as an effective tool to help confirm complex misconduct suspicions.

Observing the development of student work before submission, either manually (Austin & Brown, 1999), or with the use of software (Jones & Sherridan, 2015) and providing formative feedback (Heckler, Forde, & Bryan, 2013) could be particularly useful tools as a preventative measure for plagiarism reduction. This method may also spot where students could be at risk of using back-translated or ghost-written submissions due to their lack of development of work before submission. This could be done with draft versions of the current assignment to check that students are actively engaged in creating their work. In terms of providing feedback, student submissions from previous semesters could be used to provide general hints and tips as to how assignments can be improved, and therefore reduce the knowledge gap that has been shown as a cause of plagiarism (Goh, 2015; Jones, 2011). This would allow students to utilize Turnitin as a support tool rather than a tool of frustration and panic (Chao, Wilhelm & Neureuther, 2009).

6. Discussion

Although the final responsibility concerning academic integrity and misconduct lies with students, the roles of the faculty are also essential for building an institutional culture of academic honesty (Walker & White, 2014). In fact, plagiarism is not only a student problem: Bretag & Carapiet (2007) find in their study using Turnitin that self-plagiarism is common among Australian researchers, and Honig & Bedi (2012) found that 25% of papers presented at an Academy of Management conference contained some amount of plagiarism. Let us keep in mind that by self-plagiarism we mean submitting same works or some parts of one’s past work as if they are new texts. For example, if a student submits the same paper for two different courses or if a researcher submits the same work for two different academic gatherings or journals and treats these as if they are two different works,² what we see are cases of self-plagiarism. However, compared to the extant literature on plagiarism, this topic is understudied (Halupa & Bolliger, 2013). Halupa and Bolliger (2013) demonstrate the lack of consistency of views and awareness of faculty on the concept of student self-plagiarism, making it clear that educating faculty in identifying self-plagiarism is an important step to reducing this. At the same time, attempting to tackle this issue in the wider academic community must also be carried out; an issue highlighted by Bretag (2009) and De Jager & Brown (2010). University faculty must

² Of course we have a grey area here: Sometimes researchers present their works at a conference and then develop the presentation to come up with a journal article. However, even in that case, the author is expected to acknowledge by a footnote the fact that this work is an updated and extended version of the original conference paper. This is not applicable for a student who is expected to submit two different papers for two different courses unless the modules relies on a continuous assessment approach.

act as role models for their own students if we expect to come to a clear understanding of what is acceptable academic practice in this area.

Dyrud (2011) considers the possibility that academic misconduct may also manifest itself as unethical behaviors after graduation. This means plagiarism is not only an institutional problem, but a social one as well. It is feared that students who have plagiarised will be rewarded through their graduation, and this will set a precedent for their future career. According to Okoro (2011), “*well-publicized, high-profile instances of political and corporate dishonesty*” (p.174) could be trivializing plagiarism in the eyes of the students. Even presidents and ministers are found to plagiarise (e.g. Deutsche Welle, 2012, Pidd, 2011, The Guardian, 2013). When more and more of these cases are portrayed in the media, it is likely that plagiarism may be recognized as a normal. Contrary to this situation, universities are assumed to hold a responsibility to ensure students graduate with ethical values (Batane, 2010) and if past students commit some widely publicized act of plagiarism, it is not just the individual who suffers but also the wider university. In these cases, academic integrity is no longer only an ephemeral ethical issue; it holds real life consequences and may involve considerable public relations efforts to retain the good reputation of a university (Aaron & Roche, 2014).

7. Conclusion

This work has highlighted that there is still considerable confusion in the literature regarding plagiarism, and has aimed to reduce some of this confusion by clarifying the usage of terms, identifying causal factors, and investigating some potential measures which can be used to reduce both simple and complex plagiarism. There is still considerable scope for future research and in many cases, room for improvement from individual institutions. Although this review has highlighted the problem of ‘complex plagiarism’, as the pace of technology continues to develop, it is likely that new threats to academic integrity will emerge. Therefore, more high-quality empirical research is needed to ensure that new strategies can be developed to ensure that both current and future challenges related to plagiarism can be overcome.

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Learner Autonomy in the Vietnamese EAP Context: A Literature Review

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Abstract: This literature review explores the current body of research pertaining to learner autonomy in the Vietnamese English for Academic Purposes (EAP) context, investigating themes and research methodologies, conclusions drawn, limitations and possible avenues for further study and new research directions in the future. We demonstrate that although there are many studies exploring the concept of learner autonomy, the definitions as to how this term is described is not clear throughout the literature, and this is a limitation in the current research field. In addition to this, there is significant evidence suggesting that Vietnamese EAP learners are keen to engage in autonomous learning practices and can demonstrate the self-regulation required to do so, which disagrees with traditional conceptions of Confucian heritage culture learning approaches.

Keywords: Autonomy, EAP, Vietnam, Higher Education

Introduction

Learner autonomy is far from a new subject, having been the focus of discussion in language learning since the 1980s (Littlewood, 1999). This is attributed to the perceived benefits of autonomous learning, which have included increased motivation (Lee, 1996; Tagaki, 2003), active participation in the classroom, (Dam, 1995; Natri, 2007), and a greater sense of self-responsibility for students' learning (Cunningham & Carlton, 2003; Mizuki, 2003; Stephenson & Kohyama, 2003).

However, crafting an adequate, all-encompassing definition of learner autonomy is not straightforward, due to a multiplicity of definitions and interpretations in practice. As an example, the concept of learner autonomy has been defined as 'authoring one's own world without being subject to the will of others' (Young, 1986) and 'the ability to self-regulate and self-determine' (Ryan 1991, p210), as well as the 'the ability to take charge of one's own learning' (Holec, 1981, p3). Others, such as Littlewood (1999) have taken the concept and subdivided it further, proposing multiple levels of autonomy, including proactive and reactive autonomy (1999, p75).

Similarly, authors such as Benson (1997) have argued for technical, psychological, and political dimensions to learner autonomy, which may encompass topics such as learning strategies in technical autonomy, the fostering of psychological autonomy, and learner empowerment in political autonomy (Palfreyman, 2003). Some have postulated that learner autonomy may be considered a human right (Benson, 2000), and that increasing learner autonomy is a more effective method of language learning in comparison to others (Naiman et al., 1978). There are then, a number of interpretations of autonomy, including numerous lenses through which the concept can be viewed. This contributes to the difficulty in analysing the current literature in the Vietnamese HE and EAP context, as although studies may claim to be examining autonomy, the lack of a clear, common definition may lead to different understandings of what autonomy means in practice. Although this has previously been

recognised by other researchers (Nguyen, Tangen and Beutel, 2013) there seems to be no current suggestion as to how this can be resolved in the Vietnamese and wider context. In the following review, autonomy is defined as a broad-spectrum 'ability to take charge of one's own learning' (Holec, 1981, p3).

In terms of the East Asian, or regional context of this research, it must be recognised that autonomy has been the subject of controversy in terms of cultural origin and appropriacy. Researchers have raised questions of ethnocentricity in the practice of encouraging learner autonomy, and it has been suggested that learner autonomy is often implemented by Western teachers and academics (Palfreyman, 2003). Littlewood (1999, p71) has argued that in language learning contexts in East Asia, learner autonomy may be presented as a Western concept which may not match traditional methods of education. However, empirical research has shown that while autonomous learning might be presented in this manner, it does not mean that students in the East are not keen to employ autonomous learning practices. On the contrary, it has been argued that Asian students 'want to explore knowledge themselves and find their own answers' (Littlewood, 1999, p34). In addition to this argument, Littlewood (1999) continues to identify five generalisations surrounding autonomous learning experiences of students in the East Asian context, stating that firstly, students in East Asia will have high levels of reactive autonomy. Secondly, when students are grouped together for learning tasks or projects, they will develop both reactive and proactive autonomy. Thirdly, that students will not have experienced contexts which require individual autonomy, and finally that the language classroom can be a good context in which to develop the capacity of autonomy (Littlewood, 1999, p88). Littlewood does however, accept that these are generalisations (Littlewood, 1999), and this research takes the view that broad-strokes characterisations of learners across multiple nations, cultures and contexts (as of that in 'East Asia') is of little practical use and is not empirically verifiable. Rather, research, and investigations of learner characteristics should focus on the specific context in which it takes place.

Despite this view, a number of commonly held views about East Asian students continue to be put forward in research material, while some authors have actively contested these conceptions of Asian students, labelling them 'cultural stereotypes' (Le Ha, 2004), hence, Vietnamese university learners have attracted more attention as research subjects in recent years, and the 'gap' between English language teaching at university in Vietnam, and the requirements of English in working contexts has recently been explored (Vo, Wyatt and McCullagh, 2016). One explanation for this 'gap' in the Vietnamese context is Confucian values, which are seen as dictating 'traditional beliefs of relational hierarchy in classrooms (Ho & Crookal 1995 cited in Nguyen, Tangen and Beutel, 2013, p211), and Vietnamese EAP learners have been described as 'passive, obedient, and reproductive' (Tuyet, 2013, p75), and familiar with 'rote learning' (Dang, 2010, p3). Similarly Pham (2000, cited in Trinh, 2005, p18), states that 'it is generally believed that it is almost impossible to change the perceived students' passiveness in learning, while language classrooms in Vietnam remain teacher-centered, focusing on grammatical items.' Interestingly, these attitudes recur in other studies in separate geographical regions.

There seems to be a divide in the literature, and in the current research regarding learner autonomy in general, and more specifically, learner autonomy in Vietnam. For this reason, it is an opportune time to comprehensively analyse, investigate, and review the current research, in order to not only draw conclusions about any consensus in the field, but to shape and guide future avenues of research in learner autonomy. Through a more thorough discussion of the important factors relating to the concept of learner autonomy, we aim to attempt to resolve some of the differences currently present in the literature.

Examining the Literature on Learner Autonomy for EAP Students in Vietnam

In reviewing the literature, several themes emerge. Firstly, there is strong evidence that Vietnamese students are able to engage in autonomous learning practices, yet are limited by prescriptive exams, traditional learning methods, and lack of guided support for autonomous learning. On the other hand,

there is also evidence that there is no widely agreed upon definition for learner autonomy in the research area, and this is a significant limitation which detracts from the conclusions drawn.

Of the number of studies investigating learner autonomy in Vietnam, one of the most influential is that of Littlewood (2000). This large-scale study investigated common preconceptions surrounding learner autonomy and learner attitudes, drawing comparisons between East Asian and European contexts. Littlewood's (2000) research encompassed 2,307 students across eight East Asian countries including Vietnam, and a comparison sample of 349 students across three European nations (2000, p39). Although Vietnam was not the sole focus of this research, the findings were strongly in opposition to the traditional view of the Vietnamese learner as 'passive, obedient and reproductive' (Dang, 2010, p3). Littlewood (2000, p33) found that the Vietnamese students surveyed showed the strongest disagreement in the sample with the statement 'the teacher's authority should not be questioned'. This stands in contrast to the traditional conception of education in Confucian heritage culture learning environments.

In addition, a second survey item, that of whether knowledge should be passed down from the teacher, revealed that Vietnamese students showed higher disagreement with this statement than any other nation, including European nations such as Finland, Spain, and Germany (Littlewood, 2000, p33). This contrasts strongly with common viewpoints of teachers' roles in the Vietnamese language classroom, such as Dang (2010, p3) who states that 'teachers are used to dictating the class', and Tuyet (2013, p3) who argues that students have a habit of 'learning by heart the knowledge the teacher provides in class'. Although the results of this research are interesting in that they provide evidence of an alternative view of student autonomy in the Vietnamese classroom, no similar replications of this study have been conducted in the eighteen years since its publication. The study also does not reveal whether the survey findings accurately mirror students' behaviors in class, or merely whether students are in favor of autonomous learning in principle, but as of yet do not, or feel unable to put such principles into practice. Littlewood concludes that on the whole 'Asian students want to explore knowledge themselves and find their own answers' (2000, p34) and this is the salient point of this research paper, although it is necessary to identify that significant changes in the Vietnamese education system have occurred during the two decades since this research was published, thereby presenting an opportunity for a follow-up study in this area.

Van Thai (2015)'s research may help to explain the disjunct between students' preferences and the learning options available to them. The author explored the role of the impact of assessment on learner autonomy in the teaching of English and American literature, through a survey of 241 English-major students at Vietnam National University, Ho Chi Minh City. Van Thai (2015, p146) states that 'until the early 2000s, most Vietnamese tertiary level students were not ready for learner autonomy'. Van Thai's (2015, p150) findings suggested that assessment methods which required rote learning, unsurprisingly perhaps, had a strong negative influence on students' autonomous learning practices. The findings also suggest that it is perhaps not Vietnamese students themselves who lack autonomy, but that other external factors may limit their ability to demonstrate it in a classroom setting, which could be related to traditional cultural learning values. This explanation could help bridge the gap shown in the findings of Littlewood (2000); that between students' perceptions of their own learner autonomy, and the limited demonstration of these practices in the classroom.

Further confirmation that Vietnamese EAP students are keen and able to learn autonomously comes from Nguyen (2008), who surveyed 177 English major students at a single unnamed university in Vietnam. This study, aside from investigating learners' beliefs and practices in self-regulation and self-initiation, aimed to correlate English proficiency measures with measures of autonomy, through the analysis of skills based on end-of-semester scoring in formalised assessments (Nguyen, 2008, p74). This study is one of the few which specifically details an underlying definition of learner autonomy in the project, defining this as self-initiation and self-regulation by the student. These findings contribute to confirming the generally held view that Vietnamese EAP students in tertiary education are keen to embrace autonomous learning practices (Littlewood 2000; Van 2011; Van Thai 2015). The research demonstrated that Vietnamese learners of English who participated in the study

were motivated in their learning practices and had the ability to regulate their own learning processes and found significant positive correlations between measures of learner autonomy and English proficiency. One key point of interest for further research may be Nguyen's (2008, p74) assertion that learning strategies demonstrated by participants are suggestive not of passiveness, but of covert, or unobservable learning behaviors rather than overt learning behaviors. Further research should aim to investigate whether covert learning practices, which are autonomous in nature, are being misinterpreted in the classroom for quietness, passivity, and low motivation.

Van (2011) explored the perceptions of responsibilities and abilities relating to learner autonomy practices among non-English major students from 24 different universities across Vietnam studying in both undergraduate and graduate education programs (n=641). The research explored learners' perceptions of their responsibilities for self-study and any other self-motivated learning activities which students engaged in both inside and outside the classroom (Van, 2011, p44). Van's findings suggested that there is a divide between undergraduate and graduate study modes in the Vietnamese higher education context, and that undergraduates demonstrated a higher sense of belief in the proposition that they should take responsibility for their own study, and a lower belief in this among graduate students (Van, 2011, p46). In addition, the results of this research suggested that students of both undergraduate and graduate programmes across Vietnam perceive themselves as able to carry out autonomous and cooperative learning activities, and wished to play an active role in deciding course aims, content, and assessment (Van, 2011, p46). A specific strength of this study is the diversity of respondents, both in terms of geographic spread and level of study which may be indicative of a more representative set of results. Despite the students' self-perception of their own ability and willingness to incorporate autonomous learning practices, the majority of respondents seemed unwilling to 'take charge' of actually implementing these practices themselves without support. This suggests once again that it is factors external to Vietnamese students' control that restricts their autonomous learning practices, and for that reason, these must be 'built-in' to lesson and curricula design if these practices are to be more easily demonstrated.

Humphreys and Wyatt (2013) investigated an intervention designed to increase learner autonomy through an action-research methodology at a private university in Ho Chi Minh City, Vietnam. They combined Likert-scale questionnaires with focus group meetings and discussions, including eighty-three Vietnamese EAP learners from a range of five different levels of language proficiency, and found that students generally had 'low levels of awareness and involvement in autonomy in practice' (Humphreys and Wyatt, 2013, p57). Specifically, the authors state that most of the participants did not fully understand the concept, and in excess of 80% felt unconfident in planning their own learning, with a further 75% feeling unconfident in identifying areas of strength and weakness within their own English language ability (Humphreys and Wyatt, 2013, p57). Furthermore, of the students surveyed, the majority did not meet the expected hours of self-study, at 20 hours per week (Humphreys and Wyatt, 2013, p57), although the reasons for this were not clearly expressed. Interestingly, the researchers also found that students felt that teachers should be more proactive in supporting autonomous learning practices, assisting with goal-setting and suggesting ideas for resources and self-study, suggesting a form of 'guided autonomy' (Humphreys and Wyatt, 2013, p58). This concept of teacher-supported implementation of autonomous learning practices is highlighted as a potential method for increasing autonomy in several existing studies (Dang 2010; Nga 2012; Ngoc and Ishawita, 2012).

The authors claim that learners entering university after completing secondary school in Vietnam may have acquired 'rigidly held personal constructs as to what language learning involves' (Humphreys and Wyatt, 2013, p53), and that, in contrast to the work of Littlewood (2000), Van Thai (2015), Nguyen (2008), and Van (2011), that these may centre on dependence on the teacher or instructor (Humphreys and Wyatt, 2013, p53). The authors postulate that as a result, making the transition to tertiary education, which may require more autonomous learning practices, can be difficult (Humphreys and Wyatt, 2013, p53).

This study also identified the usefulness of an intervention aimed at promoting autonomous learning practice, in this case an independent learning journal or ILJ. Teachers questioned on the use of the ILJ responded that students appeared to show a high level of autonomous learning (Humphreys and Wyatt, 2013, p60). That said, this study was short in duration at approximately five weeks, and was limited in the lack of student input during the evaluation process. The researchers, drawing on these limitations, suggest that future research in the field follow a longitudinal structure in analysing the efficacy of autonomy-promoting interventions for students. In other geographical contexts, authors such as Aliweh (2011) have studied the use of electronic portfolio interventions in supporting students' writing competence and autonomy. While no significant effects on learner autonomy were found, Aliweh puts forward a strong case for further study of electronic portfolios in increasing learner autonomy (2011, p20), and this may be a potential method of extending the research of Humphreys and Wyatt (2013). Similarly, other authors have examined the use of interventions for improving learner autonomy online, for example, who in an Asian further education learning context designed a learning unit employing online discussion forums, seeing them as 'an opportunity for teachers to raise thought-provoking questions while giving ownership to students in order to foster learner autonomy' (Eckhaus, 2018, p280). This reconfirms the potential of this area of research in future studies of autonomy in the East Asian context.

Nguyen and Gu (2013) investigated the effects of strategy-based instruction, or SBI, on the promotion of Learner Autonomy, which the authors conceptualised as with Nguyen (2008), as learner self-initiation and learner self-regulation. The authors conducted an intervention study with an experimental group of 37 students and two control groups comprising 54 students, all of whom were third year English-major students at a single university in Vietnam (Nguyen and Gu, 2013, p9). Those in the experimental group received an eight-week metacognition training package, which was incorporated into the students' academic writing program. The results of the study demonstrated that participants in the experimental group were able to improve their ability to plan, monitor, and evaluate writing tasks in comparison to the control group. This suggests, in contrast to the views of the participants in other research (Ngoc and Ishawita, 2012) that learner autonomy can be improved among students through the use of learner training (Nguyen and Gu, 2013, p9). Other smaller scale projects have investigated the use of peer-teaching and student selection of learning content (Nga, 2012), and project-based learning (Nguyen, 2017). Nguyen (2017), through the use of a questionnaire analysed with a t-test, found that students' sense of autonomy increased after two semesters of additional autonomous project work was integrated into their curriculum.

Several studies in the Vietnamese context have aimed not just to evaluate students' beliefs, attitudes, and actions towards autonomous learning practices, but have also incorporated teachers' views. Ngoc and Ishawita (2012) conducted a comparative study exploring the attitudes held towards learner autonomy by both teachers and students; collecting data through a questionnaire delivered to 37 Vietnamese teachers of English and 88 pre-intermediate learners of English. One of the authors' key findings is that much like the ideas of guided autonomy (Humphreys and Wyatt, 2013, p58) teachers in the study felt that it was more important to facilitate learner autonomy and train learners to take responsibility for their own learning, rather than leave it up to the learners entirely. In contrast to the common idea that Vietnamese teachers are expected by students to be the expert 'knowers' of the language (Ngoc and Ishawita, 2012, p38), the majority of learners who took part in the research offered similar views to the teachers, with responses stating that an important role for the teacher was to help assist learners in developing autonomy and responsibility (Ngoc and Ishawita, 2012, p38). The authors highlight that the results of the study are somewhat paradoxical. From one perspective, learners' responses seemed to highly advocate learner autonomy practices, while simultaneously implying that in order to be able to take charge of their learning, the students first required input from the teacher, including orientation, guidance, and instruction, in order to achieve the goal of autonomous learning practices (Ngoc and Ishawita, 2012, p38). This result is similar that found in the studies explored above, in that Vietnamese learners are keen to engage in autonomous learning practices but prefer to receive guidance and orientation from teachers on how to do this effectively. This suggests that it is perhaps a matter of confidence which restricts autonomous learning as Ngoc

and Ishawita's (2012) research demonstrates that 'learner participants' were open to what they deem 'Western ideologies' of learner autonomy and learner-centredness.

Nga (2012) investigated Vietnamese teachers' understanding of the concept of learner autonomy, and how these beliefs were applied to teaching practice. Through the collection of both survey data and a range of qualitative methods (interviews, stimulated recall, interviews, and video observations), the researcher found that as a general trend, teachers lacked understanding of the concept of learner autonomy, which matches the findings from other teacher-centred studies (Nguyen, Tangen, and Beutel, 2014). As a result, the researcher concluded that the teachers displayed little evidence of autonomous learning practices in the classroom (Nga, 2012, p11).

Nga's (2012) research also identified a key concern in researching learner autonomy in the Vietnamese context, namely, that there are issues in translating the concept of learner autonomy into Vietnamese, as the standard translation is 'too general, as it doesn't identify the dimensions of learner autonomy that are being discussed' (Nga, 2012, p149), which leads to confusion. In one case, research participants in Nga's study (2012, p153) saw self-study as synonymous with autonomy. Issues with confusion are highlighted by several researchers (Benson, 1997; Nguyen Tangen and Beutel, 2014), and this suggests that developing a single, shared definition for research projects should be a future avenue of study. Finally, Nga expresses the view of other researchers (Dang, 2010; Nguyen, 2010; Oliver, 2004; Phan, 2006), that teachers in Vietnam are seen by students as 'controllers' and 'knowledge providers', and this, among other factors, means that learners do not tend to take responsibility for their own learning (Nga, 2012, p153) as they believe it is the role of the teacher to guide their study. This, may be seen as an explanation of the results showing an existence of teacher-supported or teacher-guided autonomy practices, in the studies of Humphreys and Wyatt (2013) and Ngoc and Ishawita (2012); students will not engage in autonomous learning practices until their teacher initiates this. In summary, Nga's (2012) research suggests that learner autonomy is not well understood among Vietnamese teachers, and possible explanations include the complexity of the term itself, and the traditional relationship between students and teachers, as well as the learning context which limits teachers' opportunities for innovation in the classroom (Nga, 2012, p178). The limitations of this research include the limited scope of the research and that it cannot be said to be consistent with all universities in Vietnam (Nga, 2012, p178).

One of the few studies to focus solely on the point of view of the teacher, rather than students or both students and teachers, comes from Nguyen, Tangen and Beutel (2014) They conducted structured interviews with four university lecturers of unspecified subjects at a university in Hanoi, Vietnam, with the intention of exploring the understanding of learner autonomy in Vietnamese Higher Education. The authors argue that much like in other countries such as China, Hong Kong, Taiwan, Japan, Malaysia and Korea, the influence of Confucianism, contributes to a particular image teachers hold of their students as a 'passive, reproductive, and surface learner', and that this leads to 'traditional beliefs of relational hierarchy in classrooms' (Ho & Crookall cited in Nguyen, Tangen and Beutel, 2014, p211). This could explain the unwillingness shown by Vietnamese students to engage in autonomous learning practices without guidance from their teacher, as the cultural expectations of the learning environment held by both teacher and student may restrict autonomous learning practices from being demonstrated independently by the student. The research conducted here focuses more on the lecturers' perceptions of the learner, rather than the beliefs of the learner themselves and therefore enables an alternative perspective of the concept of learner autonomy to be gained.

Nguyen, Tangen, and Beutel's (2014) study is also affected by the complexities of translation equivalence in the concept of learner autonomy. The authors state that in the Vietnamese context, learner autonomy is often translated into a range of different definitions, thus creating confusion and uncertainty. Ultimately, the authors suggest that a clearer definition of learner autonomy be adopted, if not in a global context, then at least for the context of Vietnam, as failure to do so leads to cultural impact affecting the interpretation of the concept of learner autonomy (Nguyen, Tangen, and Beutel, 2014, p205).

The lack of clarity regarding the concept of learner autonomy is therefore a pivotal point of this

research, as the authors state that one reason for lecturers not fostering autonomous approaches to learning in class was the result of a lack of understanding of the concept (Nguyen, Tangen, and Beutel, 2014, p209). However, the authors claim that this is not the largest factor restricting learner autonomy in Vietnam, and state that from their research, the largest factor hindering this is that of centralised final-semester examinations maintaining the status-quo of traditional teaching practices in the classroom,(Nguyen, Tangen, and Beutel, 2014, p209). This is coherent with the author's assertion that bureaucratic constraints render lecturers and students unable to make changes to the learning environment (which could incorporate autonomous learning practices), even if they wished to (Phan, 2006, cited in Nguyen, Tangen and Beutel, 2014, p205). This research highlights the previously discussed issues which are important to consider in further autonomy studies in Vietnam, namely that of clearly defining the understanding of the concept itself the translation of this into Vietnamese. . That said, this research is limited to a small sample size of four lecturers, and thus cannot be said to be representative of attitudes held throughout Vietnamese HE. As an example, one participant was said to believe that learner autonomy was innate in some students and could not be taught (Nguyen, Tangen and Beutel, 2014, p212), yet it seems unlikely that this opinion is shared throughout the HE context. For this reason, care must be exercised when generalising about views on learner autonomy from such a small cohort of participants.

Conclusion

By reviewing the work carried out in the field of learner autonomy in higher education EAP in Vietnam, this review has identified several areas of consensus in the literature. A common issue identified by current researchers in the field (Nga, 2012; Nguyen, Tangen, and Beutel, 2012) is that a single definition of learner autonomy is not shared between research projects, and that this can lead to confusion, especially when researching student or teacher beliefs and practices. This issue is further compounded when the term 'learner autonomy' is required to be translated into Vietnamese, as the literal translation does not adequately cover the complex set of practices and behaviours that the term implies in English. For this reason, further research is needed to create a shared, adequate and satisfactory translation which refers to a generally agreed on definition of learner autonomy. This will lead to greater consistency of results among researchers.

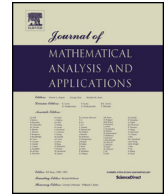
The second point of agreement is that despite traditional conceptions of the East Asian learner as being passive learners, multiple studies have demonstrated that on the contrary, Vietnamese learners are keen to adopt autonomous learning practices (Littlewood, 2000; Van 2011; Van Thai 2015). Subsequently, we believe it is now clear that Vietnamese students are not un-autonomous by nature (Trinh, 2005, p25), but are restricted in their ability to engage in autonomous learning practices by the educational culture prevalent in Vietnam (Nguyen, Tangen, and Beutel, 2014) . Several authors have achieved positive results through the use of autonomy-stimulating practices (Humphreys and Littlewood, 2013; Nga 2012; Trinh 2005), and this is an important area for further exploration. Multiple authors advocate for the implementation of autonomous learning techniques by teachers, to offer a 'guided autonomy' practice (Humphreys and Wyatt 2013; Ngoc and Ishawita, 2012) which may further stimulate learner autonomy amongst Vietnamese EAP learners.

Currently, most literature revolves around student and teacher self-assessed surveys, while there are comparatively few studies actively involving change-making practices and implementing autonomy-promoting tools for learners, even though preliminary studies have demonstrated the effectiveness of such tools (Humphreys and Wyatt, 2013). Other studies of this nature should be encouraged, especially those which aim to explore the effectiveness of autonomy-promoting methods and learning resources, or the 'profitability' of autonomy-enhancing interventions (Trinh, 2005, p179) in order to understand the differences between what Vietnamese students think about learner autonomy, compared to how they actually put this into practice. Regardless of the specific methodology used, we agree with the statements made by Dang (2010) in there being a general lack of research examining students' perceptions of learner autonomy within Vietnam and believe that further research in this area, evaluating attitudes and behaviours in regards to autonomous learning practices, may reveal deeper insights into this topic.

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Periodic n dimensional first order coupled systems and periodic schizophrenia phenomena



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ABSTRACT

This paper introduces some existence and location results for periodic solutions of first-order coupled nonlinear systems of n ordinary differential equations. The arguments used are based on the Arzela-Ascoli theorem and Schauder's fixed point theorem, combined with the upper and lower solution technique. To illustrate the applicability of these problems, an application to a mathematical model of the thyroid-pituitary interaction and their homeostatic mechanism is included, for specific cases of periodic events, such as relapsing catatonia.

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1. Introduction

This paper is concerned with the study of a fully nonlinear coupled system of n differential equations

$$u'_i(t) = f_i(t, u_1(t), \dots, u_n(t)), \tag{1}$$

with $i = 1, 2, \dots, n$, $t \in [a, b]$ and $f_i : [a, b] \times \mathbb{R}^n \rightarrow \mathbb{R}$ are L^1 -Carathéodory functions, subject to the nonlinear functional boundary conditions

$$u_i(a) = u_i(b), i = 1, 2, \dots, n. \tag{2}$$

Coupled or uncoupled systems of first order differential equations can model various phenomena, which makes the motivation for its study significant. Among the applications we can highlight some as in ecology

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[29], neural bursting [19], several epidemic models [6,8,17,18,20], energy management [27], models of the radioactive decay series, predator-prey model, electrical network [30], among others.

Throughout the years many authors have explored the existence of solution for first-order systems of differential equations, combined with different types of boundary conditions. One can refer to [1,2,4,25,29], just to name a few.

In terms of literature involving periodic first-order differential equations, several approaches have been proposed. For example: in [21], Kong addresses criteria for the existence of positive T -periodic solutions of the first order functional differential equation system, as well as the study of solutions to the eigenvalue problem associated with the same problem. In this context, the author, essentially used the fixed point index theory and the smallest positive values of characteristics of some linear operators related to the systems; in [22], Lakshmikantham and Leela study the existence and multiplicity of periodic solutions of first-order nonlinear differential equations, combining the method of upper and lower solutions, the Lyapunov-Schmidt method and the monotone iterative technique; in [23], Li et al., using Schaeffer's theorem, prove new existence theorems for a nonlinear periodic boundary value problem of first-order differential equations with impulses; in [26], Walther investigates the existence of a periodic solution for a differential equation with state-dependent delay employing the ejective fixed point principle on a compact convex set of Lipschitz continuous functions; in [15], the authors consider the existence of T -periodic and multiple T -periodic solutions of some first order functional differential equations by assuming the existence of a pair of lower and upper solutions combined with Corollary 2.2.

On the other hand, we highlight some works about first-order coupled systems:

In [3], Asif et al. study the nonlinear coupled system

$$\begin{aligned}u'(t) &= f(t, v(t)), \quad t \in [0, 1] \\v'(t) &= g(t, u(t)), \quad t \in [0, 1],\end{aligned}$$

subject to the nonlinear boundary conditions

$$h(u(0), v(0), u(1), v(1)) = (0, 0),$$

where the nonlinear functions $f, g : [0, 1] \times \mathbb{R} \rightarrow \mathbb{R}$ and $h : \mathbb{R}^4 \rightarrow \mathbb{R}^2$ are continuous. The authors investigated the existence of at least one solution applying coupled lower and upper solution approach.

In [16], Gupta approaches the existence of periodic solutions for the coupled system of ordinary differential equations

$$\begin{aligned}-x' + f(t, x, y) &= p(t), \quad t \in [0, T] \\-y' + g(t, x, y) &= q(t), \quad t \in [0, T] \\x(0) = x(T); \quad y(0) &= y(T),\end{aligned}$$

with $f, g : [0, T] \times \mathbb{R}^2 \rightarrow \mathbb{R}$ and $p, q : [0, T] \rightarrow \mathbb{R}$ given continuous functions such that $f(0, x, y) = f(T, x, y)$, $g(0, x, y) = g(T, x, y) \forall x, y \in \mathbb{R}$, $p(0) = p(T)$, $q(0) = q(T)$ and $\int_0^T p(t)dt = \int_0^T q(t)dt = 0$. Existence of a solution is obtained via the use of Liapunov-Schmidt method, Leray-Schauder degree theory and a sharpening of the methods of sum of ranges of operators.

Recently, in [10], Fialho and Minhós consider a fully nonlinear coupled system of three equations

$$u'_i(t) = f_i(t, u_1(t), u_2(t), u_3(t)) \quad t \in [a, b], \quad i = 1, 2, 3,$$

where $f_i : [a, b] \times \mathbb{R}^3 \rightarrow \mathbb{R}$ and $i = 1, 2, 3$ are L^1 -Carathéodory functions, subject to two types of boundary conditions: the nonlinear functional case

$$\begin{aligned} u_1(a) &= L_1(u_1, u_2, u_3, u_1(b), u_2(b), u_3(b), u_2(a), u_3(a)) \quad t \in [a, b] \\ u_2(a) &= L_2(u_1, u_2, u_3, u_1(b), u_2(b), u_3(b), u_1(a), u_3(a)) \quad t \in [a, b] \\ u_3(a) &= L_3(u_1, u_2, u_3, u_1(b), u_2(b), u_3(b), u_2(a), u_2(a)) \quad t \in [a, b], \end{aligned}$$

with $L_i : (C[a, b])^3 \times \mathbb{R}^5 \rightarrow \mathbb{R}$, $i = 1, 2, 3$, are continuous functions verifying some properties that do not allow the periodic frame, which is considered too, but with the periodic boundary conditions

$$u_1(a) = u_1(b), \quad u_2(a) = u_2(b), \quad u_3(a) = u_3(b).$$

The technique used is based on the Arzèla-Ascoli theorem, Schauder’s fixed point theorem and the upper and lower solutions method, along with some adequate local monotone assumptions on the nonlinearities.

Motivated by the works above, we consider the study of existence and localization result of problem (1)-(2). In this paper, we emphasize the fact that the nonlinearities f_i specified in (1) generalize most of the ones presented in the above mentioned papers. The method applied relies on the same type of topological tools, but extends the range of applicability, as it is shown in the last section. Moreover, it obtained an existence and localization result, giving estimations on the unknown functions. These methods are well documented and can be seen, for instance, in [5,7,11–14]. In this specific case, the nonlinearities fulfill some monotone conditions for well ordered lower and upper solutions. However the monotone properties may change if lower and upper solution definition is adequate modified. To single out this localization feature and the ability to interconnect the monotone conditions with the definition of upper and lower solution, an application of (1)-(2) to a mathematical model describing the thyroid-pituitary homeostatic mechanism, as it is shown in [9] and later developed in [24].

The outline of the present paper is as follows: Section 2 contains definitions and assumptions of this paper. In Section 3, we present an existence and localization result. Lastly, an application to a real phenomenon is shown, a model to study the thyroid-pituitary homeostatic mechanism.

2. Definitions and assumptions

Along this work we consider the space of continuous functions in $[a, b]$, $(C[a, b])$, equipped with the norm $\|u\| = \max \{\|u_i\|, i = 1, \dots, n\}$ where $\|u_i\| = \max_{t \in [a, b]} |u_i(t)|$.

As it is well known, in this way, $C[a, b]$ is a Banach space.

The admissible functions for our work will be the L^1 –Carathéodory functions, according the following definition:

Definition 1. The functions $f_i : [a, b] \times \mathbb{R}^n \rightarrow \mathbb{R}$, $i = 1, \dots, n$, are L^1 –Carathéodory if they verify

- (i) for each $(y_1, \dots, y_n) \in \mathbb{R}^n$, $t \mapsto f_i(t, y_1, \dots, y_n)$ are measurable on $[a, b]$, for $i = 1, \dots, n$;
- (ii) for almost every $t \in [a, b]$, $(y_1, \dots, y_n) \mapsto f_i(t, y_1, \dots, y_n)$ is continuous in \mathbb{R}^n , for $i = 1, \dots, n$;
- (iii) for each $L > 0$, there exists a positive function $\psi_{iL} \in L^1[a, b]$, $i = 1, \dots, n$, such that, for $\max \{\|y_i\|, i = 1, \dots, n\} < L$,

$$|f_i(t, y_1(t), \dots, y_n(t))| \leq \psi_{iL}(t), \quad a.e. \ t \in [a, b], \quad i = 1, \dots, n.$$

The method to be used will rely on the following definitions of lower and upper solutions.

Definition 2. Consider the C^1 -functions $\alpha_i, \beta_i : [a, b] \rightarrow \mathbb{R}$, $i = 1, \dots, n$. The functions $(\alpha_1, \dots, \alpha_n)$ are lower solutions of the periodic problem (1), (2) if

$$\alpha'_i(t) \leq f_i(t, \alpha_1(t), \dots, \alpha_n(t)), \quad \text{for } i = 1, \dots, n, \tag{3}$$

and

$$\alpha_i(a) \leq \alpha_i(b), \quad i = 1, \dots, n. \quad (4)$$

The functions $(\beta_1, \dots, \beta_n)$ are upper solutions of the periodic problem (1)-(2) if the reversed inequalities remain true.

Schauder's fixed point theorem will be an important tool to guarantee the existence of fixed points for our operator. The version considered in this paper is then

Theorem 3. ([28]) *Let Y be a nonempty, closed, bounded and convex subset of a Banach space X , and suppose that $P : Y \rightarrow Y$ is a compact operator. Then P has at least one fixed point in Y .*

3. Existence and localization result

This method allows to obtain an existence and localization result for periodic nontrivial solutions in presence of well ordered lower and upper solutions:

Theorem 4. *Let $(\alpha_1, \dots, \alpha_n)$ and $(\beta_1, \dots, \beta_n)$ be lower and upper solutions of (1), (2), respectively, such that $\alpha_i(t) \leq \beta_i(t)$, $\forall t \in [a, b]$ and for $i = 1, \dots, n$.*

Assume that, for $i = 1, \dots, n$, f_i are L^1 -Carathéodory functions on the set

$$\{(t, u_i) \in [a, b] \times \mathbb{R}^n : \alpha_i(t) \leq u_i \leq \beta_i(t), i = 1, \dots, n\},$$

not identically null, with

$$f_i(t, x_1, \dots, x_n) \text{ nondecreasing on } x_j, \quad (5)$$

for $t \in [a, b]$, $\alpha_j(t) \leq x_j \leq \beta_j(t)$, $j \neq i$, $i, j = 1, \dots, n$.

Then problem (1), (2) has, at least, a solution $u = (u_1, \dots, u_n) \in (C[a, b])^n$ such that

$$\alpha_i(t) \leq u_i(t) \leq \beta_i(t), \quad i = 1, \dots, n, \text{ for all } t \in [a, b].$$

Proof. For $i = 1, \dots, n$, define the truncature functions δ_i given by

$$\delta_i(t, u_i) = \begin{cases} \alpha_i(t) & \text{if } u_i < \alpha_i(t) \\ u_i & \text{if } \alpha_i(t) \leq u_i \leq \beta_i(t) \\ \beta_i(t) & \text{if } u_i > \beta_i(t) \end{cases} \quad (6)$$

and consider the modified problem composed by the truncated and perturbed differential equations

$$u_i'(t) + u_i(t) = f_i(t, \delta_1(t, u_1), \dots, \delta_n(t, u_n)) + \delta_i(t, u_i), \quad (7)$$

for $i = 0, 1, \dots, n$, together with the boundary conditions (2).

Step 1: As the linear and homogeneous problem associated to (7), (2) has only the null solution, then we can write (7), (2) in the integral form

$$u_i(t) = \int_a^b G_i(t, s) [f_i(s, \delta_1(s, u_1(s)), \dots, \delta_n(s, u_n(s))) + \delta_i(s, u_i(s))] ds, \quad (8)$$

for $i = 0, 1, \dots, n$, where $G_i(t, s)$ are the Green functions corresponding to the problem

$$\begin{aligned} u_i'(t) + u_i(t) &= h_i(t) \\ u_i(a) &= u_i(b), \end{aligned}$$

where

$$h_i(t) = f_i(t, \delta_1(t, u_1), \dots, \delta_n(t, u_n)) + \delta_i(t, u_i),$$

for $i = 0, 1, \dots, n$.

Then the operator

$$T : (C[a, b])^n \rightarrow (C[a, b])^n$$

given by

$$T(u_1, \dots, u_n) = (T_1(u_1, \dots, u_n), \dots, T_n(u_1, \dots, u_n)),$$

with $T_i : (C[a, b])^n \rightarrow C[a, b]$, $i = 1, \dots, n$, defined as

$$T_i(u_1, \dots, u_n) = \int_a^b G_i(t, s) \begin{bmatrix} f_i(s, \delta_1(s, u_1(s)), \dots, \delta_n(s, u_n(s))) \\ + \delta_i(s, u_i(s)) \end{bmatrix} ds.$$

Consider now a convergent sequence (u_{1k}, \dots, u_{nk}) , convergent to (u_1, \dots, u_n) in $(C[a, b])^n$.

Then, for each $i = 1, \dots, n$,

$$\begin{aligned} & \|T_i(u_{1k}, \dots, u_{nk}) - T_i(u_1, \dots, u_n)\| \\ &= \left\| \int_a^b G_i(t, s) \begin{bmatrix} f_i(s, \delta_1(s, u_{1k}(s)), \dots, \delta_n(s, u_{nk}(s))) \\ + \delta_i(s, u_{ik}(s)) \end{bmatrix} ds \right. \\ & \quad \left. - \int_a^b G_i(t, s) \begin{bmatrix} f_i(s, \delta_1(s, u_1(s)), \dots, \delta_n(s, u_n(s))) \\ + \delta_i(s, u_i(s)) \end{bmatrix} ds \right\| \\ &\leq \int_a^b G_i(t, s) \left\| \begin{bmatrix} f_i(s, \delta_1(s, u_{1k}(s)), \dots, \delta_n(s, u_{nk}(s))) \\ - f_i(s, \delta_1(s, u_1(s)), \dots, \delta_n(s, u_n(s))) \end{bmatrix} \right\| ds \\ & \quad + \int_a^b G_i(t, s) \|\delta_i(s, u_{ik}(s)) - \delta_i(s, u_i(s))\| ds, \end{aligned}$$

which by Lebesgue Dominated convergence theorem and (6), converges to 0 as (u_{1k}, \dots, u_{nk}) , converges (u_1, \dots, u_n) . Therefore $T(u_1, \dots, u_n)$ is completely continuous in $(C[a, b])^n$.

Step 2: To apply Schauder's fixed point theorem, it remains to prove that $TD \subset D$, for some $D \subset (C[a, b])^n$ a bounded, closed and convex subset.

So, consider

$$D = \{(u_1, \dots, u_n) \in (C[a, b])^n : \|(u_1, \dots, u_n)\| \leq k\}$$

where

$$k := \max \left\{ \int_a^b G_i(t, s) \psi_{iL}(s) ds, i = 1, \dots, n \right\} < \infty.$$

Then, for $i = 1, \dots, n$

$$\begin{aligned} \|T(u_1, \dots, u_n)\| &= \max \{ \|T_1(u_1, \dots, u_n)\|, \dots, \|T_n(u_1, \dots, u_n)\| \} \\ &= \max_{i=1, \dots, n} \left\{ \max_{t \in [a, b]} \int_a^b G_i(t, s) \left[\begin{array}{c} f_i(s, \delta_1(s, u_1(s)), \dots, \delta_n(s, u_n(s))) \\ + \delta_i(s, u_i(s)) \end{array} \right] ds \right\} \\ &\leq \max \left\{ \int_a^b G_i(t, s) \psi_{iL}(s) ds, \quad i = 1, \dots, n \right\} = k. \end{aligned}$$

Therefore, by Schauder's fixed point theorem, T has a fixed point, that is, the problem (7), (2) has at least a solution $u_* := (u_{*1}, \dots, u_{*n}) \in (C[a, b])^n$.

Step 3: To prove that this function u_* is a solution of the initial problem (1), (2), it will be enough to show that

$$\alpha_i(t) \leq u_{*i}(t) \leq \beta_i(t), \quad i = 1, \dots, n, \quad \text{for all } t \in [a, b]. \quad (9)$$

So, suppose that there are $i_0 \in \{1, \dots, n\}$ and $t_1 \in [a, b]$ such that

$$u_{*i_0}(t_1) < \alpha_{i_0}(t_1).$$

Extend by periodicity the function $(u_{*i_0} - \alpha_{i_0})(t)$ and define

$$t_0 := \min \{ t \in [t_1 - b + a, t_1] : u_{*i_0}(s) < \alpha_{i_0}(s), \quad \forall s \in [t, t_1] \}.$$

For $t \in [t_0, t_1]$, we have

$$\begin{aligned} u'_{*i_0}(t) - \alpha'_{i_0}(t) &\geq f_{i_0}(t, \delta_1(t, u_{*1}), \dots, \alpha_{i_0}(t), \dots, \delta_n(t, u_{*n})) \\ &\quad - u_{*i_0}(t) + \alpha_{i_0}(t) - f_{i_0}(t, \alpha_1(t), \dots, \alpha_n(t)) \\ &\geq \alpha_{i_0}(t) - u_{*i_0}(t) > 0. \end{aligned}$$

Therefore the function $\alpha_{i_0}(t) - u_{*i_0}(t)$ is increasing on $[t_0, t_1]$, and

$$(\alpha_{i_0} - u_{*i_0})(t_1) > (\alpha_{i_0} - u_{*i_0})(t_0),$$

with $t_0 = t_1 - b + a$, which is a contradiction with the periodicity of the extension $(u_{*i_0} - \alpha_{i_0})(t)$.

So, $\alpha_i(t) \leq u_{*i}(t)$, for every $i = 1, \dots, n$, and for all $t \in [a, b]$.

The arguments for the remaining inequalities are similar, proving that (9) and, consequently, that problem (1), (2) has at least a solution. \square

4. Relation between nonlinearities monotony and lower and upper-solutions definition

The monotonies required by the nonlinearities on Theorem 4 could be an handicap for some applications. In this section we present a method to overcome this issue relating different monotone assumptions with adequate lower and upper solutions definition.

So let us consider the following assumption:

(A) There are $k, j_0 \in \{1, \dots, n\}$, with $k \neq j_0$, such that

$$f_k(t, x_1, \dots, x_{j_0}, \dots, x_n) \text{ is nonincreasing on } x_{j_0} \tag{10}$$

and nondecreasing on x_j , for $j \neq j_0$ and $j \neq k$,

for $t \in [a, b]$, $\alpha_j(t) \leq x_j \leq \beta_j(t)$, for $j = 1, \dots, n$ and $j \neq j_0, k$.

For the functions f_k verifying (10), lower and upper solutions must be modified:

Definition 5. Consider the C^1 -functions $\alpha_i, \beta_i : [a, b] \rightarrow \mathbb{R}$, $i = 1, \dots, n$. The functions $(\alpha_1, \dots, \alpha_n)$ are lower solutions of the periodic problem (1), (2) verifying (A), if

$$\begin{cases} \alpha'_i(t) \leq f_i(t, \alpha_1(t), \dots, \alpha_n(t)), \text{ for } i = 1, \dots, n, \\ \alpha'_k(t) \leq f_k(t, \alpha_1(t), \dots, \alpha_{j_0-1}(t), \beta_{j_0}(t), \alpha_{j_0+1}(t), \dots, \alpha_n(t)), \end{cases}$$

for some $k = 1, \dots, n, k \neq i, j_0$, and the boundary conditions (4).

The functions $(\beta_1, \dots, \beta_n)$ are upper solutions of the periodic problem (1)-(2) verifying (A), if the reversed inequalities hold.

The existence and localization theorem will be:

Theorem 6. Assume that, for $i = 1, \dots, n$, f_i are L^1 -Carathéodory functions, not identically null, satisfying condition (A).

Let $(\alpha_1, \dots, \alpha_n)$ and $(\beta_1, \dots, \beta_n)$ be lower and upper solutions of (1), (2), respectively, according Definition 5, such that $\alpha_i(t) \leq \beta_i(t)$, $\forall t \in [a, b]$.

Then problem (1), (2) has, at least, a solution $u = (u_1, \dots, u_n) \in (C[a, b])^n$ such that

$$\alpha_i(t) \leq u_i(t) \leq \beta_i(t), i = 1, \dots, n, \text{ for all } t \in [a, b].$$

Proof. The proof follows similar methods to the ones suggested in Theorem 4.

Let us see in detail the proof for function f_k which assumption (A) holds.

Arguing as in Step 3 of previous section, suppose that there is $t_2 \in [a, b]$ such that

$$u_{*k}(t_2) < \alpha_k(t_2).$$

Extend by periodicity the function $(u_{*k} - \alpha_k)(t)$, consider

$$t_0 := \min \{t \in [t_2 - b + a, t_2] : u_{*k}(s) < \alpha_k(s), \forall s \in [t, t_2]\}.$$

Assuming, without loss of generality, that $k < j_0$, then, on $[t_0, t_2]$, by Definition 5,

$$\begin{aligned} u'_{*k}(t) - \alpha'_k(t) &\geq f_k(t, \delta_1(t, u_{*1}), \dots, \alpha_k(t), \dots, \delta_{j_0}(t, u_{*j_0}), \dots, \delta_n(t, u_{*n})) \\ &\quad - u_{*k}(t) + \alpha_k(t) - f_k(t, \alpha_1(t), \dots, \alpha_{j_0-1}(t), \beta_{j_0}(t), \alpha_{j_0+1}(t), \dots, \alpha_n(t)) \\ &\geq f_k(t, \alpha_1(t), \dots, \alpha_k(t), \dots, \beta_{j_0}(t), \dots, \alpha_n(t)) \\ &\quad - u_{*k}(t) + \alpha_k(t) - f_k(t, \alpha_1(t), \dots, \alpha_{j_0-1}(t), \beta_{j_0}(t), \alpha_{j_0+1}(t), \dots, \alpha_n(t)) \\ &\geq \alpha_k(t) - u_{*k}(t) > 0. \end{aligned}$$

So, function $\alpha_k(t) - u_{*k}(t)$ is increasing on $[t_0, t_1]$, and the contradiction is similar to the proof of Step 3 of Theorem 4. \square

5. The thyroid-pituitary homeostatic mechanism and periodic catatonia

In [9], the authors develop a mathematical model of the thyroid-pituitary interaction. This model is based on the fact that the anterior lobe of the Pituitary gland produces the hormone thyrotropin, under the influence of a thyroid releasing factor (TRF), a releasing hormone secreted by the hypothalamus. The thyrotropin induces the thyroid gland to generate an enzyme, that will produce thyroxine, when activated. The thyroxine has a negative feedback effect on the release of thyrotropin by the pituitary gland. More details can be found in [24] where the mathematical model is introduced

$$\begin{aligned} \frac{dP}{dt} &= \begin{cases} c - h u(\theta) - g P, & \theta \leq \frac{c}{h} \\ -g P, & \theta > \frac{c}{h} \end{cases}, \\ \frac{dE}{dt} &= m f(P) - kE, \\ \frac{d\theta}{dt} &= v s(E) - b\theta \end{aligned} \quad (11)$$

where P , E and θ represent the concentrations of thyrotropin, activated enzyme and thyroxine respectively, g and k represent the loss constants of thyroxine, thyrotropin and activated enzyme, respectively, v , h , m are constants expressing the sensitivities of the glands to stimulation or inhibition, c is the rate of production of thyrotropin in the absence of thyroid inhibition. All constants are assumed to be positive, u, f, s are real-valued nonnegative continuous functions and f, j are nondecreasing.

As we are looking for periodic solutions, we consider the boundary conditions, for $t \in [0, T]$, $T > 0$,

$$\begin{aligned} P(0) &= P(T), \\ E(0) &= E(T), \\ \theta(0) &= \theta(T). \end{aligned} \quad (12)$$

This model can now be presented in the form of (1)-(2), where $u_1 = P$, $u_2 = E$ and $u_3 = \theta$.

If the function u is nonincreasing then Theorem 4 can be applied. On the contrary, if u is nondecreasing then Theorem 6 must be applied with $i = 2, 3$, $k = 1$, $j_0 = 3$, that is, $j_0 = \theta$.

Let us see two examples of this problem, for some values of the parameters and distinct methods.

In the first example we consider lower and upper solutions technique to guarantee the existence of a solution and to obtain localization strips for the three functions.

In this case, we take $T = 1$, $c = 4$, $h = 3$, $g = 1$, $b = 2$, $m = 1$, $k = 2$, $v = 0.1$, $u(w) = w^2$, $f(w) = w^3$, $s(w) = w^2$.

The system (11), now becomes

$$\begin{aligned} \frac{dP}{dt} &= \begin{cases} 4 - 3\theta^2 - P, & \theta \leq 0.1 \\ -P, & \theta > 0.1 \end{cases}, \\ \frac{dE}{dt} &= P^3 - 2E, \\ \frac{d\theta}{dt} &= 0.1E^2 - 2\theta \end{aligned} \quad (13)$$

the triples

$$(\alpha_1, \alpha_2, \alpha_3) = (P, E, \theta) = (t^2, 0, 0)$$

and

$$(\beta_1, \beta_2, \beta_3) = (P, E, \theta) = (1, 1, 1)$$

are coupled lower and upper solutions of problem (11), (12), respectively, according Definition 5.

The nonlinearities are f_1, f_2 and f_3 are L^1 -Carathéodory functions such that, for $\max \{\|P\|, \|E\|, \|\theta\|\} < k$,

$$|f_1(t, u_1, u_2, u_3)| \leq |4 - 3\theta^2 - P| \leq 8 := \psi_{1k}(t),$$

$$|f_2(t, u_1, u_2, u_3)| \leq |P^3 - 2E| \leq 3 := \psi_{2k}(t),$$

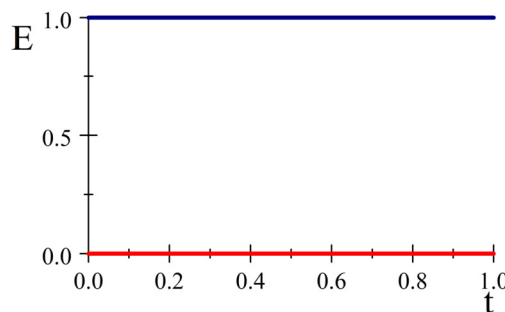
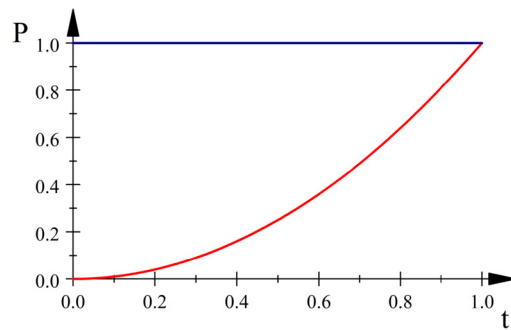
$$|f_3(t, u_1, u_2, u_3)| \leq |0.1E^2 - 2\theta| \leq 2.1 := \psi_{3k}(t),$$

and verify the monotone assumptions, therefore, by Theorem 6, the system (11)-(12) has at least one non trivial periodic positive solution $(P, E, \theta) \in (C[0, 1])^3$, that is, there are periodic catatonic schizophrenia phenomena, if the concentration of thyrotropin, P , holds in

$$t^2 \leq P(t) \leq 1, \forall t \in [0, 1], \tag{14}$$

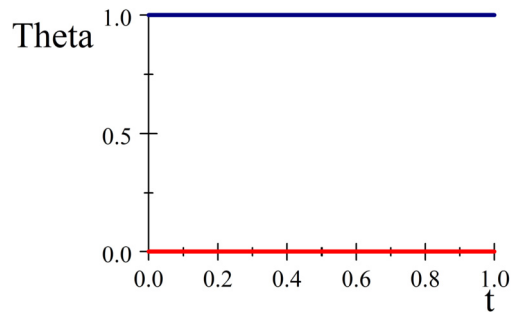
the concentration of thyroid gland enzyme, E , varies in

$$0 \leq E(t) \leq 1, \forall t \in [0, 1],$$



and the levels of thyroxine (θ) are between

$$0 \leq \theta(t) \leq 1, \forall t \in [0, 1].$$



The authors would like to emphasize that the solution highlighted is in fact a non-trivial periodic solution. For instance, from (14), the only constant solution would be $P = 1$. However, by replacing in (13) one would obtain the triple

$$(P, E, \theta) = (1, 1, \sqrt{20})$$

as the constant solution of (13)-(12), which is not covered in the combination of areas for upper and lower solution for P, E and θ .

6. Conclusion

In this paper the authors show the existence of solution for a periodic n dimensional first order coupled systems. The results presented, explore the technique of the upper and lower solutions. As a consequence and to illustrate the sophisticated connections between the definition and the monotone conditions assumed, two separate results are presented, exploring this feature. To highlight the high level of applicability of these results an application to relapsing catatonia is presented and the concentrations of one of the hormones are estimated, using the localization features of this technique.

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CORPORATE GOVERNANCE IN EMERGING ECONOMIES: AN INDIAN INSIGHT

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ABSTRACT

India is emerging as one of the fastest growing economy on the global platform. Being a mixed economy it has both the public and private sector functioning but corporate governance practices of both the public and private sector firms is a constant debatable. Private sector companies are highly efficient and productive, their prime focus is on profiteering whereas socioeconomic development tops the agenda of public sector companies.

Corporate governance practices of both the public and private limited companies in India is the focal point of our study. It comprises of 242 firms listed on Bombay Stock Exchange (BSE) for the period of 2015 to 2019. In order to check the validity and the level of significance of the hypothesis we applied various statistical tool and tests.

On the basis of the results of the statistical analysis it is found that the corporate governance practices of private sector and the public sector companies are not the same. It is further observed that the corporate governance practices of public sector firms are better as compare to the private sector.

Keywords: Corporate Governance, Firm Performance, Public Sector Company, Private Sector Company, Emerging Economies.

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1. INTRODUCTION

For many decades the public sector firms have being criticised for their lower productivity and bureaucracy similarly the morality of private sector is also constantly under scanner. On one hand the public sector is dedicated to societal causes on the other side the private sector's lust for money is clearly evident in the series of corporate scams around the world. Our investigation is aimed at finding the reality in the Indian context for which we have chosen both the public limited companies owned by the government and the private limited companies owned and controlled by the individuals, groups and corporate families. Corporate governance of Indian corporate sector is the kingpin of our study entire investigation revolves around it.

2. REVIEW OF LITERATURE

The corporate governance practices of both the public and private sector firms is a constant debatable topic among the researchers. Some find the private sector companies highly efficient and productive whereas others find public sector companies more responsible. Like (Hodges,Wright and Keasy, 1996) in their book related to the corporate governance in the public sector firms suggest that the public sector corporate governance distinguishes itself from its private sector counter part by the considerable diversity of the objectives and management structure. The study results further suggest the need to improve the performance as well as conformance issues in the public sector governance.

(Xu and Wang, 1999) in their study related to the public sector firms in China, attempts to investigate the relationship between ownership structure and firm performance of publicly listed companies in the China within the corporate governance framework. The study results revels that the firms performance (profitability) is either negatively correlated or uncorrelated with the fraction of state shares. It further shows that the labor productivity tends to decline as the proportion of the state share increases. It further reveals the inefficiency of the state ownership where as the empirical result further suggests that the large institutional shareholders are of great significance in any overly dispersed ownership structure.

Another study by (Mulgan,R.,2000) on comparing the accountability of public and private sectors on Australian firms shows that the private sector firms are more accountable as compare to the public sector firms in Australia. Similarly a study on private and public sector firms by (Chen, J., 2001) advocates that the private sector firms have better corporate governance system. On similar grounds Goel, P. (2018) advocated the corporate reforms and governance for the Indian companies.

In another study by (Borisova,G.,et. al., 2012) related to the government ownership and corporate governance in the Europe the government ownership is negatively associated with the corporate governance quality. And it further reveals that the government owned firms are poor in the corporate governance quality.

Study based on the Indian firms, by (Patibandla, M., 2006) shows that the government owned local financial institutions have lower incentives in monitoring the managers. The empirical results show that the increasing presence of private foreign institutional investors has a positive effect on the firm performance, whereas the firms depending on the government financial institutions for external finance show decline in the performance.

(Claessens , Djankov and Pohl, 1997) in their study suggest that the state owned firms are less efficient than the privately owned firms.(Megginson et al., 2004) also suggested the same.

There is very limited literature available which shows that the public sector firms have better corporate governance system better than private sector firms. Majority of the studies related to private sector and public sector firms reveals that the private sector firms have better corporate governance system. However there are some studies which advocate that the level of

transparency and disclosure is very high in public sector firms like (Eng and Mak, 2003) in their study found that the firms owned by the government i.e. Public sector firms are associated with the increased disclosure.

Yameen, M., Farhan, N. H., Tabash, M. I. (2019) in their study on Indian tourism industry found that the good governance practices of the privately owned companies was positively affecting their financial performance.

Bijalwan, J. G. ,Bijalwan, A , Amare, L (2019).. in their research on Indian firms suggested that the firms with good governance practices perform good and the public sector companies have better corporate governance implementation in India.

In order to come out of this dilemma we have classified the ownership structure of the firms into public sector and private sector and performed the empirical analysis to check the individual performance of both the sectors in the Indian context. This facilitated us the stronger grounds for comparison of corporate governance system between the private sector companies and public sector companies. On the basis of the review of literature and for backing our claim more scientifically we have developed a null hypotheses as mentioned below

H₀₁ - There is no significant difference between corporate governance of public and private sector companies.

3. METHODOLOGY

The study is based on 242 firms enlisted on stock exchange of Mumbai popularly known as BSE for a time period of 2015 to 2019. Random purposive sampling technique is used for taking the sample for the study. In order to derive the adequate sample size Cohen's formulae was utilised.

$$\text{Cohen's } d = (M_2 - M_1) / SD_{\text{pooled}}$$

Where,

$$SD_{\text{pooled}} = \sqrt{((SD_1^2 + SD_2^2) / 2)}$$

For facilitating a rational and objective comparison between the corporate governance practices of public and private companies two parameters were developed I.e. Corporate Governance Scores (CGS) and Financial Performance (FP) as explained below.

3.1. Corporate Governance Score (CGS)

After analysing all the corporate governance variables utilised for the study i.e. board composition (BCN), ownership structure (OS) , ownership concentration (OC), board and shareholders meetings (BSM), board remuneration (BR) , corporate governance policies and practices (CGP) and transparency and shareholders rights (TSH) over all corporate governance of the company was measured. On the basis of these scores, corporate governance of the firms was categorised into four categories viz. firms with very strong corporate governance, firms with strong corporate governance, firms with moderate corporate governance and the firms with weak corporate governance practices. Table no 1 shows the benchmark for categorisation of the corporate governance on the basis of scores earned by the individual companies on standard governance practices laid down in clause 49 of the Companies Act, 2013.

Table 1 Overall Corporate Governance Score (CGS)

Category	Scores
Very Strong Corporate Governance	80 and above
Strong Corporate governance	65-80
Moderate Corporate Governance	50-65
Weak Corporate Governance	50 below

On the basis of the GAMMA score criteria and review of the literature (Das, 2008), the benchmarking for corporate governance scores (CGS) were developed for corporate governance variables used in the study.

3.2. Financial Performance

Financial performance of the company was measured by using accounting based method. Different financial ratios such as Return on Assets (ROA), Return on Capital Employed (ROCE), Profit After Tax (PAT), Return on Equity (ROE), Inventory Rate (IR), Total Assets (TA), Financial Leverage (LEV) and Current Ratio (COR) were used for measuring the financial performance of both the public and private sector companies.

4. RESULTS AND DISCUSSION

In our attempt of gaining the understanding of the corporate governance system of India we further developed the null hypothesis. The null hypothesis states that, "There is no significant difference between corporate governance of public and private sector companies". In order to check the validity and the level of significance of the hypothesis we applied various statistical tool and tests. The tests reveal the multi facet relationship and degree of accoutumance between the variables under study. The study results are discussed as follows.

Table 2 Group Statistics

	Sector of Co	N	Mean	Std. Deviation	Std. Error Mean
Total Assets	Public Sector	26	3.9706	37296.6884	10344.2401
	Private Sector	216	1.1021	23115.6648	2224.3058
ROCE Percentage	Public Sector	26	19.4377	12.4556	3.4545
	Private Sector	216	17.6939	16.6953	1.6065
Financial Performance Category	Public Sector	26	1.54	0.660	0.183
	Private Sector	216	1.56	0.687	0.066
Financial Leverage	Public Sector	26	0.5100	0.6093	0.1689
	Private Sector	216	0.7084	0.7628	0.0734
COR	Public Sector	26	1.7677	0.7956	0.2206
	Private Sector	216	4.7884	24.7273	2.3793
Inventory Rate	Public Sector	26	18.2338	15.2549	4.2309
	Private Sector	216	1.4385	921.0180	88.6250

PAT	Public Sector	26	4.4541	5013.4534	1390.4818
	Private Sector	216	1.2160	2864.6464	275.6507
ROA	Public Sector	26	1.2391	8.47406	2.35028
	Private Sector	216	1.6023	45.7903	4.4061
ROE	Public Sector	26	1.5970	12.5849	3.4904
	Private Sector	216	1.1339	21.3404	2.0534

Table 3 Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Total Assets	Equal variances assumed	8.307	0.005	3.92	240	.000	28685.567	7314.062	14202.9928	43168.1418
	Equal variances not assumed			2.71	26.26	.018	28685.567	10580.682	5850.7618	51520.3729
ROCE Percentage	Equal variances assumed	.044	.834	.364	240	.716	1.7438	4.7903	-7.7416	11.2292
	Equal variances not assumed			.458	35.30	.653	1.7438	3.8098	-6.2714	9.7590
Financial Performance Category	Equal variances assumed	.186	.667	-.131	240	.896	-.026	.201	-.424	.372
	Equal variances not assumed			-.135	30.60	.894	-.026	.195	-.441	.388
Financial Leverage	Equal variances assumed	.603	.439	-.903	240	.369	-.19843	.21983	-.6337	.2368
	Equal variances not assumed			-1.077	33.60	.297	-.19843	.18425	-.5873	.1905
COR	Equal variances assumed	.642	.425	-.439	240	.662	-3.0207	6.8838	-16.6513	10.6099

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	Equal variances not assumed			-1.26	217.54	.209	-3.0207	2.3896	-7.7569	1.7154
Inventory Rate	Equal variances assumed	1.001	.319	-.490	240	.625	-125.61597	256.39076	-633.2952	382.0633
	Equal variances not assumed			-1.416	214.96	.160	-125.61597	88.72594	-301.4957	50.2638
PAT	Equal variances assumed	5.349	.022	3.503	240	.001	3238.1032	924.31020	1407.8767	5068.3298
	Equal variances not assumed			2.284	25.90	.040	3238.1032	1417.54119	174.7180	6301.488
ROA	Equal variances assumed	.832	.363	-.284	240	.777	-3.6324	12.7712	-28.92080	21.65596
	Equal variances not assumed			-.727	205.06	.469	-3.6324	4.99382	-13.53702	6.2721
ROE	Equal variances assumed	.316	.575	.765	240	.446	4.631417	6.055354	-7.358788	16.621623
	Equal variances not assumed			1.144	42.90	.265	4.6314	4.0496	-3.7794	13.0423

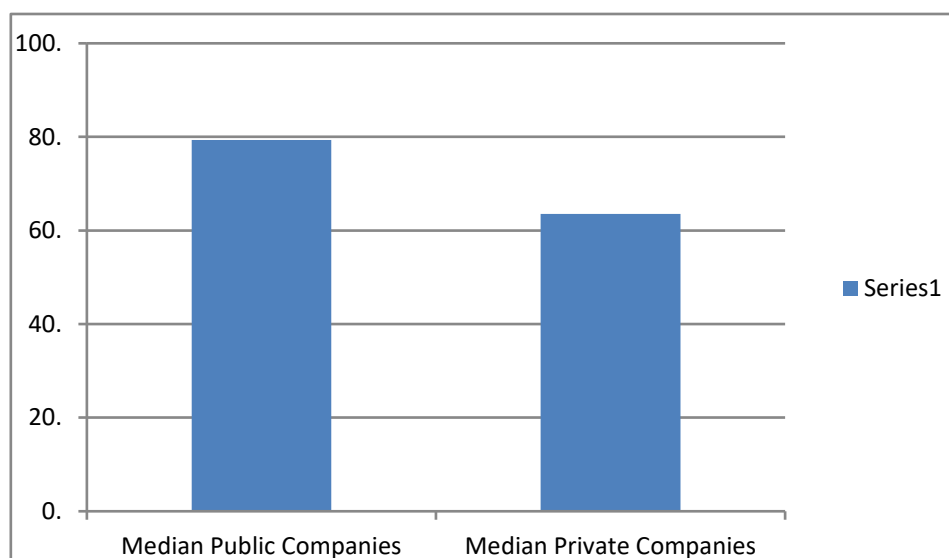


Chart 1 Median of Corporate Governance

Table 2 exhibits sample size, mean, standard deviation, and standard error for both the public sector and private sector firms. On an average the Return on Capital Employed Percentage (ROCP) of public sector firms is 1.744% more than private sector firms, similarly average of (PAT) of public sector firms is 3.23% more than private sector firms further the averages of (ROE) 0.464%, (TA) 2.868% and (IR) 16.795% are more than the private sector firms. However the odds between the means is ponderable amongst PAT, ROCE, TA, ROE and IR.

The procedure produces two tests of the difference between the two groups (Public sector companies and private sector companies). The Levene statistic tests testifies the assumption that the variances of the two groups are equally same kind.

Table 3 gesticulates the F statistic's significance value is 0.834 for ROCEP%, 0.022 for PAT, 0.363 for ROA ,0.575 for ROE, 0.005 for TA, 0.667 for financial performance category (FCP), 0.439 for LEV, 0.425 for COR and 0.319 for IR. Any value bigger than 0.10 reveals that the equal variances can be conjectured which is evident in the case of ROCEP, ROE, ROA, FCP, LEV, COR, IR groups but same cannot be assumed in the context of PAT and TA.

The t column shows described t statistic for every sample in the form of a ratio I.e. difference among sample means / standard error of the difference. In the Table df column shows degrees of freedom which is used in the independent samples t test. It is equal to the total number of cases in both samples minus 2. Another column in table with heading Sig. (2-tailed) reveals a probability from the t distribution with 240 degrees of freedom with the notion of equal variances. The value shown is the probability of getting an absolute value \geq to the obtained t statistic, provided the disparity among the sample means is absolutely random. The Mean Difference is calculated as the sample mean for group 2 (Private sector company) minus the sample mean for group 1 (Public sector company). The 95% Confidence Interval of the Difference provides an estimation of the range within which the actual mean difference lies in the 95% of all probable random samples of 242 companies under investigation. It is observed that the significance value of the test is lower than the standard 0.05 for the PAT and TA which further strengthens the point that the average difference of 3.23% of PAT between two groups and 2.868% among TA has some strong reasons. The t statistic stands rock solid grounds for a difference in PAT and TA between public companies and private companies. The confidence interval promulgates that in tautologized samplings the difference is not likely to be lower than 1407.87 (PAT) and 14202.99 (TA). In such situation the companies will attempt to keep back these returns and this gives us rational grounds for rejecting the null hypothesis. As per the observed median in the chart no 1 the median of corporate governance score for private sectors firms is 63.55 and for public sector firms' median is 79.35. It can be clearly stated that the corporate governance practices of public sector firms are better than the private sector firms in India.

5. CONCLUSION

On the basis of the results of the statistical analysis it is found that the corporate governance practices of private sector and the public sector companies are not the same. It is further observed that the corporate governance practices of public sector firms are better as compare to the private sector firms in India. Therefore it can be concluded that in India the public sector firms have much better adherence to the governance laws and their corporate governance policies and practices are far better when it comes to practical implementation on the ground level.

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Corporate Social Responsibility Reporting in Locally Owned Hotel Chains in Singapore

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Keywords:

CSR, reporting, websites, annual reports, hotels, Singapore.

Abstract.

This exploratory study looked at the Corporate Social Responsibility (CSR) programmes of 10 locally owned and operated Singapore hotel chains. By using a Content Analysis methodology, the 10 hotel chains' CSR efforts were analysed vis-à-vis to their annual reports and websites. This gave clear indication of whether the hotel chains were complying with the promises and standards that they had stated and promised. This report found that the CSR reported by the hotel chains were inclined toward Environmental efforts. This could probably be due to this Environmental practice being more tangible and visible. It was also noted that while the initiatives taken by the hotel chains were relatively numerous, many failed to report on whether these efforts amounted to an achievement. Moreover, CSR reporting on the hotel chains' websites were almost non-existent. Given this, recommendations have been included to assist Singapore hotel companies manage their reporting of CSR activities.

Kata Kunci:

CSR, pelaporan, website, laporan tahunan, hotel, Singapura.

Abstrak.

Studi eksplorasi ini meneliti program Corporate Social Responsibility (CSR) dari 10 jaringan hotel Singapura yang dimiliki dan dioperasikan secara lokal. Dengan menggunakan metodologi Analisis Konten, upaya penerapan CSR di 10 hotel jejaring dianalisis berdasarkan laporan tahunan dan website mereka. Studi ini menunjukkan indikasi yang jelas tentang apakah hotel jejaring memenuhi janji dan standar yang telah mereka nyatakan dan janjikan. Laporan ini menemukan bahwa CSR yang dilaporkan oleh hotel jejaring cenderung mengarah pada upaya perlindungan terhadap lingkungan. Ini mungkin karena praktik penjagaan lingkungan menjadi lebih jelas. Studi mendapati bahwa meskipun inisiatif yang diambil oleh hotel jejaring relatif banyak, banyak yang gagal melaporkan apakah upaya ini merupakan pencapaian. Selain itu, pelaporan CSR di situs web hotel jejaring hampir tidak ada. Mengingat hal ini, rekomendasi telah dimasukkan untuk membantu perusahaan perhotelan Singapura mengelola pelaporan kegiatan CSR mereka.

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1. Introduction

In our present day, there is greater awareness of Corporate Social Responsibilities (CSR) by the public, investors, customers and clients of private companies. People generally want companies that they deal with to have a greater sense of accountability to the needs of society, community and the environment. People are more inclined to work with companies that are more active and more in-tuned with their CSR efforts (Hsieh, 2012). Therefore, in order to appease the public, customers and stakeholders, many companies are driven to take a more proactive stance in their CSR efforts.

While there are many different understandings of what CSR means or is about (Holcomb, Upchurch & Okumus, 2007), it has been defined by Robbins and Coulter (2005) as the efforts that are taken by a company to go above and beyond what it is needed, i.e. in terms of its economic, financial and legal efforts to help society, community and the environment to its betterment. This can be in terms of donations, volunteerism, education and the reduction and/or recycling of resources. The World Business Council for Sustainable Development (World Business Council for Sustainable Development, 1999) has a similar understanding of CSR. It maintains that CSR is an organisation's commitment to long-term developments and improvements in the economy, environment, employees, families and communities around them. The European Commission's stand on CSR is also similar. It views CSR as the incorporation of the establishment's interest in the environment and its community in its daily routines and operations (Commission of the European Communities, 2001).

With people being more educated and socially aware, there is a greater demand from society to ensure that companies are accountable - socially and environmentally, for its policies and practices that can invariably damage the environment and its surrounding communities. As such, there is a great demand by society on the establishments to report them and to hold them accountable to their operational standards and promises (Holcomb *et al.*, 2007; Hsieh, 2012). In this way, the public and stakeholders are made aware of the companies' efforts and can influence the direction and decision-making of the companies. Discerning customers, investors and the government can also use the information shown to decide what to buy, where to invest and whom to support. This essentially impacts businesses and compels them to take on more and greater responsibilities to society, communities and the environment, instead of just earning a profit and being financially successful. While there are many differing views on the business such as Friedman (2007) who stated that the business establishments should only focus on the economic and legal aspects of the business and not be distracted by other non-business related issues, that are not directly related to its core offering. There is also a growing view that CSR needs to be incorporated into part of an organisation's business plan. Carroll (1979) mentioned that businesses are intrinsically linked to their communities and have a responsibility to see to the needs of them especially if the organisation is indirectly affecting them.

However, even though there is greater awareness of CSR for business establishments, there is scant research on CSR and CSR reporting in the hospitality and tourism industry, specifically in the hotels sector (Holcomb, Okumus & Bilgihan, 2010). While research in the western countries and societies are considered low, countries outside of Europe and North America especially in Asia is extremely limited (Hsieh, 2012; Tsai, Tsang & Cheng, 2012). This could probably be due to the high number of small, medium enterprises (SME) and local chains that need not comply to CSR regulations such as in Western countries. Moreover, according to Tsai, Tsang and Cheng (2012), there is limited research of hotel CSR especially in developing countries in Asia.

The study aims to address the research gap by look at the CSR reporting by the local hotel chains in Singapore. The study will explore how local hotel chains report their CSR activities in their annual reports and websites and investigate whether there is any dissonance. This study will

focus on locally owned and operated hotel chains in Singapore, ranging from the Meritus Group, Hotel Properties Limited to Far East Hospitality Trust, and others.

In order to ensure uniformity, these hotel chains need to fulfil the following requirements. Firstly, all the researched hotel chains must be in operation for a minimal of three years and have at least three hotels within their chain. Next, they are all owned by large and established public listed companies in Singapore. Due to the chain being linked to public listed companies allows them to draw from the funds of the parent company and from the financial market. Lastly, many of the hotel chains have been in operation for several years and have expanded their brand overseas and have gained international recognition.

This study on the hospitality industry in Singapore is importance and of great relevance because of the tourism and hospitality industry account for up to 4% of the Gross Domestic Product (GDP), making it one of the major contributors to the Singapore economy. It has contributed more than Singapore \$17.7 billion to the economy through direct sources (Singapore Tourism Board, 2019). Moreover, the hospitality and tourism industry, supported more than 169,500 jobs in Singapore and this is about 4.6% of the jobs in the city-state (Li, 2018).

While many hotel chains are starting to be more transparent in their disclosure of their practices, there is hardly any research made on CSR reporting by the local hotel chains in Singapore. As for nearby countries within the region of South East Asia, there has been some studies conducted in Malaysia. Wee and Ross-Smith (2018) conducted a research that investigated the CSR reporting Malaysian local hotels. There was another research that looked at sustainability in Malaysian hotels by Joseph, Lin, Nichol and Jussem (2014). Unlike this previous study, which was quantitative in nature, the current study is a qualitative in nature and is centred around the content analysis of the hotel chain's websites and annual reports on their CSR efforts.

This study has been organised along the following sections. The first part will introduce the objective of the study and the research gap. The subsequent parts will review the literature of CSR reporting in the hospitality and tourism industry. The research approach and research method will be highlighted in the Methodology section. The Discussion section will highlight the findings and issues raised and finally, the Concluding section will summarise the salient aspects and possible future research for this study.

2. Literature review

Hotels are known to be direct contributors to the economy. They help to increase the GDP of countries and indirectly drive tourism to specific regions within a country. Other benefits to the economy would be that of job creation, skills and knowledge creation. However, it is also known that hotels are a great consumer of resources and is directly linked to many forms of wastages, including food, water and electricity. Some of these wastes include linen, amenities, food, energy, sanitation chemicals and others (Kasim, 2007; de Grosbois, 2012). With an increase in the number of hospitality properties, higher wastages are postulated and will have a greater effect on the social and environmental level.

In terms of CSR, there is a greater awareness in an organisation's contribution to social, community and environmental causes. According to Font *et al.* (2012) and Hsieh (2012), there is a growing interest among stakeholders in the CSR affairs of their invested companies. Conscientious customers, stakeholders, partners and suppliers desire more information from the companies that they deal with so that they can align their business values with that of the organisation. While CSR reporting is optional in many countries, many organisations report CSR activities to obtain public approval and to generate publicity. Certain countries in Asia, such as Singapore and Malaysia have put in place CSR reporting as a requirement for listed companies (Abaeian, Yeoh & Khong, 2014).

In the hotel industry, many of the established brands are keen to report CSR activities as part of a public relations effort and for transparency reasons. However, a study by Holcomb *et al.* (2007) on the top ten hotels in the world as listed in the 'Hotels magazine' revealed mixed responses. Some hotels openly disclosed CSR efforts and had CSR accountable personnel in place to oversee their activities. Other hotels were less forthcoming in revealing their CSR efforts. With the study on the top 150 global hotels, de Grosbois (2012) found that most hospitality companies reported a commitment to support CSR activities and efforts, however, many did not reveal the exact activities, and execution efforts in these plans. Using the study from de Grosbois (2012) and with further examination, Font *et al.* (2012) applied the similar methodology to ten international hotel chains. They examined the CSR disclosure – performance gap of these hotels and found significant gaps between the variables. Font *et al.* (2012) noted that there was much disparity between what was committed and what was actually delivered by the hotels. Other studies have also found similar variations in actuality and reporting. Clarkson, Li, Richardson and Vasvari (2011) conducted a study on hotels in Australia and found that there were also considerable discrepancies between disclosure and the actual performance in terms of CSR reporting.

This disparity between the actual result and the reported CSR is also prevalent in larger hotel companies (Font *et al.*, 2012) to the point where it has now been noted by a particular vernacular, i.e. 'greenwashing'. This term of 'greenwashing' is generally referred to companies who only highlight the positive action and effects of their sustainable and eco-efforts, while hiding the negative aspects of their doings (Lyon & Maxwell, 2011). The companies only report positive aspects of their CSR, so that they can garner favourable public relations and put seen in a 'good light' (Holcomb, 2007).

In terms of hotel CSR reporting, there has been a shift of CSR from community and employee action to the environment. A study by Holcomb *et al.* (2007) mentioned that hotels generally favoured CSR on community and employees in the early 21st century. About 80% of all hotels which had CSR actions plan focused on community and 60% had programmes to help their employees. In recent years, there has been a greater emphasis on environmental CSR (Font *et al.*, 2012; de Grosbois, 2012; Cherapanukon & Focken, 2014; Hsieh, 2012). This can be attributed to a greater awareness on environmental trends and issues and green practices.

In terms of benefits, CSR has ensued many benefits for hospitality companies. The most compelling of the benefits would that be of cost-savings. Such savings are usually attributed to savings in the areas of utilities management, i.e. water, energy and heating (Levy & Park, 2011; Sprinkle & Maines, 2010). Another area that hospitality companies looked at was in the areas of employees and their guest. All these CSR efforts ultimately led to improving the public relations image of the hospitality company and greater guest satisfaction (Martinez, Perez & Del Bosque, 2014; Martinez & Del Bosque, 2013).

CSR activities also affects employees in terms of their loyalty (Brammer, Millington & Raton, 2007), their retention and affinity to join an organisation (Sprinkle & Maines, 2010) and their motivation to work (Kim & Scullion, 2013). These CSR activities has also been shown to increase investor relations (Petersen & Vredenburg, 2009) and competitive advantage (Kramer & Porter, 2006). On a whole, CSR helps to increase the positive well-being, image and financial success of an organisation (Sinha, Dev & Salas, 2002).

There are many ways by which hospitality companies convey their CSR efforts. There are traditional and technological means. Traditional methods of highlighting CSR activities would be through annual reports, press releases, newsletters, and other forms of print media. With internet being used more frequently and a choice medium of conveying information, more companies are keen to use this technological platform as a channel. The use of the internet is also seen as a CSR effort with the minimal use of resources. Hsieh (2012) and Jose and Lee (2007) highlights that the internet allows quick dissemination of information to their employees, customers and stakeholders in a cost-effective manner.

From a technological perspective, the use of websites has been the most popular means by which hospitality companies share CSR activities, efforts and measurements. Most hospitality companies imbed their CSR information as part of their corporate websites to give the public a holistic understanding of the mission of the company and their direct and indirect goals. A study was undertaken by Basil and Erlandson (2008) on Canadian corporations' website on their CSR efforts. They found that 67% of these companies had some form of CSR reporting in 2006, compared to 2004, where only 27% reported their CSR activities online. Another study by Gomez and Chalmeta (2011) which examined 50 corporate websites from the USA, revealed that 80% of these organisations reported their CSR efforts on their webpages.

In Singapore, there has been much interest in the CSR reporting and activities within the hospitality trade. Singapore developed the 'ASEAN Green Hotel Awards' which was initiated by ASEAN member countries (Chung & Parker, 2010), based on assessing environmental and energy conservation methods taken. However, despite the interest in CSR in hospitality companies in Singapore, the Brand Company (2012) in their study on CSR reporting in luxury chains in Singapore only listed one Singapore company in their top 10 Asian international hotel companies. While this report only reflects international luxury chains in Singapore, this lack of CSR reporting might be reflective of other categories of hotels in the city-state.

3. Methodology

This study looked at the CSR reporting of Singapore hotel chains. The objective is to investigate the content and nature of CSR reporting by local hotel companies. This study uses content analysis to identify and describe the patterns and congruency emerging from the data samples. The use of content analysis has been used as a research method as it is advantageous in gathering and analysing text-based content (Neuman, 2007).

There have been previous studies which used this methodology of content analysis to measure CSR reporting in hospitality organisations, i.e. Holcomb *et al.* (2007) study on CSR reporting on 10 international hotel chains; Font *et al.* (2012) study on CSR disclosure and performance gap; and Hsieh (2012) looked at sustainable practices and policies of over 50 hotel chains in Europe, the USA and in Asia. These studies have showed that the Content Analysis methodology is reliable and valid for this form of analysis.

Using content analysis, a set of sustainable related concepts must be identified. These concepts should have in turned been identified and have been used in the earlier literature reviews. In past studies, Levy and Park (2011), Holcomb *et al.* (2007) and de Grosbosis (2012) identified 5 categories of CSR activities that hotels actively participated in. These included Community, Environment, workplace (Employee Welfare), Marketplace and Mission. However, for this study, only 4 of the 5 activities will be reviewed, namely Community Affairs, Environmental Concerns, Employee Welfare and Marketplace Interest.

The data that will be examined is determined from the hotel and corporate websites, annual financial statements and annual report from the 10 Singapore owned and operated hotel chains. Only 2017 and 2018 financial and annual reports were examined. Data was taken from the websites in the month of November 2019. From the data set, the commitments, initiatives, plans and achievements of the 4 CSR categories of each hotel chain were noted, recorded and tallied.

It should be noted that the hotel chains sampled were all part of a larger parent companies. Table 1 displays the names of these companies and their parent establishments. Table 1 also list the number of hotels under each respective chain. The number of hotels is shown as it is important to depict the size of the company due to the relevance of this study. Hsieh (2012) has noted that

larger companies in terms of size and capital are more likely to acknowledge the benefits of CSR activities and are more likely to report them.

Another reason for choosing larger, established hospitality companies gives accessibility to obtaining data from their annual reports and from their corporate websites. While most companies are not obligated to disclose their corporate dealings of a financial year, other than for listed companies, many companies openly list their corporate finances to ensure transparency and accountability to their stakeholders. These reports are generally a credible source of data and false reporting can be noted as a criminal offence. Many companies also derive these data after they have been audited and accounted for, so that their account reports are a true and fair representation of their companies' business and financial well-being.

Therefore, this focus of this study is to examine how the local hotel chains in Singapore report their CSR activities. This study will use the content analysis to analyse the websites and annual reports of the Singapore hotel companies, specifically regarding the category of the CSR reporting. The result of this study will be analysed and presented in accordance to the categories which has been mentioned earlier, i.e. Community Affairs, Environmental Concerns, Employee Welfare and Marketplace Interest.

Table 1. List of sampled Singapore Hotel Companies

Hotel Name	Listed Parent Company	Location of Headquarters	Number of Properties
Meritus Hotels and Resorts	Overseas Union Enterprise	Singapore	3
Frasers Properties	Frasers Hospitality Trust	Singapore	71
Banyan Tree	Banyan Tree Holdings	Singapore	39
Far East Hospitality	Far East Hospitality Trust	Singapore	51
Concorde Hotels	Hotel Properties Limited	Singapore	4
Park Avenues Hotel	United Engineers	Singapore	4
Fragrance	Fragrance Group	Singapore	8
Amara Hotels	Amara Holdings	Singapore	5
Parkroyal-Pan Pacific Hotels	UOL Group Limited	Singapore	29
Millennium and Cophthorne	City Developments Limited	London, United Kingdom	129

4. Results

The results of the analysis of commitments, initiatives and achievement on the four categories of Community Affairs, Environmental Concerns, Employee Welfare and Marketplace Interest are depicted on Appendix A. The results are from the analysis of samples hotel companies' websites, annual financial and/or sustainability reports.

All the hotels listed provided a fair amount of information on CSR. Despite the information obtained, each company depicted CSR differently. Most of the companies had their CSR information on their annual report downloaded from their corporate website or on their parent companies' webpage. Some companies reflected these CSR activities on both former and latter webpages, although some were listed differently, and cross referencing was necessary.

Table 2. Analysis of CSR reporting in annual reports and websites

CSR Activities	Commitments	Initiatives	Achievements
Environmental Concerns			
Water Savings	5	5	5
Energy Management	5	5	5
Waste Recycling	5	5	3
Green Products	4	4	4
Nature Conservation	5	5	5
Employee Welfare			
Health & Safety	7	7	4
Fair & Equitable Wages	4	4	0
Employee Assistance Programme	2	2	1
Opportunities for Training & Development	7	7	4
Diversity & Equal Opportunity	7	7	3
Work Life Balance	2	2	2
Community Affairs			
Scholarship & Grants	1	1	0
Blood Donation	1	0	0
Community Giving	6	6	1
Gifts to Disadvantaged Groups	5	5	3
Marketplace Interest			
Quality Products	3	3	1
Supplier Diversity	3	3	2
Ethical Behaviour	4	4	0
Fair Trade & Negotiation	3	3	0

Most of the CSR efforts and activities were listed on the hotel's sales and marketing / corporate communications webpages. These webpages often depict the properties and establishments under their purview. The pages often showed images of their staff in the course of their work. The annual reports also focused in its entirety on the financial status and economic well-being of the hospitality parent companies. The CSR efforts were marginally depicted, both pictorially and informatively. Most of the CSR information was on the annual reports imbedded on the websites and not directly placed on their webpages per se.

As mentioned, the CSR information on the hotel websites were very scarce. Only 1 out of the 10 hotel studies had details of their CSR activities wholly embedded their corporate websites. Most of the other hotels had their CSR information listed on the parent holding companies' corporate websites and their annual report were imbedded on their parent companies' websites. In most of the CSR reported for all 10 companies, CSR activities were often not detailed and were ambiguous with no measurement of the activities. Moreover, the CSR activities described were generally related to the parent company, rather than the specific hotel chain or specific properties.

While most of the companies were legally bound to report their endeavours, financial or otherwise to the public, non-public listed companies were obligated to do so. Nonetheless, all 10 companies' information on CSR were obtained either through their (proprietary or parent companies) websites, or from print media. It was noted that the CSR information of each

company were often found towards the end of the qualitative content of the report (prior to the financial statements section). The CSR information were generally not detailed and vague.

On the same note, the CSR information on most parent companies are difficult to find. Financial and accounting information dominated the annual reports. Little information, i.e. less than 5% of the reports reflected the CSR activities, which amounted to 2 – 5 pages for each report. As mentioned earlier, the activities reported were general superficial and non-detailed and listed the actions taken without any form of accountability, measurements or standards (national or international). The results of the findings are highlighted in Appendix A. The below sections break the findings into their different categories, namely Community Affairs, Environmental Concerns, Employees Welfare, and Marketplace Interest.

4.1 Community Affairs

Many of the hotels are generally into community giving, especially to disadvantaged groups. These disadvantaged groups are represented by elderly groups to children welfare and illness societies. This form of CSR is generally one of the highest of CSR efforts with almost half of the hotel group sample helping out in this aspect. From the annual reports, many companies feature pictorial aspects with visits to elderly homes, disadvantaged groups, such as children with illness and disabilities. Donations and gift presentation have been clearly noted in the pictures. In terms of scholarship and grants, there is a clear indication that CSR to schools and educational institutions are generally low with only a single hotel group supporting this form of CSR. Unknowingly, blood donations are generally not a form of CSR practised for Singapore hotel groups.

4.2 Environmental Concerns

In terms of environmental CSRs, about half of the sampled hotels practised environmental CSR. The range of CSR covered all aspects of water saving, energy management, waste recycling, nature conservation and green products. Almost all the commitments and initiatives taken were back up with quantitative data of achievements in the annual reports. From the data collected, hotels take the most effort in their environmental CSR practices, probably it has the greatest tangible and visible effect on guest and on their operational cost.

4.3 Employee Welfare

Under Employee Welfare, the most practised CSR would be that of Health and Safety, Opportunities for Training and Development and Diversity and Equal Opportunity- each with similar rankings. The least practised and committed CSR efforts were that of employee assisted programmes and work-life balance. Unlike the Environment achievements which were consistently highlighted with measurable data, the results of employee-related CSR practices were not featured on the annual reports.

4.4 Marketplace Interest

Marketplace CSR practices were only highlighted in about a-third of the hotel group's annual report. The highest committed CSR effort was that of having ethical behaviour when dealing with their suppliers. The other efforts i.e. having quality products, having supplier diversity and fair trade and negotiation were equally matched in terms of being highlighted in the annual reports. It is noted that in terms of achievements, these CSR practices were not mentioned if they attained their desired target.

In terms of Achievements, the hotel chains that showed and met their targets, often related their target to some to some form of international standard and abided by proper certification systems. While there might be certain variations in the standards based on the different certifications such as ISO, SERQUAL, HACCP etc. for standards in assurances, all these provide corporate companies as a yardstick of measurement (Cherapanukorn & Focken, 2014). In terms of sustainability and CSR standards, many of the hotels adopt standards from Earth Check and Green Globe as a form of adherence and measurement. The hotel groups in the sample that used these international standards were Banyan Tree, Frasers Properties and Far East Hospitality.

5. Discussion

From the findings, it can be surmounted that CSR is an important aspect of the business of Singapore hotel chains. Many hotels chains perceive the implementation CSR as a means by which their guest see them as caring for the world. (Holcomb *et al.*, 2007; Chung & Parker, 2010; Levy & Park, 2011). It has also been noted that in terms of comparison of a study by Wee and Ross-Smith (2018), the hotels chains in Singapore had comparable CSR efforts and commitments to their Malaysian counterparts. This clearly reinforced that CSR is indeed important to the business well-being and public image of the Singapore hotels.

The factors within the Employee category which are rated the highest is that of Health and Safety, Opportunities for Training and Development and having a Diverse and Equal Opportunity. The reasons these factors having a higher rating could be because of the direct impact they have on the business returns for the hotel companies, as compared to other factors such as Employee Assistance programmes and having a balance-work life. Moreover, the factor of a Diverse and Equal opportunity is in-line with Singapore's national multi-racial and cosmopolitan population and equity policy where all people are given equal opportunities and racial mix in a hospitality company is highly encouraged for operational sustainability reasons.

The Environmental Concerns factors are seen to be rated highly in terms of commitments, initiatives and achievements. These factors are often of high emphasis for most hotels as it brings about positive economic gains to a hotel's bottom line (Font *et al.*, 2012). Moreover, these factors are often the most noted by hotel guest and they are easiest to quantify by means of measurement tools (Levy & Park, 2011). This can be noted from the researched annual reports where almost all commitments are validated and accounted for through actual achievements. Lastly, in terms of CSR for hotels, many guest equate CSR generally to the environmental action taken, rather than factors associated with the well-being of staff and to suppliers (Font *et al.*, 2012).

In terms Community Affairs, it is the lowest category of CSR. In terms of grants and scholarships, it has been noted that only a single commitment from the Singapore hotel chains. The reason for this non-committal could be due to a perceived biasness by the hotel chains towards specific educational institutions, resulting in low participation in this area. Moreover, most schools, while not considered as charity organisation or causes, within the Singapore fall under the purview of the Ministry of Education. These schools have already received funding through the Government and from social and racial associations such as the Chinese Developmental Assistance Council, the Singapore Indian Development Association and the Mendaki Association. However, in terms of community giving and gifts to the disadvantaged groups, the Singapore hotel chains are more inclined to provide assistance through their CSR endeavours. The reason for this could be due to the community and disadvantaged groups being registered as charity organisations and deemed for organisation donations. Likewise, CSR efforts linked to aiding disadvantaged group are often perceived to have greater mileage from a public relations perspective (Frankental, 2001).

As for Marketplace Interest, there is consistently low CSR activities in this category. The reason for this could be because at the Marketplace level, there is minimal publicity. There is generally greater public awareness when activities are carried out on a Business-to-Consumer than on a Business-to-Business level. Moreover, it is presumed that there is greater public relations mileage when CSR is conducted from an Environmental and Community level as compared to it being done on a marketplace level. In terms of Achievements, there is not many international industry yardstick or measurements for the Marketplace, as compared to Environment issues. Furthermore, activities such as Ethical Behaviour is arbitrary and subjective. Hence, the achievements quantified are generally low.

From the findings, it has been noted that despite the quantitative data obtained, the annual reports do not feature details of the CSR efforts, other than for several hotel chains, such as Banyan Tree, Frasers Hospitality Trust, Far East Hospitality Trust and Millennium and Copthorne. Many of the hotel chains are generally not very forthcoming in terms of the specifics of their activities, often giving generic and scant information. Many did not feature the implementations of the CSR programmes, initiative developed, and achievement made, resulting in difficulties in obtaining the relevant data. This is supported by studies conducted by de Grosbois (2012) and Font *et al.* (2012) that many hotel chains often do not detail their CSR efforts in terms of execution and performance. Singapore hotel were also similar to their Malaysian counterparts, where CSR effort mentioned in their annual reports were often more narrative rather than focused on objectives, targets and performances (Wee & Ross-Smith, 2018).

While the hotel chains in Singapore depict a fair amount of CSR practices within the companies, it should be noted that the CSR practices found in the annual reports of the hotel chains as well as the parent companies of these chains. An example of that would be City Development Limited (CDL). The CSR practices of the Millennium and Copthorne hotels, a subsidiary business unit under CDL, were obtained from CDL's annual reports. While diligent work has been put in to ensure that the CSR practices were specific to the hotel group, this could be the reason why the details of CSR were scant, i.e. being part of the entire holding company's annual report.

With a greater awareness of CSR and more initiatives taken by the global hotel chains, it would seem that more hotels would be keener to take on greater CSR activities. Moreover, with Singapore being a headquarters of many such global chains, it would have been presumed that local Singapore hotel chains would follow suit. However, the CSR efforts noted in the annual reports are generally similar to a study conducted on Malaysian hotels by Wee and Ross-Smith (2018). They concluded that the results (like this current study) is lacking in the expected CSR efforts.

The reasons for the lack of expected CSR efforts as reflected in the annual reports could stem from several reasons. Firstly, the costs attributed to CSR might be a substantial amount, impacting their overall operational cost. While hotels might see CSR as part of the business or as a cost, these costs can be managed and trimmed without an impact their profits. Moreover, for many hotel companies there is no definitive mandate from their owners, guest and stakeholders. To many hotel chains, CSR efforts are a 'want-to-have' rather than a 'need-to-have'. Another reason for the lack of interest in CSR activities is that of the lack of awareness of CSR practices and the benefits that they offer. According to Tsai *et al.* (2012), Hong Kong hotel staff were not aware of the benefits of CSR. This is further supported by Kasim (2009) who mentioned that small and medium sized hotels (SME hotels) in Malaysia were severely lacking in their awareness of CSR practice and the reciprocal benefits. The lack of understanding and awareness can often result in the lack of CSR initiatives and expedition (Scanlon, 1997).

While most of the chains provided some form of CSR efforts, it has been noted a single hotel chain failed to provide any information on their CSR efforts. This hotel group which did not

mention any CSR effort was that of Hotel Properties Ltd (HPL), which had several local and overseas properties including the Four Seasons Singapore, Concorde Hotel Singapore, Hilton Singapore and others. The possible reason for the lack of CSR could have stem from the fact that HPL represent an owner hotel company, rather than an operations management company. Hence the prerogative of the company is essentially to depict the profitability of the organisation and leave the operational aspects including CSR endeavour to the respective brands to showcase.

It has also been noted that this study has sort to obtain CSR practices from annual reports and from the online hotel chain proprietary websites. However, almost all information derived for this report were obtained from only the annual reports. The reason is due to the lack of CSR information and programmes on the hotel chains proprietary websites. Most hotel websites depicted their operational aspects of the hotels. Several of the hotels showed the financial successes of the hotel chain. Banyan Tree hotels was the only hotel chain in the study that cleared stated their CSR mission and programmes. Therefore, from this, we can see that CSR can be used to better inform the public of the hotel's pursuits and to better integrate holistic digital marketing.

From the study, it has been noted that most corporate information on the hotels can be found on the websites, other than their CSR efforts. This could be because CSR reporting on websites are still a relative phenomenon, and CSR does not help to contribute to the top line of finances, therefore by deeming it as unimportant by the hotel chains (Holcomb *et al.*, 2007). However, websites being used as a source of information and as a point of booking (Shin, Pang & Kim, 2015). Therefore, the Singapore hotel companies would need to leverage on their websites to a platform where the public can access more of their information. By doing so, they can use their websites to generate greater positivity and customer loyalty through CSR (Cyr, 2008). However, it should be noted that while CSR depicted in a non-professional manner on a poorly designed website with vague information might create customer distrust.

Vague and limited CSR information on hospitality corporate websites might not be desirable and might hurt the image of the organisation. It has been noted by Vassilikopoulou, Siomkos and Mylonakis (2005) that consumers are generally willing to support businesses that practise CSR and meet their expectations. On that note, they are also not hesitant to boycott businesses that are damaging the environment and the community. From the above, hotels should leverage on their internet corporate websites to feature more of their CSR practices and efforts. In current times, websites are often perceived by guest to be the first-stop hub for information. Therefore, with added attention on the hotel chains' commitment and implementation on CSR will not only create more awareness, brand loyalty and guest demand in terms of patronage.

6. Conclusion

The general theme of this study is on the CSR reporting by Singapore hotel chains in terms of their activities and efforts. For most of the hotels that were investigated, they generally focused on the commitments and implementations of their CSR efforts. However, in many of the annual reports, most of the companies did not digress into their achievement criteria and failed to mention if they met their targets. This limited reporting in CSR could be because the hotels do not use website holistically and strategically – aiming only at obtaining economic benefits for their companies (Schmidt, Cantalops, & Dos Santos, 2008). In this sense, the holistic development of hotels in Singapore seen to be relatively weak. Welford (2005) mentioned that there is a close link between CSR and economics. Hence this clearly reflects that the Singapore hotel chains are still 'economically' developing.

The limited reporting could possibly raise the issue of 'greenwashing', which means that CSR efforts and reporting are generally seen as the way of making a company look good in the eyes of the public. It has been noted by Hsieh (2012) and Holcomb *et al.* (2007) that many companies

look at CSR as a public relations tool to generate a positive image for the corporation or to recover from negative criticism. Although many a times, this helped in building the image of the corporation, it can cause companies to become blind-sighted to the goal and purpose of the CSR effort and in way trivialise the benefits of CSR. Therefore, non-profit organisations and ministerial boards in Singapore, such as the Singapore Environment Council, Zero Waste SG and Ministry of Environment respectively should continue to accredit and educate Singapore hotels about the benefits of the CSR movement, encourage better reporting and avoid 'greenwashing'.

On the matter of reporting, it has been noted that there is no requirement by the hotel chains to report their CSR efforts in their annual reports. Moreover, non-public listed companies are not obligated to publically feature their annual reports, yearly endeavours and CSR efforts. It was reported by Tsang (1998) that many hotels and food and beverage establishments only disclosed scattered information on the CSR efforts and hardly any 'bad news' were disclosed. This is because CSR reporting is not mandatory under the Singapore law and all information disclosed is on a volunteer basis. Moreover, it was mentioned by de Grosbois (2012) that most hospitality companies were generally hesitant to disclose their CSR effort and provide only sporadic information. The hotel chains on a whole did not disclose much on their corporate websites. Therefore, to promote more CSR reporting, the Singapore Environment council and other green movement groups could provide more guidelines to companies on website reporting. As mentioned earlier, there is no mandate for companies in Singapore to provide CSR activities openly, websites are the 'go-to place' for obtaining information on the companies. This is especially so for the millennial generation who are more computer savvy. The corporate websites are the public face of the company. Therefore, it would be advisable for the Singapore government to mandate corporate organisation to conform certain standards of CSR report to ensure consistency in reporting with the country.

In order to encourage more CSR efforts and reporting, more education, training and encourage is needed from both the management corporate headquarters, the government and from non-profit green organisations. Kasim (2009) has noted that there is a lack of knowledge and the importance of raising awareness and appreciation of the benefits of CSR especially in the SME hotels. The management corporate headquarters could incentivise CSR efforts implemented in their subsidiary hotels and even place CSR efforts as part of the hotels' key performance indicators. The companies can even work with the owners of the properties as part of their operating cost and revenues. The government, with the non-profit green organisations can organise workshops, lectures and seminars for the local hotels on the benefits of a comprehensive CSR and CSR reporting regime in the annual reports and websites. It is only by having a transparent reporting of CSR system, coupled together with the commitments and targets achievement that transcend all levels of the hotel employee hierarchy, can a hotels monitor their CSR results and have a holistic appreciation of CSR practices and activities.

Finally, many studies on companies listed on the New York Stock Exchange indicates that the financial performance of companies that take sustainability and CSR importantly and proactively tend to surpass companies that don't (Kasim, 2009). On the similar note, these companies are equally well supported by investors. These findings go to show that at present times, CSR is of great importance in the corporate world. Companies who choose to ignore taking CSR seriously would no doubly face harsh consequences.

This study contributes to the overall literature on CSR and CSR reporting in the hospitality line. It gives a microcosm aspect of the said topic within the sphere of the Singapore hotel chain terms of their CSR actions taken and their reporting through the various mediums. This study also looks at the different CSR practised by the different hotel groups and which category is

deemed the most popular and the probable reasons why they are so. Finally, this study identifies companies which provide useful and informative CSR reporting. As for limitations, the study looks at only 10 Singapore based hotel groups through their websites and annual reports. While it might be conclusive to obtain the CSR efforts from these mediums, the results might be represented if interviews were conducted on the staff and management of the hotels. There could have been CSR efforts conducted that might have not be published on the researched mediums.

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ORIGINAL ARTICLE

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Reducing plagiarism through academic misconduct education



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Abstract

Although there is much discussion exploring the potential causes of plagiarism, there is limited research available which provides evidence as to the academic interventions which may help reduce this. This paper discusses a bespoke English for Academic Purposes (EAP) programme introduced at the university level, aimed at improving the academic writing standards of students, reducing plagiarism, and detecting cases of contract cheating. Results from 12 semesters of academic misconduct data ($n = 12,937$) demonstrate a 37.01% reduction in instances of detected plagiarism following the intervention, but due to limited data, cannot demonstrate a direct impact on reducing detected rates of contract cheating. The results also show a lower than expected proportion of plagiarised assignments (3.46%) among submissions.

Keywords: Academic misconduct, Plagiarism, Contract cheating, Turnitin, Academic dishonesty, Ghost-writing, EAP intervention, fingerprinting

Introduction

Academic dishonesty is not a new problem for higher education service providers. However, the rising availability of information sources which can easily be accessed by student writers, as well as essay-writing services heavily marketed towards university students, has led to an increase in discussions on this topic in both the media and academic journals. One way in which universities have attempted to monitor and control academic integrity is through the use of text matching software such as Turnitin. However, Turnitin and other software packages used to detect similarities between text submissions have been widely acknowledged as far from a perfect solution to 'solve' plagiarism (Heckler et al. 2012; McKeever 2006; Scheg 2012) as they do not inherently detect whether plagiarism has occurred.

Aside from cases of plagiarism that can be detected using text matching software, other, more subtle and difficult to detect forms of plagiarism such as contract cheating also need to be addressed. Throughout this paper, we use the term 'contract cheating' to refer to any form of plagiarism where a student has contracted another individual or organisation to carry out assessed work on their behalf.



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Although student use of contract cheating services are not new (Lancaster and Culwin 2007) and prevalence of this behaviour is low (Rundle et al. 2019), they are becoming more visible, to the point where it is not uncommon to see these services advertised on social media. These services show evidence of being mature, well-established commercial operations, suggesting that there is a substantial demand feeding this supply (Ellis et al. 2018).

In this study, we present and discuss an intervention designed to improve the academic writing skills of students, reduce levels of plagiarism, and provide a tool to assist in the detection of contract cheating, by capturing a 'fingerprint' of a writing sample in an offshore international higher education service provider: British University Vietnam (BUV). BUV has operated in Vietnam's capital city, Hanoi, since 2009. Although the faculty are entirely expatriate employees, almost all the students are Vietnamese, and therefore use English as their second or even third language. BUV faces the same problems as any other university with regards to plagiarism threats. However, due to the suggested negative relationship in the literature between English language ability and the propensity to commit plagiarism (Abasi and Graves 2008; Bretag 2007; Chen and Ku 2007; Goh 2015; Jones 2011; Li 2015; Marshall & Garry 2006; Perkins et al. 2018; Pennycook 1996; and Walker and White 2014), BUV must be more aware of the potential threats of plagiarism in its student body. In this paper we focus specifically on how the use of a bespoke English for Academic Purposes (EAP) programme (referred to internally as the Academic English Masterclass) may improve the academic writing skills of students, assist in reducing overall plagiarism levels within BUV, and specifically, assist in the identification of cases of contract cheating. As proposed by Kakkonen and Mozgovoy et al. (2010), we demonstrate how a final exam for this programme may be used to help identify potential cases of contract cheating by providing 'fingerprints' of a writing style which may be checked for consistency against a piece of work submitted later.

Literature review

Although there are multiple definitions and characterisations of plagiarism (see: Park 2004; Bennett et al. 2011; Mozgovoy et al. 2010), for the purpose of this paper, we refer to plagiarism as an act of submitting a document that belongs partially or completely to somebody else without due reference, and therefore misrepresents the effort that has been carried out by the submitting author. It is important to recognise that plagiarism can also occur unintentionally. We believe that the primary benefit of the initiative we present is that it has the potential to reduce instances of unintentional plagiarism by developing the academic skills of students, whilst also serving as a disincentive to the minority of students who seek to benefit by engaging in one or more deliberate forms of plagiarism discussed above. However, as the analysis presented in this paper uses institutional data on detected cases of plagiarism, we cannot differentiate between deliberate and accidental cases of plagiarism.

The reasons students engage in plagiarism has been well explored in numerous other papers, but as most students at BUV are Non-Native English Speakers (NNES), we wish to highlight the effect that low levels of English may have on incidences of plagiarism. This finding is supported by Bretag et al. (2018) who found that a factor influencing

contract cheating prevalence was the use of a language other than English in students' homes. Studies which have found a generally negative relationship between English language ability and plagiarism include Abasi and Graves (2008), Bretag (2007), Bretag et al. (2018), Chen and Ku (2007), Goh (2015), Jones (2011), Li (2015), Marshall and Garry (2006), Pennycook (1996), Perkins et al. (2018), and Walker and White (2014). However, many studies exploring this relationship are based on self-reported data from both students (Goh 2015; Jones 2011) and faculty (Abasi and Graves 2008; Bretag 2007; Li 2015; Walker and White 2014) which raise methodological concerns about the potential validity of this relationship.

In terms of interventions which may assist in combatting plagiarism, several options have been suggested in the relevant literature. These include an online academic integrity module (Belter and du Pré 2009; Curtis et al. 2013), a web-based module with a blended method on plagiarism (Stetter 2013), an online quiz through Blackboard (O'Donnell 2011), a plagiarism assignment (Davis 2011), an ethics-related module (Guo 2011), computer simulations and games as a preventative measure (Bradley 2015), marker training and the use of novel detection software, (Dawson et al. 2019; Dawson et al. 2019) and student plagiarism workshops (Chen and Van Ullen 2011; Hoanca 2019). Soto et al. (2004), and Levine and Pazdernik (2018) provide clear evidence of a reduction in plagiarism following a combination of initiatives, including structured educational modules, implementation of policies, increasing the difficulty of plagiarism by requiring students to submit drafts, and ensuring there are consequences of plagiarism. The fear of consequences arising from being caught committing plagiarism was also shown to be a strong deterrent to plagiarism by Bennett (2005). Amigud and Lancaster (2019) also identify that in some cases, familial involvement occurs in the process of purchasing contract cheating services, although it is not specified how this takes place. The authors suggest that ultimately, reducing contract cheating should focus on detection rather than attempting to stop it happening in the first place.

Proposals which have been suggested to specifically reduce contract cheating include: collecting writing samples from students (McLafferty and Foust 2004; Jones & Sheridan, 2014); setting assignments that specifically refer to lecture contents rather than generic essays (McLafferty and Foust 2004); improving the teaching and learning environment, including the relationship between staff and students and reducing the turnaround time of assessments (Wallace and Newton 2014); 'designing out' plagiarism (Fazel and Kowkabi 2014) by providing alternative forms of assessment such as exams, oral presentation (Lines 2016), internship experience and field trip-based reports, as part of a holistic assessment methodology (Goh 2015); and incorporating assessments that involve critical thinking and personal involvement with the course content (Carroll 2007; Heckler et al. 2012; McLafferty and Foust 2004; Probett 2011).

There is limited research in the field providing evidence of how contract cheating may be detected in the first place. Clarke and Lancaster (2007) present a 'Six-Stage Contract Cheating Detection Process' for identifying incidences of contract cheating in computer science assignments. However, this method relies on the availability of public information; in this case, 'bids' to an auction site. This ignores a common pathway of students obtaining papers from 'essay mills' or from advertisements on private social media groups. Morris (2018) on the other hand, suggests a more holistic model of five considerations for addressing contract cheating, including determining strategy,

reviewing institutional policy, developing an understanding of students, edited and revisiting practices for assessment and including areas for staff professional development.

Koppel and Winter (2014) demonstrate how computational linguistic methods can be used to determine whether the author of two documents is the same. Although the results of their study indicate that this method has a good degree of accuracy in determining whether two documents were written by one author, it relies on having access to digital copies of all text being examined. This method is therefore unable to determine whether contract cheating has taken place, as it is not possible to analyse work from authors who are not in the existing database.

Clare et al. (2017) present a method of determining whether contract cheating may have occurred by examining whether unusual patterns exist between the grades received by students for unsupervised work compared to those for supervised work. This approach may be helpful to identify where further investigation could take place, but given the wide range of factors which could also influence differences in grades between different types of assessment (student preferences, differences in grading practices between markers, quantitative vs qualitative assessments, etc.), it cannot be relied upon by itself as a tool to identify contract cheating.

Dawson and Sutherland-Smith (2018) show that experienced markers were able to detect contract cheating 62% of the time in one experiment. However, these papers were all obtained from dedicated contract cheating websites which may be of varying quality, and the study only examined twenty papers from one course.

Harper et al. (2020) demonstrate that staff are generally skilled at detecting contract cheating rates for text-rich assessments, but this reported detection rate was lower for exam-based assessments as opposed to take-home assignments.

Although it is very easy for software solutions to identify text that is already present in its database, the ability of current software is not yet advanced enough to detect the complexities of contract cheating (Kakkonen and Mozgovoy 2010; Mozgovoy et al. 2010). As advances in technologies such as deep learning, neural networks, and quantum computing develop and become available for use in higher education, these difficulties may be eased. It is worth noting that new products from Turnitin such as Authorship Investigate have shown potential in identifying contract cheating cases (Dawson et al. 2019) although are not yet widely available. As software cannot adequately assist with detecting incidences of contract cheating, this is therefore left to faculty. However, studies such as Lines (2016) and Malesky et al. (2016) have shown how these contract cheating services can both be undetected by faculty (despite knowledge of their use) whilst also providing acceptable grades for the students engaging in these practices.

As there have been few reports of studies which have been specifically designed to both reduce plagiarism and identify potential cases of contract cheating, we contribute to the literature by detailing the methods which BUW have taken in order to resolve this problem, whilst at the same time increasing the academic writing capabilities of our students.

Language, plagiarism and context in British University Vietnam (BUV)

BUV is a private educational institution which began operations in 2009. BUV holds a unique position in Vietnam's higher education system, as the only university to offer

entirely British undergraduate programmes which are accredited by and offered in partnership with two UK universities. As of February 2020, BUV has approximately 700 students primarily studying degrees in Business and Management subjects.

The majority of BUV students are NNES and study a programme comprising two semesters of study per academic year. All students who begin a course of study must have achieved an English language proficiency score: either an official IELTS Band score of 6.0 with no sub-skill below 5.5, or an alternative English language qualification equivalent to this level.

BUV is in the process of undertaking rapid expansion and has recently relocated to a suburban campus with a capacity for over 7000 students. This dramatic increase in scale has the potential to give rise to new and increased risks for academic quality and reputation, and so it is imperative that appropriate measures are employed to safeguard the quality and rigour of the programmes offered during this period of growth and in the future. Consequently, the faculty of BUV has been working towards the development of an intervention to detect, reduce, and deter students from voluntarily or involuntarily participating in behaviours which would constitute plagiarism, whilst at the same time improving the key language and study skills required by students studying in an international educational setting.

Prior to the introduction of the BUV intervention in April 2016, faculty had identified that many students in their classes may benefit from additional support in developing their academic study skills. BUV had, by chance, also discovered some challenging cases of contract cheating and were also anecdotally aware that this was more common in the student body than previously thought. Due to the historical reliance in the institution on Turnitin as the key tool to identify instances of plagiarism, a new approach to managing the academic integrity of the university needed to be taken which could further improve the English language ability of students.

As any potential threats to the academic integrity of the BUV programmes need to be taken extremely seriously, and the potential benefits to the English language ability of students were clear, the introduction of an initiative to tackle both issues was required. The highly competitive market of private, international higher education in Vietnam also means that any additional benefits provided to students may act as market differentiators. By developing an initiative which could tackle both issues at BUV, and therefore increase the likelihood of students attaining good degrees, this would likely act as a potential selling point to the fee payers and decision makers (most often the parents of students). In this market, as in many others, a strong reputation is a key decision-making factor in the choice of universities. If there was a suggestion that the academic integrity of BUV was anything other than impeccable, this could cause significant problems with student recruitment, as well as damage our relationships with local and international stakeholders.

This intervention had to address several key concerns. Firstly, students had to be provided with additional academic English classes in order to attempt to reduce feelings of low confidence and improve their overall ability to write in English. Secondly, students also had to receive additional support in terms of time management and fostering motivation. An intervention had to provide a tangible, stringent method of detecting instances of contract cheating. Finally, the intervention had to specify the rules and codes of conduct relating to academic integrity expected in an international university

environment, while being careful not to fall into the trap of assuming that Western academic values are a universal constant.

The intervention: Academic English Masterclass

Based upon the analysis presented above, BUV approved the creation of a standalone compulsory module for all undergraduate students, entitled Academic English Masterclass (AEM) which ran for the first time in April 2016.

The module consists of 2 hrs of class-based tuition per week for 12 weeks for all undergraduate students and culminates in a novel final exam, which functions as both a control and benchmark for students' English writing ability as well as enabling fingerprinting of submitted work to be carried out.

The process of syllabus development was based on a needs analysis, as suggested by Nunan (1988), of a convenience sample of 30 students, targeting their 'needs, lacks, and wants' (Nation and Macalister 2010, p.25) and adapted for the East Asian context based on the research of Cai (2013). This was combined with informal one-to-one interviews with all 30 members of the sample group, and an initial diagnostic test in the form of a written essay. The needs analysis revealed that in terms of composition skills, students required the most assistance with essay planning, paraphrasing, referencing, and finding relevant sources of information. Many final year students admitted to plagiarising when they were unable to put ideas into their own words or were unable to identify the boundaries of utilising others' material versus academic misconduct. This suggests that although first year students may require more focussed training on academic misconduct policy and basic EAP training, the requirements for final year students may be different. This insight was incorporated into the design of the course.

A final consideration in the design of the programme was the international context of BUV. Academic integrity is far from a universal concept and ignores the Eastern academic tradition of duplicating material as homage (Stowers and Hummel 2011). This is an important consideration in terms of understanding students' interpretation of plagiarism, and it is possible that the view of reusing material in 'homage' is not seen by all students in this cultural context as a breach of academic integrity. However, research on this area is conflicted, and some authors suggest that plagiarism is more frequently linked to individual preference rather than cultural acceptability (Martin 2011). Regardless of this potential cultural paradigm clash, it remains important in this context that the AEM programme explicitly teaches and explains the underlying philosophical foundations of the British academic system, and the conventions that must be followed to avoid committing plagiarism.

The needs analysis led to the development of a multidimensional syllabus with the course goal of raising the awareness of acceptable practices surrounding plagiarism and academic misconduct, whilst at the same time, developing students' researching and writing skills. This is tested by a final written assessment under exam conditions. Students are provided with a set of multiple-choice questions to assess knowledge about acceptable academic practices, and are also set a writing task. In this task they are given extended extracts from a variety of sources, including academic and non-academic

sources of information with differing degrees of bias, and must tackle an essay question in which they utilise these sources. This procedure ensures that the essay written by the student (and subsequently used as a fingerprint) is entirely their own work,¹ and also provides them with the opportunity to demonstrate their ability in every facet of academic writing, including not only grammatical and lexical accuracy, but also the skills of paragraphing, paraphrasing, referencing, and critical thinking (as text extracts must be analysed for their impartiality). Alongside the original exam script is a companion piece, written by the marker, that contains several key points related to the writer's ability, along with a band score of 1–9, which is developed based on a rubric and band score system of English proficiency. The rubric and band system scores students on grammatical accuracy, coherence, academic skills (referencing, paragraphing, and synthesis of material), and vocabulary. The marked sample is available for checking by faculty by the time students submit their summative assignments for their academic modules.

Markers must carry out a check using the writing sample on all high scoring assessments (papers scoring 70% and above), as well as a random selection of 10% of papers from each set of assessments, with a minimum sample size of six papers. Although all grading is carried out anonymously, once a paper has been graded, markers are permitted to use the student number to match up with the student name to aid in initial authorship investigation. All markers are trained how to perform these checks, and this process is discussed later in the paper.

Following the introduction of this intervention, all students were reminded of the dangers of plagiarism and new warnings were introduced to all assignment guidelines highlighting the severity of consequences if students were caught plagiarising. All students were made aware that their writing samples obtained during the AEM exam would be made available online for faculty and misconduct panels to check if there were any suspicions regarding their writing. New writing samples are obtained every semester from students, approximately 3 weeks before the assignment submission period begins in order to reduce the likelihood of significant changes being seen in the writing styles of students over time.

Methods and analysis of results

Data collection and screening

If any student submission is flagged by a marker as a potential plagiarism or contract cheating case, a process is initiated by the faculty members which ends in the student being notified by the administration that they are required to attend an informal meeting to discuss their work. Most cases of plagiarism are resolved at this stage and any penalties recorded. If, after this stage, there are concerns regarding potential contract cheating students are requested to attend an academic misconduct panel and participate in a *viva voce* of their submission in the presence of both a subject matter

¹Bretag et al. (2018) demonstrate the widespread nature of cheating in university exams and Harper, Bretag and Rundle (2020) demonstrate the lack of ability of markers to detect this, which raises a question regarding this statement. However, given the relatively low stakes of this particular assessment, and that it is the writing *style* of the student that we are most interested in as opposed to the *content*, we believe this to not be of major concern.

expert and a misconduct expert. Following the viva, if this panel has remaining suspicions of contract cheating, then the case is escalated to the most serious university panel for a meeting with the student. This panel will make the final decision as to whether contract cheating has occurred and will use a wide variety of sources of evidence in making its final decision. These include the writing samples obtained during the AEM exam, statements from relevant faculty, the previous marks obtained by the student, results from the initial *viva* and additional questions which the panel may put to the student. As the typical penalty for a student found to have utilised any contract cheating services is a failure of their award, it is the responsibility of the university to establish proof beyond reasonable doubt in these cases, and no decision is made solely on the basis of the comparison of the fingerprint with the submitted piece of work. The procedures used by BUUV are set by the awarding body, and there is an appeal process available to the student.

In February 2020, we conducted an analysis of the plagiarism and contract cheating cases recorded during this process from the semesters of April 2014 through October 2019 to answer three questions:

1. What is the overall prevalence of plagiarism committed by students at BUUV?
2. Has the AEM initiative been successful in reducing plagiarism cases?
3. Has the AEM initiative been successful in reducing detected incidences of contract cheating?

Before carrying out the analysis, the data was screened in the following way: Firstly, all recorded cases where a misconduct panel determined that no form of plagiarism had occurred in the flagged submission, and therefore gave a verdict of 'no case to answer', were removed. Any incidences where a verdict of 'poor academic practice' was given by the panel solely due to poor referencing practices were also excluded from the results. If one student had been punished for several plagiarism violations, each incident was counted separately.

The results of this analysis are shown in Table 1.

Overall prevalence of plagiarism and contract cheating

From a total of 12,937 student submissions, analysis of the data revealed 448 plagiarism offences over the twelve-semester period between April 2014 and October 2019. The percentage of submissions found to have contained some element of plagiarism (excluding contract cheating cases) ranged between 2.35% and 7.08% each semester, with a mean percentage of 3.46% across the period of study. As the dataset covers multiple years, some incidences of plagiarism were from individual students who had committed plagiarism offences over multiple semesters.

With the caveat that it is possible that the study may underestimate plagiarism in the student body (as it would be unwise to believe that any higher education institution detects 100% of plagiarism cases), the first point to note is that the prevalence of detected plagiarised submissions is much lower than described in previous studies examining plagiarism data (as opposed to self-report studies). These studies have revealed mean rates of plagiarism of 26% ($n = 182$) (Barret & Malcolm 2006), 26.2% ($n = 290$) (Walker 2010), and 10.8% ($n = 74$) (Warn 2007) respectively. Within a specifically Vietnamese

Table 1 Descriptive Plagiarism Results at BUJ

	Semester start date	Number of assignment submissions	Number of detected cases of plagiarism	Plagiarism cases as percentage of assignment submission	Number of detected Contract Cheating cases	Contract Cheating cases as percentage of plagiarism cases	Contract Cheating cases as percentage of assignment submissions
Results prior to the introduction of the AEM intervention	April 2014	642	33	5.14%	1	3.03%	0.16%
	October 2014	715	21	2.94%	1	4.76%	0.14%
	April 2015	933	37	3.97%	1	2.70%	0.11%
	October 2015	847	60	7.08%	8	13.33%	0.94%
Results following the introduction of the AEM intervention	April 2016	872	31	3.56%	3	9.69%	0.34%
	October 2016	799	55	6.88%	0	0.00%	0.00%
	April 2017	994	39	3.92%	1	2.56%	0.10%
	October 2017	1064	43	4.04%	0	0.00%	0.00%
	April 2018	940	31	3.30%	1	3.23%	0.10%
	October 2018	1492	9	0.60%	1	11.11%	0.07%
	April 2019	1577	37	2.35%	2	5.41%	0.13%
	October 2019	2062	52	2.52%	0	0.00%	0.00%
Total/Average before AEM:		3137	151	4.81%	11	7.28%	0.35%
Total/Average after AEM		9800	297	3.03%	8	2.69%	0.08%
Total/Average overall:		12,937	448	3.46%	19	4.24%	0.15%

context, Ba et al. (2016) found that 73% ($n = 681$) of the submissions tested in their study had Turnitin similarity indexes of over 20%, and Tran et al. (2017) found that in their studies of two Vietnamese universities, there were plagiarism levels (defined by similarity indexes over 24%) of 91.7% and 61.7%.² Our study differs from those cited above due to the longitudinal aspects of the data collection period, meaning that a much larger sample has been obtained for analysis.

The results may indicate that BUJ students demonstrate a lower predilection towards plagiarism than the norm, however, they are more likely explained by the large sample utilised in the study. Even though faculty (Andrews et al. 2007) and students (Scanlon and Neumann 2002) alike may consider plagiarism to be a significant problem

²The authors of these papers suggest that this equates to a high probability of plagiarism having occurred, however text matching software such as Turnitin does not identify plagiarism, it simply identifies similarities in documents which *may* indicate that plagiarism has occurred in some form. Just because there is a high degree of similarity identified, does not necessarily mean that an author has engaged in plagiarism. This may occur in cases where students have submitted improved versions of papers as part of a continuous assessment initiative.

in their institutions, our results demonstrate that a quantitative analysis of a larger data sample could reveal a lesser problem than initially imagined. Despite the professed increased propensity of non-native English speaking 'International' students to commit plagiarism (Walker 2010), the low levels of plagiarism indicated in the set of submissions (even though almost all submitting students are NNES) indicates that this suggestion is not universally accurate, a viewpoint echoed by Soto et al. (2004).

Identified levels of contract cheating were overall very low, with a total number of 19 cases over the period, ranging from 0% to 0.94% of submissions per semester, with a mean percentage of 0.15% of the total number of submissions in the time period. This prevalence rate is significantly lower than the figures reported by Curtis and Clare et al. (2017), of 3.5% of students (not submissions) having committed these offences, and by Harper et al. (2020) of 2.6%. However, as contract cheating cases are more difficult to detect than more 'traditional' plagiarism offences (whether intentional or unintentional), we recognise that the detected cases are unlikely to be fully representative of the actual levels of contract cheating in the student body.

Effectiveness of the AEM in reducing plagiarism

Prior to the introduction of the AEM intervention in the April 2016 semester, the mean percentage of submissions found to contain plagiarism was 4.81% ($n = 3137$). Following the introduction of the intervention, the mean percentage of submissions found to contain plagiarism dropped to 3.03% ($n = 9800$); a 37.01% decrease from the results prior to the intervention. Although the rates of plagiarism were already low prior to the introduction of the AEM, the further reduction in plagiarism demonstrates that the intervention has achieved one of its stated aims of educating students about appropriate academic standards and reducing levels of plagiarism. These findings are in line with those of Soto et al. (2004), and Levine and Pazdernik (2018), demonstrating that training programmes such as the AEM may help reduce plagiarism.

Effectiveness of the AEM in reducing contract cheating

With regards to the prevalence of contract cheating before and after the AEM intervention, the results do show a reduction in the percentage of contract cheating cases detected, from 0.35% of submissions, to 0.08% of submissions, a 77.14% decrease. With the assumption that the decrease in identified cases is not due to any decrease in the ability of markers to detect these (given the additional training that occurred), this apparent reduction in contract cheating may be due to several factors or a combination of these factors. Firstly, an improvement in student knowledge of appropriate academic standards may have increased the awareness of what is expected of them in a university setting. Secondly, knowing that there will be increased scrutiny of their submissions regarding contract cheating, and the knowledge that samples of their work are available for checking may have increased the perceived risk of contract cheating. Thirdly, any reduction may be due to real improvements in the EAP abilities of the students. As the English language ability of students has been shown to be linked to plagiarism, the increased EAP skills of the students may have reduced the perceived need to obtain contract cheating services.

However, the relative rarity of contract cheating as a percentage of submissions, and the very small total number of cases over the entire period of investigation do not allow us to make any firm conclusions as to the effectiveness of this intervention on the reduction of detected cases of contract cheating. The relatively large number of cases identified in the October 2015 semester compared to other semesters, and the limited periods of data collection prior to the introduction of the intervention have likely made a comparison of contract cheating data before and after the intervention untenable.

Despite this, we believe that continuing with this initiative is important. By continuing to educate students in academic writing skills and expected academic practice, as well as establishing a protocol of collecting and checking student writing samples, we can reduce plagiarism, provide a disincentive for students who may seek to engage in contract cheating, and obtain a valuable data source for the further investigation of any such detected cases.

Discussion

Although the preliminary results of this intervention are promising, any benefits of an intervention such as the AEM must be considered alongside an understanding of the numerous challenges of any intervention involving the collection and comparison of student writing samples.

Firstly, faculty carrying out marking of assessments must know which submissions are suspicious, and therefore warrant checking against the student fingerprints. In order to do this on an ad-hoc basis, some prior expectations as to the quality of the submitted work must be held. Although some faculty may be aware of the general quality of work they are expecting from a set of assignment submissions, the use of anonymous marking means that as long as the quality of work is generally in line with the entire cohort, markers may not necessarily detect a clear difference between contracted and legitimate assignments. As the size of student cohorts increases, this leads to a wider spread of both marks and writing styles being expected, and the likelihood of faculty having initial suspicions is further reduced, therefore compounding this problem. For institutions which have a high concentration of NNES, an additional challenge which may be encountered is that of fellow NNES students being hired for contract cheating, as opposed to 'professional' native English speaking contract cheating services. This sub-type of contract cheating may be more appealing to some students, as fellow NNES students may have similar writing styles and have completed the same, or similar classes. This means that the differences between these submissions and fingerprinted work may not be as apparent when compared to the results obtained from professional contract cheating websites.

Secondly, faculty may not always accurately detect cases of contract cheatings, even if a submission is checked for consistency against the fingerprinted sample. Markers will likely have differing skill levels in their ability to accurately detect differences in writing styles between a submission and a fingerprint and some cases may be missed. Therefore, any institution considering the introduction of fingerprinting must be aware of the potential increase in false negatives occurring due to some submissions not being investigated appropriately and implement training programmes to address this. This method also does not address cases where a writing sample would not be helpful in determining authorship of an assessment, such as computer coding or artwork.

Conversely, the potential risk of false positives must also be considered. If faculty members flag a submission as a possible case of contract cheating due to a change in writing styles between a fingerprint and a submitted assignment, there must be a fair and consistent approach to investigating these cases fully. Markers must also be aware that improvements in English language abilities and writing styles are likely to be seen when comparing what can be produced under timed, exam conditions, compared to a take-home assignment, as students will have had time to proofread, plan, edit, and check their final submission.

Research by Dawson et al. (2019) has indicated that the training of markers can improve their ability to identify contract cheating, therefore to minimise the problems stated above, all faculty members receive training on how to assess work for potential cases of contract cheating, and assessments are only graded by faculty who have completed this training. When checking for potential evidence of contract cheating, markers are asked to investigate several things. The initial step is an overall comparison of the student's writing in the unsupervised, external assessment with the sample produced under exam conditions. If a student produced a flawless submission in adherence to all academic standards, but during the AEM written exam had received a low score in this area, or the overall standards of English were very different, this might indicate a second or alternate author.

Other techniques based on forensic linguistics are also used. These include comparing the submission with the sample to see if there are mismatches between the writer's unique choice of words and individual style of writing (idiolect), and their tendency to use certain constructions (coselection and lexical choice) (Coulthard, 2010).

Markers are also trained to identify other potential indicators of contract cheating, either of the whole document, or of partial sections. These indicators include changes in formatting or styles of writing in different sections of the text, as well as examining the document properties for any suspicious elements such as very short editing times (indicative of content being copied into a brand new document before submission), or whether there are inconsistencies in the named author of the document. Even the choice of sources used or not used in a submission could raise suspicions: for example, not citing key sources indicated during class sessions. By training all markers how to check for contract cheating, making comparisons between the sample and submissions part of the marking procedure, and carrying this procedure out on a regular basis, it is our hope that we can improve the capacity of markers to identify instances of contract cheating.

Although individually none of the above indicators would ever be considered conclusive evidence of contract cheating, and the fingerprinting method has significant limitations as discussed, all the above can be employed by a panel investigating whether academic misconduct may have occurred.

Reducing and detecting plagiarism and contract cheating requires a holistic approach to be taken (McCabe 2005; Morris 2018). We believe that initiatives such as the AEM programme which aim to improve the English capabilities of students, educate them on expected academic conduct practices, and discourage contract cheating fit this definition, and our results demonstrate how doing so may assist with this goal.

Conclusion

This paper has discussed the introduction of an intervention designed to improve the academic writing skills of students, reduce levels of plagiarism, and provide a tool to assist in the detection of contract cheating by capturing a 'fingerprint' of a writing sample.

The data collected over the course of 12 semesters show a 37.01% decrease in the rate of detected plagiarism following the introduction of the AEM intervention, and suggest that the introduction of a programme like this could help institutions with reducing plagiarism.

The levels of detected contract cheating cases did decrease following the introduction of the intervention, however, the very small numbers of detected contract cheating cases both pre and post intervention mean that we cannot make a conclusion regarding the use of collecting writing samples as an effective tool to help detect these cases. We have recognised the limitations of this fingerprinting exercise and suggested potential mitigations to these through faculty training.

Despite using a large database of student submissions ($n = 12,937$), the data shows surprisingly low levels (3.36%) of detected plagiarism overall, which do not match the high prevalence of plagiarism that has previously been recorded in the literature, however, by analysing detected cases of plagiarism data as opposed to student self-reported data, it is possible that this study may have underestimated plagiarism in the student body. Previous studies have used much smaller samples of student submissions in their analysis, which suggests that different results may be obtained when examining larger sets of data. We therefore recommend that further research should try to use longitudinal university or department wide databases for analysis purposes, as opposed to individual class submissions, as this may give a more accurate representation of the prevalence of plagiarism in an institution.

The issue of academic misconduct is becoming increasingly more visible to the general public. In the United Kingdom, 40 university leaders have written to the Minister of State for Universities, Science, Research and Innovation demanding a ban on companies offering contract cheating services (BBC News 2020), and the Advertising Standards Authority has already banned misleading advertisements from one of these companies (Advertising Standards Agency, 2019). We recognise that the costs required for an intervention strategy such as the AEM may pose a barrier to entry for many institutions, but given the increasing focus on academic integrity, this is not an issue that universities can afford to ignore. We therefore recommend the use of similar initiatives in other institutions as a potential method to educate students about expected academic practice, reduce plagiarism, and believe the potential benefits justify the challenges of introducing such an initiative.

Abbreviations

AEM: Academic English Masterclass; BUV: British University Vietnam; EAP: English for Academic Purposes; NNES: Non-Native English speaker

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Existence results for functional first-order coupled systems and applications

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This paper is concerned with the existence of solutions of the first-order fully coupled system with coupled functional boundary conditions. These functional boundary conditions generalize the usual boundary assumptions and may be applied to most of the classical cases.

The arguments used are based on the Arzela-Ascoli theorem and Schauder's fixed-point theorem.

An application to a mathematical model of the thyroid-pituitary interaction and their homeostatic mechanism is included.

KEYWORDS

coupled nonlinear systems, functional boundary conditions, mathematical modelling, Schauder fixed-point theory, thyroid-pituitary homeostatic mechanism

1 | INTRODUCTION

This paper is concerned with the study of a fully nonlinear coupled system of equations

$$u'_i(t) = f_i(t, u_1(t), \dots, u_n(t)), \quad (1)$$

with $i = 1, 2, \dots, n, t \in [a, b]$ and $f_i : [a, b] \times \mathbb{R}^n \rightarrow \mathbb{R}$ are L^1 -Carathéodory functions, subject to the nonlinear functional boundary conditions

$$u_i(a) = L_i(u, u(b), u^*(a)), \quad (2)$$

where $i = 1, 2, \dots, n, L_i : (C[a, b])^n \times \mathbb{R}^n \times \mathbb{R}^{n-1} \rightarrow \mathbb{R}$ are continuous functions with properties later to be defined, and

$$\begin{aligned} u &= (u_1, \dots, u_n) \\ u(b) &= (u_1(b), \dots, u_n(b)), \\ u^*(a) &= (u_1(a), \dots, u_j(a), \dots, u_n(a)), \quad j = 1, \dots, n, j \neq i. \end{aligned}$$

Systems of differential equations are very popular in mathematical modelling because of their high applicability in diverse areas like population dynamics, finance, medicine, biotechnology, physics, etc. Some examples of these applications can be seen in Nieto and Zhang and Fan.^{1,2}

There are not many cases available in the literature dealing with coupled systems of equations one can point,³⁻⁶ however, this paper generalizes some of the results presented there as it deals with both coupled equations. Moreover, to the best of our knowledge, it is the first time where coupled systems are considered with coupled functional boundary conditions. This feature allows to generalize the classical boundary data in the literature, such as two-point or multi-point, nonlinear, nonlocal, integro-differential conditions, among others. Indeed, the functional part can deal with global boundary

assumptions, such as with minimum or maximum arguments, infinite multipoint data, integral conditions, . . . , on the several unknown functions. More details on functional problems can be seen in the previous studies⁷⁻¹² and the references therein.

The technique used is based on the Arzèla-Ascoli theorem and Schauder's fixed-point theorem. An example and an application of (1)-(2) to the mathematical model describing the thyroid-pituitary homeostatic mechanism is shown to illustrate the applicability of the problem discussed. This example is presented to emphasize the huge potential of applications from functional boundary conditions used and consequently the main existence result.

2 | DEFINITIONS AND ASSUMPTIONS

Along this work, we consider the space of continuous functions in $[a, b]$, $(C[a, b])$, equipped with the norm $\|u\| = \max \{\|u_i\|, i = 1, \dots, n\}$ where $\|u_i\| = \max_{t \in [a, b]} |u_i(t)|$.

As it is well known, in this way, $C[a, b]$ is a Banach space.

The functional boundary functions verify the assumption:

(H1) $L_i : (C[a, b])^n \times \mathbb{R}^n \times \mathbb{R}^{n-1} \rightarrow \mathbb{R}$ are continuous functions. Moreover, $L_i(\eta, x, y)$ are uniformly continuous when (η, x, y) are bounded and decreasing on η , for $i = 1, \dots, n$.

(H2) The functions $L_i : (C[a, b])^n \times \mathbb{R}^n \times \mathbb{R}^{n-1} \rightarrow \mathbb{R}$ are decreasing in the i th component of first and second arguments.

Remark 1. Condition (H2) is critical to guarantee that the problem (1)-(2) is well-defined and solvable. In fact, (H2) avoid the periodic case, for which the the problem (1)-(2) may have no solution. For example, for $n = 1$, the problem

$$\begin{cases} u'(t) = 1 \\ u(a) = u(b), \end{cases}$$

with $a < b$ has no solution.

The admissible functions for our work will be the L^1 -Carathéodory functions, according the following definition:

Definition 2. The functions $f_i : [a, b] \times \mathbb{R}^n \rightarrow \mathbb{R}, i = 1, \dots, n$, are L^1 -Carathéodory if they verify

- (i) for each $(y_1, \dots, y_n) \in \mathbb{R}^n, t \mapsto f_i(t, y_1, \dots, y_n)$ are measurable on $[a, b]$, for $i = 1, \dots, n$;
- (ii) for almost every $t \in [a, b], (y_1, \dots, y_n) \mapsto f_i(t, y_1, \dots, y_n)$ is continuous in \mathbb{R}^n , for $i = 1, \dots, n$;
- (iii) for each $L > 0$, there exists a positive function $\psi_{iL} \in L^1[a, b], i = 1, \dots, n$, such that, for $\max \{\|y_i\|, i = 1, \dots, n\} < L$,

$$|f_i(t, y_1(t), \dots, y_n(t))| \leq \psi_{iL}(t), \text{ a.e. } t \in [a, b], i = 1, \dots, n.$$

Schauder's fixed-point theorem will be an important tool to guarantee the existence of fixed points for our operator:

Theorem 3. (Zeidler¹³). *Let Y be a nonempty, closed, bounded, and convex subset of a Banach space X , and suppose that $P : Y \rightarrow Y$ is a compact operator. Then P has at least one fixed point in Y .*

3 | MAIN RESULT

In this section, we present and prove the main existence result for (1)-(2), given by the following theorem:

Theorem 4. *If f_i are L^1 -Carathéodory functions, for $i = 1, \dots, n$, and (H1), (H2) hold, then the problem (1)-(2) has at least one solution $u \in (C[a, b])^n$.*

Proof. Let us consider the integral system given by

$$u_i(t) = L_i(u, u(b), u^*(a)) + \int_a^t f_i(s, u_1(s), \dots, u_n(s)) ds, \tag{3}$$

and the operator

$$T : (C[a, b])^n \rightarrow (C[a, b])^n$$

defined by

$$T(u_1, \dots, u_n) = (T_1(u_1, \dots, u_n), \dots, T_n(u_1, \dots, u_n)), \quad (4)$$

where $T_i : (C[a, b])^n \rightarrow C[a, b]$, $i = 1, \dots, n$, given by

$$T_1(u_1, \dots, u_n) = L_i(u, u(b), u^*(a)) + \int_a^t f_i(s, u_1(s), \dots, u_n(s)) ds. \quad (5)$$

If u is a fixed point of T then T_i maps u to u_i , $i = 1, \dots, n$, and vice-versa, we will use the Arzèla-Ascoli theorem and Schauder's fixed-point theorem to prove that the problem (1)-(2) has at least one solution.

For clarity, we consider several claims:

Claim 1. $TD \subset D$, for some $D \subset (C[a, b])^n$ a bounded, closed, and convex subset.

Consider

$$D = \left\{ (u_1, \dots, u_n) \in (C[a, b])^n : \|(u_1, \dots, u_n)\| \leq k \right\},$$

where

$$k := \max \left\{ k_i + \int_a^t \psi_{iL}(s) ds, i = 1, \dots, n \right\} < \infty,$$

and, by (H1),

$$k_i := \max \{ L_i(u, u(b), u^*(a)), i = 1, \dots, n \}.$$

Then,

$$\begin{aligned} \|T(u_1, \dots, u_n)\| &= \max \{ \|T_1(u_1, \dots, u_n)\|, \dots, \|T_n(u_1, \dots, u_n)\| \} \\ &= \max \left\{ \max \left| \begin{array}{c} L_i(u, u(b), u^*(a)) \\ + \int_a^t f_i(s, u_1(s), \dots, u_n(s)) ds \end{array} \right|, i = 1, \dots, n \right\} \\ &\leq \max \left\{ k_i + \int_a^t \psi_{iL}(s) ds, i = 1, \dots, n \right\} = k, \end{aligned}$$

proving Claim 1.

Claim 2. The operator T is completely continuous.

To prove that the operator T is completely continuous, it is sufficient to show that T is uniformly bounded and T is equicontinuous.

Applying the above arguments, it can be proved that T_i are uniformly bounded, for $i = 1, \dots, n$, and therefore, T is uniformly bounded.

In order to show that the operator T is equicontinuous, let us consider $t_1, t_2 \in [a, b]$, such that, without any loss of generality, $t_1 < t_2$.

Then for T_i , $i = 1, \dots, n$, we have

$$\begin{aligned} &|T_i(u_1(t_2), \dots, u_n(t_2)) - T_i(u_1(t_1), \dots, u_n(t_1))| \\ &\leq \int_{t_1}^{t_2} |f_i(s, u_1(s), \dots, u_n(s))| ds \leq \int_{t_1}^{t_2} \psi_{iL}(s) ds \rightarrow 0, \end{aligned}$$

as $t_1 \rightarrow t_2$. So, each operator T_i is equicontinuous and, hence, the operator T is equicontinuous.

Therefore, by Arzèla-Ascoli's theorem, the operator T is compact, and using Schauder's fixed-point theorem, we obtain that T has a fixed point, that is, the problem (1)-(2) has at least a solution $u \in (C[a, b])^n$. \square

4 | EXAMPLE

Consider the problem composed by the coupled system of differential equations

$$\begin{cases} u_1'(t) = (u_2(t))^2 + 2(u_3(t))^3 \\ u_2'(t) = (u_1(t))^3 - e^{u_3(t)} + (u_2(t))^2 \\ u_3'(t) = u_2(t) - \ln(|u_1(t)| + 1), \end{cases} \tag{6}$$

together with the functional boundary conditions

$$\begin{aligned} u_1(a) &= - \max_{t \in [a,b]} u_1(t) - u_1(b), \\ u_2(a) &= - \int_a^b u_2(t) dt - (u_2(b))^3, \\ u_3(a) &= - \min_{t \in [a,b]} u_3(t) - \sqrt[3]{u_3(b)}. \end{aligned} \tag{7}$$

Clearly, the above problem is a particular case of (1)-(2), where

$$\begin{aligned} f_1(t, x, y, z) &= y^2 + 2z^3, \\ f_2(t, x, y, z) &= x^3 - e^z + y^2, \\ f_3(t, x, y, z) &= y - \ln(|x| + 1) \end{aligned}$$

are L^1 -Carathéodory functions with, for $L > 0$ such that $\max\{|x|, |y|, |z|\} < L$,

$$\begin{aligned} |f_1(t, x, y, z)| &= L^2 + 2L^3, \\ |f_2(t, x, y, z)| &= L^3 + e^L + L^2, \\ |f_3(t, x, y, z)| &= L + \ln(L + 1), \end{aligned}$$

and the functional boundary conditions, verifying (H2),

$$\begin{aligned} L_1((x_1, x_2, x_3), (y_1, y_2, y_3), (z_1, z_2)) &= - \max_{t \in [a,b]} x_1(t) - y_1, \\ L_2((x_1, x_2, x_3), (y_1, y_2, y_3), (z_1, z_2)) &= - \int_a^b x_2(t) dt - (y_2)^3, \\ L_3((x_1, x_2, x_3), (y_1, y_2, y_3), (z_1, z_2)) &= - \min_{t \in [a,b]} x_3(t) - \sqrt[3]{y_3}. \end{aligned}$$

As all the assumptions of Theorem 4 are satisfied, then problem (6) and (7) has at least a solution $(u_1, u_2, u_3) \in (C[a, b])^3$.

5 | THE THYROID-PITUITARY HOMEOSTATIC MECHANISM

In Danziger and Elmergreen,¹⁴ the authors develop a mathematical model of the thyroid-pituitary interaction. This model is based on the fact that the anterior lobe of the pituitary gland produces the hormone thyrotropin, under the influence of a thyroid releasing factor (TRF), a releasing hormone secreted by the hypothalamus. The hormone thyrotropin causes the thyroid gland to produce an enzyme, which when activated, produces the hormone thyroxine. This hormone has a negative feedback effect on the secretion of thyrotropin from the pituitary gland. This mechanism can be seen in more detail in Mukhopadhyay and Bhattacharyya,¹⁵ and the following mathematical model is suggested

$$\begin{aligned} \frac{dP}{dt} &= \begin{cases} c - h\theta - gP, & \theta \leq \frac{c}{h} \\ -gP, & \theta > \frac{c}{h} \end{cases}, \\ \frac{dE}{dt} &= mP - kE, \\ \frac{d\theta}{dt} &= aE - b\theta, \end{aligned} \tag{8}$$

where P , E , and θ represent the concentrations of thyrotropin, activated enzyme, and thyroxine, respectively; b , g , and k represent the loss constants of thyroxine, thyrotropin, and activated enzyme, respectively; a , h , m are constants expressing the sensitivities of the glands to stimulation or inhibition; c is the rate of production of thyrotropin in the absence of thyroid inhibition. All constants are assumed to be positive.

We consider, for $t \in [0, T]$ with $T > 0$, the differential equations 8 coupled with the boundary conditions

$$\begin{aligned} P(0) &= \min_{t \in [0, T]} \theta(t), \\ E(0) &= \int_0^T E(T)E(s)ds, \\ \theta(0) &= \max_{t \in [0, T]} P(t). \end{aligned} \quad (9)$$

These functional boundary conditions fully reflect the considerations and conclusions presented in Mukhopadhyay and Bhattacharyya,¹⁵ As the concentrations of thyrotropin and thyroxine are based on a negative feedback effect, when one is at its maximum, the other will be at its minimum, and vice-versa. The concentration of the activated enzyme, E , is considered to be, at its initial moment, a weighted average of the amount present on the system, weighted by the final value of the activated enzyme, E , at T . Functional boundary conditions allow these assumption to be considered in full, as they allow for operators to be considered as boundary conditions. The minimum concentration of thyrotropin at start is illustrated by the first condition, the average concentration of the activated enzyme by the second and the maximum concentration of thyroxine is described by the last condition.

This model can now be presented in the form of (1)-(2), where $u_1 = P$, $u_2 = E$, and $u_3 = \theta$,

$$f_1(t, u_1, u_2, u_3) = \begin{cases} c - hu_3 - gu_1, & u_3 \leq \frac{c}{h} \\ -gu_1, & u_3 > \frac{c}{h} \end{cases},$$

$$f_2(t, u_1, u_2, u_3) = mu_1 - ku_2,$$

$$f_3(t, u_1, u_2, u_3) = au_2 - bu_3,$$

$$L_1(u_1, u_2, u_3, u_1(T), u_2(T), u_3(T), u_2(0), u_3(0)) = \min_{t \in [0, T]} u_3,$$

$$L_2(u_1, u_2, u_3, u_1(T), u_2(T), u_3(T), u_1(0), u_3(0)) = \int_0^T u_2(T)u_2(s)ds,$$

$$L_3(u_1, u_2, u_3, u_1(T), u_2(T), u_3(T), u_1(0), u_2(0)) = \max_{t \in [0, T]} u_1.$$

It is clear to see that f_1, f_2 , and f_3 are L^1 -Carathéodory functions such that, for $\max \{ \|u_1\|, \|u_2\|, \|u_3\| \} < L$,

$$|f_1(t, u_1, u_2, u_3)| \leq c + hL + gL := \psi_{1L}(t),$$

$$|f_2(t, u_1, u_2, u_3)| \leq mL + kL := \psi_{2L}(t),$$

$$|f_3(t, u_1, u_2, u_3)| \leq aL + bL := \psi_{3L}(t),$$

and that the boundary conditions L_1, L_2 , and L_3 satisfy (H1). Therefore, by Theorem 4, the system (8)-(9) has at least one solution $(u_1, u_2, u_3) \in (C[0, T])^3$.

A similar approach can be taken in several other models, allowing global conditions to be considered as boundary conditions, highly increasing the level of applicability of these models.

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Open innovation and organizational features: An experimental investigation

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ABSTRACT

This paper reports experimental results on open innovation in which free-riding, efficiency and spillover depend on the ability to affect the number of innovation contributors, and the modularity of the innovation task. This paper provides a tractable laboratory setting that relaxes the restrictive assumption of the theoretical literature that costs of development are independent across individuals. We have induced more distributed problem solving and spillover of knowledge when the process is more non-modular. When efficiency is measured as the percentage of profits made over maximum profits, small groups were more efficient than large groups in the non-modular production environment and efficiency was higher in the modular production environment irrespective of group size. Significantly, there was a higher percentage of spillover in the non-modular production environment, especially for large groups.

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1. Introduction

Following the theme of this special issue, Technology 4.0 is considered here as the interlocking set of technologies that enable Industry 4.0. This includes a number of disruptive innovations derived and implemented across supply chains, incorporating digitalization, autonomy, transparency, mobility, modularization, networking, and socialization of products and their production processes (Pfohel et al., 2015). Technology 4.0 is typified by linkages between organisations (and, in fact, consumers), that share data in a more integrated fashion and essentially become actors in an ongoing process of Open Innovation (OI).

OI (Chesbrough, 2003) is now widely recognised as a powerful tool for new knowledge creation, complex problem solving, and product and process improvement (Bogers et al., 2017). Yet we have conflicting reports as to the benefits of OI across innovation networks (Cheng & Huizingh, 2014). The primary focus of this paper is to extend our understanding of value creation and capture, as

mediated by organizational design, in OI contexts.

The question of value capture is highly topical in current OI research (Chesbrough et al., 2018), and forms a useful extension of distributed problem solving research: i.e. the addition of payoff-sharing to task-sharing and result-sharing. Distributed problem solving underpins our understanding of OI, however, without close monitoring, innovation networks can suffer from a 'free-riding' problem - an interplay between private cost and social benefits. To better understand the consequences, we join with recent efforts by management scholars to add to this rich and interdisciplinary literature by broadening the notion of modularity to take into account the incentives associated with OI.

Among the many aspects that Industry 4.0 addresses, the concept of modularity is often mentioned as it is closely tied to organizational features (Ghobakhloo, 2018). Modularity improves value creation (and thus economic efficiency measured as total surplus created) in distributed problem solving because innovators use less time in communication and more time in computation (Smith & Davis, 1981). In contexts of increased modularity and low communication costs, open innovation will complement, if not substitute, closed innovation modes (Lakhani et al., 2013).

In this paper, we are going to show that: 1. Value creation (through an increase in efficiency) of non-modularity can be improved when the group size is decreased and 2. non-modularity

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is itself valuable as a driver for the adoption of open innovation. In particular, we designed an experimental environment, into which we have induced more distributed problem solving and spillover of knowledge when the process is more non-modular.

The sections that follow begin with a review of the literature that highlights the importance of OI in Industry 4.0, and in turn the importance of value creation and value capture to OI. Then we review how organisation features such as modularity and group size can affect value creation and value capture. This is followed by the method section, which details our experimental design. We propose seven hypotheses on the likely relationship between these variables. Our findings indicate that large groups were associated with a higher free-riding level than small groups, however in non-modular production environments large groups also resulted in greater spillover. Our discussion section explores the extent to which these findings can explain how actors share inputs and payoffs in innovation development, thus extending current theoretical work on firm value capture and organizational design in an OI context. We delimit several important considerations for OI strategy, which has value for individuals and organisations involved in the pursuit of Technology 4.0. We conclude with a critical look at the value of this study and the directions it opens for further research. [Appendix 1](#) reports the instructions to subjects.

2. Literature

[Kohnová \(2018\)](#) suggests that OI is an important way to achieve sustainable development in the turbulent environment of Industry 4.0, given calls for accelerated time to market and the need to manage disruptive innovations. Similarly, [Lee et al. \(2018\)](#) argue that OI provides dynamic new combinations between technology, market, and society to better respond to Industry 4.0.

In OI networks actors share knowledge in order to create value, but they also need to protect knowledge in order to extract profit from it ([Alexy et al., 2013](#)). Individuals and smaller organisations are shown to be willing to trade off effort to be able to accrue a variety of non-pecuniary benefits ([Harhoff et al., 2003](#)). However, large organisations have traditionally been wary, as they may not be able to achieve the pecuniary benefits needed to justify investing in (and then sharing) innovative research ([Teece, 1993](#)). [Bogers et al. \(2018\)](#) highlight the implicit tension: “Open innovation must harness the value-added of openness in science, and yet also promote the investment needed to transform open initiatives into new technologies and new business models” (p. 6). Thus, value creation and value capture are explicit concerns of actors in OI networks. [Chesbrough et al. \(2018\)](#) argues that “Open innovation requires collaboration among distributed but interdependent actors who rely on each other’s capabilities for value creation and capture. Value in open innovation is driven not only by actors’ value creation but also by their ability to capture value” (p. 930).

The function of an OI network is in essence predicated on cooperation in the solving of OI problems. Distributed problem solving is the cooperative solution of problems by a decentralized and coupled collection of knowledge sources (procedures, sets of rules, etc.), located in a number of distinct processor nodes ([Smith & Davis, 1981](#)). [Smith and Davis \(1981\)](#) argue that two forms of cooperation are crucial in distributed problem solving: task-sharing and result-sharing. In the former, nodes assist each other by sharing the computational load for the execution of subtasks. In the latter, nodes assist each other by sharing partial results which are based on somewhat different perspectives on the overall problem.

To create an efficient network of problem solvers, individual actors need to spend the greater percentage of their time in computation rather than communication. Thus the traditional management of a distributed system relies on high modularity so as to offer

conceptual clarity and simplicity of design, and the same applies to problem solving in modern OI contexts ([Lakhani et al., 2013](#)).

Modularity is deeply rooted in the computer science literature. According to [Parnas \(1972\)](#): “[A] ‘module’ is considered to be a responsibility assignment rather than a sub-program” (p. 1054) Why is modularity important? The Conway’s Law ([Conway, 1968](#)) says: “Organisations which design systems are constrained to produce designs which are copies of the communication structure of these organisations” (p. 31). Conway asserts that communication structure ties closely with the partitioning of an organisation. [Parnas \(1972\)](#) states that non-modularity is not optimal if the inner workings of a module overlap with the responsibility of another module. For instance, non-modularity implies that errors are serially correlated across modules copies of the communication structure of these organisations.

When non-modularity takes the form of minimum effort games, various experimental studies (see [Camerer, 2003](#), p. 383 for a review) show that it is easier to achieve a socially inefficient outcome as group size increases. In an open source context, [Baldwin and Clark \(2006\)](#) point to free-riding as the source of inefficient value creation and that [Johnson \(2002\)](#) adds the nuance that such inefficiency varies with group size.

3. Theoretical framework

We review here the theoretical concerns of why modularity and group size affect value creation and capture (measured as economic efficiency) through changes in free-riding and knowledge spillover.

[Kagel et al. \(2016\)](#) state that most economists expect group size to be positively related to free-riding, and with more free-riding, total economic value decreases. [Isaac and Walker \(1988\)](#) and [Issac et al. \(1994\)](#) find that group size does not matter when the cost of a contribution is low, but that group size increases a contribution at a decreasing rate when the cost of a contribution is high. In an open source context, [Baldwin and Clark \(2006\)](#) show theoretically that social efficiency decreases because non-modularity leads to a higher free-riding level among open source developers. By varying group size and modularity, [Johnson \(2002\)](#) shows theoretically that non-modularity is socially inefficient (due to free-riding) for large groups of developers. In [Johnson \(2002\)](#), when the number of developers exceeds a threshold, modular software is more likely to be completed; otherwise, non-modular software is more likely to be completed. This is because “non-modularity will sometimes affect free-riding” ([Johnson, 2002](#), p. 660).

However, in the OI field there is increasing evidence that knowledge spillover is desirable, accepted as the basis for new network and/or alliance creation ([Han et al., 2012](#)), that it underpins the involvement of user communities ([Harhoff et al., 2003](#)), and is being proactively managed ([Lakhani et al., 2013](#); [Henkel et al., 2014](#)). In previous research, both [Baldwin and Clark \(2006\)](#) and [Johnson \(2002\)](#) assume that the costs of development are independent across individuals, implying that the spillover of know-how does not matter to cost saving. But, this restrictive assumption is a deviation from the essential features of distributed problems solving and what is already embedded in OI contexts. We know in practice that individuals share with each other the codes or methods they use, implying that spillover of know-how matters to value creation. This paper relaxes this assumption, and we are going to explain how one can observe different levels of spillover in the laboratory.

4. Methodology

The aim of this paper is to understand the context dependency of ‘value’ for participants in open innovation networks. Our

theoretical frame suggests that free-riding, efficiency, and spillover in innovation networks should depend on the number of innovation contributors, and the modularity of the innovation task. However, innovation systems are notoriously difficult to measure (Carlsson et al., 2002) as a multitude of other variables are also known to affect participation and outcomes. In the sections that follow we outline our choice of an experimental design. Experiments are useful in general in the Social Sciences as they enable more rigorous control of factors to establish causality (Falk & Heckman, 2009). Further, in an OI context, an experimental design provides a methodological benefit in its abstraction of underlying variables; with the potential to create new and otherwise hardly retrievable scientific knowledge about innovation processes (Sorensen et al., 2010).

5. Method

The experiment was based on a factorial design with modularity and number of contributors as factors. An open innovation production process was simulated on the basis of a popular board game called MASTERMIND.¹ The next subsection explains the rules of MASTERMIND and provides justifications for using it for open innovation experiments. Appendix 1 reviews the strategies that solve the traditional (standalone) MASTERMIND. The second subsection presents the experimental design.

5.1. Open innovation and MASTERMIND

The rules of MASTERMIND are simple. In a popular version of MASTERMIND, there are pegs in 6 colors used by the combination breaker and pegs in black and white used by the combination setter. For each game the combination setter secretly sets a combination of 4 coloured pegs. The combination breaker's task is to guess the secret combination. For each guess, the combination setter uses black and/or white pegs to give hints to the combination breaker. A black peg means that the color and position of a guessed peg are correct; a white peg means that the color of a guessed peg is correct but not the position.

A player 'guesses' in MASTERMIND is a reasonable proxy for open innovation in the sense that many examples of open innovation contain an algorithm. Even for open innovations that do not have an algorithm, a guess could be a good proxy in the sense that both are free to use, reuse, and distribute.

5.2. Experimental design

This experiment retained the rules of MASTERMIND, except that at any time subjects could post unfinished games to a public pool where everyone could see the complete history of moves in the posted games. Each game posted had to be accompanied by a non-negative commission price chosen by the one who posted this particular game. The one who solved it first had the commission price transferred from the reward of the poster to themselves. Anyone who solved a posted game had to clone the posted game first, so a copy of the history of work already done would be displayed on the screen for them to continue their work. The exact number of clones could not be observed by the participants. Everyone was allotted three games, each with a random secret combination, in each period. There was a \$1 potential reward for either solving a game by oneself or having other people solve it through the public pool.

The experiment followed a two-by-two factorial design with

production i and number of contributors j as factors, where i = modularity (M) or non-modularity (NM) and j = large (L) or small (S). In the modular production, the potential reward was immediately credited to the subjects' earnings. In the non-modular production, the potential reward was credited only if all allotted games for every subject were solved—this is also called the O-ring requirement. In other words, the total production (or payoff) of a number of contributors was zero if any one of its members failed in the NM production.

In each session, there were 10 periods of 7 min each. Each period ended when the time limit was reached.

5.3. Experimental procedures

The experiment was conducted on networked computers with human subjects in the laboratory of a university in North America. The author developed a software application that is a collaborative version of MASTERMIND. There were 16 subjects for the 'large' number of contributors and 4 subjects for the 'small' number of contributors. A total of 88 students were recruited, most of whom were undergraduate students in the host university. See Table 1 for the experimental design. Students who had already subscribed to the mailing lists of the labs received notice of the experiment. The interested students then signed up for the experiment through an online recruitment system on a first-come-first-served basis. Each session lasted for 2 h. No subject participated in more than one session. Over 95% of the students finished reading the instructions in half an hour. A quiz was administered before the experiment began. The experimenter went to the carrels to check the answers. If there was a mistake, the experimenter explained the mistake to them individually. Individual anonymity was maintained throughout the experiment; subjects did not know the real-world identities of the players in the game. There was a 2-min trial period before Period 1. The average payoff without the show-up fee was \$15.50.

5.4. Hypotheses

Three dependent variables were examined: free-riding, efficiency, and spillover.

Free-riding was measured using three methods. Throughout the following analysis, the first method is applicable and the discrepancies are listed whenever it applies. The first method measures the number of posted games set at zero commission divided by all allotted games. The second method measures the number of posted games set at zero commission divided by all posted games. The third method measures free-riding in the same way as the first method except that only posted games set at a zero commission that have been solved by a person other than the poster are counted. The last method was used to capture the supply of and the demand for free-riding.

Efficiency was measured as the percentage of profits made over maximum profits. A second measure, the percentage of completed games over all allotted games was also used. These two measures coincided in the modular production environment but differed in the non-modular production environment. If only one game were not solved in the non-modular production, the first measure gave zero efficiency but the second gave positive efficiency.

Spillover was measured as the percentage of posted games over total allotted games. One can argue that for knowledge to be spread, it is necessary that a game be posted first. In this sense, unless a game spreads negative know-how, spillover should be positively related to the number of posted games. The general null hypothesis was no difference. The following hypotheses were the alternative hypotheses. In the studies of both Baldwin and Clark (2006) and

¹ MASTERMIND is a registered trademark of Hasbro International Inc.

Table 1
Experimental design.

Group Size	Production	Number of Subjects per Session	Number of Sessions
Large	Non-Modularity	16	2
Large	Modularity	16	2
Small	Non-Modularity	4	2
Small	Modularity	4	2

Johnson (2002), an individual is said to be free-riding if he or she does not complete a task while some other individuals do. The following hypothesis was formulated to test the above prediction:

Hypothesis 1. Free-riding is less prevalent in modular production than in non-modular production.

From the discussion in the theoretic framework section, it is important to test the effects of group size against such “common sense” of economists.

Hypothesis 2. Free-riding is less prevalent for small numbers of contributors than for large numbers of contributors.

The next two hypotheses test the interplay between modularity and free-riding in Johnson (2002).

Hypothesis 3. Free-riding is less (more) prevalent in non-modular production than in modular production for small (large) numbers of contributors.

Hypothesis 4. Efficiency is higher (lower) in non-modular production than in modular production for small (large) numbers of contributors.

Consistent with Parnas (1972), the following prediction seems to be consistent with computer scientists' expectations:

Hypothesis 5. Efficiency is higher in modular production than in non-modular production.

If one believes that this experiment captured some salient features of minimum effort games, the following hypothesis seems reasonable because it is hard to coordinate with a larger number of contributors to reach a more efficient equilibrium in such games (see Camerer, 2003, p. 383).

Hypothesis 6. In the non-modular production environment, efficiency is higher for small numbers of contributors.

In contrast to Baldwin and Clark (2006) and Johnson (2002), the experiment reported in this paper allowed for some spillover of know-how. A question is whether subjects would behave such that the behaviour usually seen in minimum effort games no longer holds. That is, some people choose to exert a rather high effort level in the current period such that their knowledge can be learned by others to solve games in future periods. Consistent with this suspicion, the final hypothesis was formulated as:

Hypothesis 7. Spillover is higher in the non-modular production environment.

6. Findings

Fig. 1 groups all data into four cells that vary in modularity and group size. The plots use only the first measures; the statistical analyses test other measures as well.

Some casual visual inspection results are as follows. It seems somewhat true that free-riding is less prevalent for small groups than for large groups, especially for large groups in later periods. Small groups seem to free-ride more in the non-modular production environment than in the modular production environment.

Efficiency seems to be higher in the modular production environment. In the non-modular production environment, small groups seem more efficient, especially for later periods. It seems that spillover is significantly higher for large groups.

In the statistical analyses, an ANOVA was first used. Standard ANOVA assumes the normality of error terms, an assumption the data did not satisfy. ANOVA was still performed on the data because Conover & Iman (1981) suggest that ANOVA can still be performed the usual way after rank transforming the dependent variables.

The k th observation in cell (i, j) was specified as follows:

$$\text{DependentVariable}_{ijk} = \mu + \text{GroupSize}_i + \text{Modularity}_j + \text{Groupsize}_i \times \text{Modularity}_j + \varepsilon_{ijk} \quad (1)$$

The main results using the Tukey-Kramer test for pairwise comparisons are as follows. The critical value at the 5% significance level for a one-tailed test was 2.35. An asterisk indicates that the corresponding difference in means was significant at this level. See Table 2 for more details.

Result 1 *There was significantly less free-riding in small groups than in large groups.*

Conditional on whether the environment was modular or not, the means of free-riding for small groups were smaller than those for large groups for each of the free-riding measures. The smallest difference was 25.25% (test statistic = 4.07); the largest difference was 91.05% (test statistic = 14.28). All differences were significant at the 5% level.

Result 2 *In the non-modular production environment, small groups were significantly more efficient.*

In the non-modular production environment, the mean of efficiency for small groups was 61.43% (test statistic = 10.47) higher than those for large groups, significant at the 5% level.

Result 3 *There was significantly more spillover in the non-modular production environment.*

For large groups, the mean of spillover in the non-modular production environment was 38.55% (test statistic = 5.47) higher than those in the modular production environment. For small groups, the mean of spillover in the non-modular production environment was 64.63% (test statistic = 11.24) higher than those in the modular production environment. All were significant at the 5% level.

Result 4 *There was significantly less free-riding in the modular production environment than in the non-modular production environment only for large groups.*

For large groups, the means of free-riding in the non-modular production environment were 42.45% (test statistic = 6.05, first measure), 34.60% (test statistic = 4.74, second measure), and 60.30% (test statistic = 8.87, third measure) higher than those in the

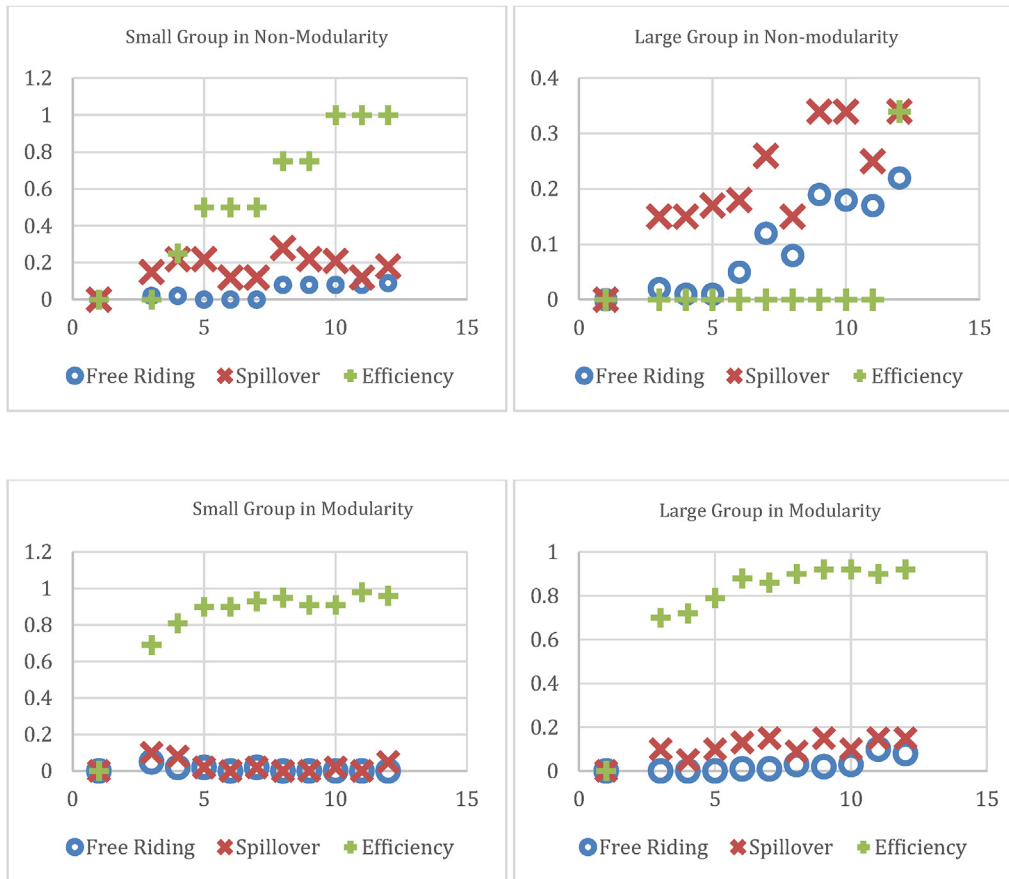


Fig. 1. Percentages of free-riding, spillover, and efficiency varying modularity and group size.

Table 2
Tukey-kramer tests of difference in means.

Dependent Variable	Measure	Held Constant	Means Comparison Between	Means Difference	Test Statistics	
Free-riding	First	S	NM&M	0.00	0.00	
		L	NM&M	42.45	6.05*	
		NM	S&L	-91.05	14.28*	
	Second	M	S&L	-48.80	7.65*	
		S	NM&M	0.00	0.00	
		L	NM&M	34.60	4.74*	
	Third	NM	S&L	-88.50	13.30*	
		M	S&L	-53.90	8.10*	
		S	NM&M	0.00	0.00	
	Efficiency	First	L	NM&M	60.30	8.87*
			NM	S&L	-85.55	13.79*
			M	S&L	-25.25	4.07*
Second		S	NM&M	-21.33	4.07*	
		L	NM&M	-70.20	10.93*	
		NM	S&L	61.43	10.47*	
Third		M	S&L	12.57	2.14	
		S	NM&M	5.10	0.90	
		L	NM&M	21.95	3.16*	
Spillover		First	NM	S&L	10.03	1.58
			M	S&L	26.88	4.24*
			S	NM&M	64.63	11.24*
	Second	L	NM&M	38.55	5.47*	
		NM	S&L	-32.82	5.11*	
		M	S&L	-58.90	9.16*	

Notes.
 1. S, L, NM, and M stand for small groups, large groups, non-modularity, and modularity.
 2. The critical value at the 5% significance level for a one-tailed test is 2.35. An asterisk indicates that the corresponding difference in means is significant at this level.
 3. The means difference is obtained by subtracting the second group mean from the first group mean in the **Means Comparison Between** column.

modular production environment. All were significant at the 5% level.

Result 5 Efficiency in the modular production environment was significantly higher than in the non-modular production environment for large and small groups.

For large groups, the mean of efficiency in the modular production environment was 70.20% (test statistic = 10.93) higher than those in the non-modular production environment. For small groups, the mean of efficiency in the modular production environment was 21.33% (test statistic = 4.07) higher than those in the non-modular production environment. All were significant at the 5% level.

Result 6 There was significantly more spillover for large groups.

In the non-modular production environment, the mean of spillover for large groups was 32.82% (test statistic = 5.11) higher than those for small groups. In the modular production environment, the mean of spillover for large groups was 58.90% (test statistic = 9.16) higher than those for small groups. All were significant at the 5% level.

The overall results were as follows. Hypotheses 1, 3, and 4 were partly rejected, and hypotheses 2, 5, 6, and 7 were not rejected. The test did not reject a result not referred to in all hypotheses: there was a higher percentage of spillover for large groups. To summarize, large groups were associated with a higher free-riding level than small groups. Free-riding was more severe when large groups worked in the non-modular production environment. There was a higher percentage of spillover in the non-modular production environment, especially for large groups. When efficiency was measured as the percentage of profits made over maximum profits, small groups were more efficient than large groups in the non-modular production environment and efficiency was higher in the modular production environment irrespective of group size.

7. Discussion

The primary focus of this paper was to extend our understanding of value capture and creation, as mediated by organizational design, in OI contexts. In this section we review the significance of our findings, and other elements of the paper, to the areas of firm value capture and firm strategic choice in OI contexts.

Our findings extend current work on firm value capture (following Chesbrough et al., 2018) in several important ways. In OI settings it can be difficult to measure the attractiveness of engagement with a problem (Belenzon & Schankerman, 2015; Carlsson et al., 2002). If pecuniary reward allocation is used as a measure, it can only be a rather imperfect signal. Our findings document an experimental case in which pecuniary price was not, at times, used to coordinate resources, in a context where innovation problem solving was decentralized. Free-riding, measured as a zero price to helpers, was prevalent in the experiment. In line with Kagel et al. (2016), large groups were associated with a higher free-riding level than small groups, and free-riding was more severe when large groups worked in a non-modular production environment. Confirming Issac et al. (1994), free-riding resulted in the removal of the signalling function of price for the difficulty level of tasks but did not result in uncompleted problem sets. However, value in our experiment is construed as either efficiency (for the nominal problem setter) or financial reward and knowledge spillover (for the nominal actors in the open innovation network). When efficiency is measured as the percentage of profits made over maximum profits, small groups were more efficient than large

groups in the non-modular production environment and efficiency was higher in the modular production environment irrespective of group size (as suggested by Johnson, 2002). Significantly, there was a higher percentage of spillover in the non-modular production environment, especially for large groups. This can be important for many actors in an OI network (Han et al., 2012; Harhoff et al., 2003), assuming they have the ability to partake in knowledge spillover (Chesbrough et al., 2018).

The extent to which the study has significance as to strategic choices for firms in OI contexts has much to do with the actor's locus (Lakhani et al., 2013) relative to the product being produced, and their ability to influence features of the innovation network (Chesbrough et al., 2018). If the two group sizes used here are a reasonable proxy for the network sizes in a given innovation problem, the following implications arise for organisations nearest to the locus of innovation concerning efficiency: if the production function is restricted to non-modular, reduce the number of contributors; with no such restriction, always choose to distribute tasks in a modular fashion. For actors less close to the locus of innovation, contributor numbers should influence the choice of which OI networks to be involved in, with fewer likely to lead to greater ability to capture pecuniary rewards. Actors in smaller networks may take greater ownership where they are involved in reward allocation (Duhaimé et al., 2019), as here price signalling remains a way to attract help in problem solving. However, efficiency and pecuniary reward capture is not the only goal of actors in OI networks (Han et al., 2012; Harhoff et al., 2003; Henkel et al., 2014). Our findings show that knowledge spillover was significantly higher in the non-modular production environment. The issue of spillover is particularly important for actors further from the locus of innovation; such as user communities (Harhoff, 2003; Lakhani & Wolf, 2005), start ups, and actors originating in developing countries (Rocha et al., 2019). And while spillover has historically been referred to as a cost for firms close to the locus of innovation, it is also a route to increase the market/community for a product (Chesbrough, 2003). It may be desirable to have a broad innovation network where knowledge about an innovation is widely distributed, such as in the case of new technological standards (Chesbrough, 2003; Lakhani et al., 2013).

8. Conclusions

Following calls for increased attention to OI strategy formulation and implementation (Randhawa et al., 2016) this paper reports experimental results when organizational features such as group size and modularity vary. Our research gives a unique insight into the 'paradox of openness' (Laursen & Salter, 2014), demonstrating the willingness of OI network actors to contribute to OI projects even where pecuniary rewards are diminishing. In turn, we were able to measure the effect of OI design to outcomes of free-riding, efficiency, and spillover.

This paper makes two important theoretical contributions, occurring at the intersection Economics and Management, in the domain of open innovation networks. In the first instance, our research suggests that efficiency (or financial reward) can be less important than knowledge spillover for understanding value captured from open innovation networks (Chesbrough, 2018). In the second instance, our research suggest that in open innovation networks *strategic choice* is at least partially determined by the information available on task modularity and group size.

Our research has three important implications for management practice. First, the demonstrated instances of value capture indicate some of the conditions under which firms may be able to acquire pecuniary Vs non-pecuniary rewards. Second, we delimit some of the OI network design factors (network size, modularity of

problems shared) which, taking into account preferences for the type (or types) of 'value' being sought, may allow firms to make strategic choices about their involvement in OI projects. Finally, there are indications that in smaller open innovation projects; the organisation at the central locus may garner greater participation (and thus value creation) where they allow involvement in decisions about who captures value from successful solutions.

This study is not without limits, however these may lead to fruitful avenues for further research. A key limit of our design is the experimental setting, which is a particularly simple rendering of an OI network and its actors, with only a single innovation problem setter in each instance. This being said, unanswered issues arising from this paper offer some promising directions for future research. This study did not directly investigate *why* groups of any size were able to complete their problem solving, and whether each member used open artefacts such as code, contents, or algorithms freely observable to the rest of the group instead of prices to (at least implicitly) signal the attractiveness of tasks. Nor did it directly investigate whether and how open artefacts facilitate learning applicable to other OI projects. However, the data showed that spillover was significantly higher in the non-modular production environment. Thus the exact mechanisms enabling production costs to be lowered, and further innovations to be developed, due to spillover offers a promising path for future research.

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Appendix 1. Instructions to Subjects

The next pages reproduce the instructions to subjects for the non-modular production only. The instructions for the modular production are largely the same except that there is no longer a group requirement. Whenever person A solved a game (or someone solves a game A has posted), the points A received would automatically be shown as Period Earnings. The period earnings would be added to the total earnings. In the information panel, the Potential Period Earnings and Group Requirement Achieved cells were no longer there.

Experiment Instructions

Welcome. You are about to participate in an experiment that is approximately 2 h long. You will be paid in cash at the end of the experiment. The payment will depend on the decisions you make. At various points of the instructions you will be instructed to work on short quizzes. When you have finished reading your instructions, raise your hand and the experimenter will come to check your answers before we start the actual experiment. If at

anytime you have any questions, raise your hand and the experimenter will assist you. The experimenter will also entertain questions publicly when everyone has finished the instructions.

The instructions are divided into five parts.

- I. Standalone Games
- II. Working with Games
- III. Acquiring Games
- IV. Structure of the Experiment
- V. How to Use the Software

II. Standalone Games

In a standalone game, there is a combinationmaker and a combinationbreaker. In each game, the computer will be the combination-maker and you will be the combinationbreaker.

For each game, the combinationmaker will randomly generate a hidden combination of four pegs using six colors (blue, red, green, yellow, cyan, pink). Colors can be used more than once. For example a combination can be (blue, blue, blue, blue), (red, cyan, blue, blue), (red, blue, green, pink), (green, pink, cyan, yellow), etc. If you have trouble seeing the colors, you can click on **Display Color Numbers** (see Fig. 1 on P. 12; Area A).

You have an unlimited number of chances to guess the hidden combination. For each guess, the combinationmaker will give you a hint as to how close to the hidden combination you are. **If you have a peg in the correct slot and of the correct color, a black peg will be shown. If you have a peg of the correct color but in an incorrect slot, a white peg will be shown.**

The black and white pegs for each hint refer to any of the four pegs you have chosen, not to any one specific peg. For instance, if the combination is (blue, green, red, yellow), and you guess (yellow, green, blue, cyan), then you will see one black peg and two white pegs (see Fig. 2; Area A).

I.1 Reward

For each game solved, the experimenter will give out 10 points. For every 10 points you earn, you will be paid US\$1.

There is a group requirement: everyone has to make sure that all three of his allotted games in a period are solved either by himself or by other people in this experiment. You will only receive your earnings in a period if everyone solves all his games allotted in that period. In other words, if there is one game that is not solved in a period, none of you will receive your earnings in that period.

The points you earn from solving a game will be shown in the field **Potential Period Earnings**. If Group Requirement Achieved becomes "True", your **Potential Period Earnings** will be transferred to your **Period Earnings**.

Please work on Quiz 1 on P.8–9 now. Continue with the instructions when you are done.

III. Working with Games

When you are working on a game, there are three courses of action you may take:

- II. 1 Completing a game You complete a game by guessing the hidden combination correctly.
- II. 2 Storing a game to your Private Games Collection You may click on Work Later (see Fig. 2; Area B). Doing so will transfer your game, with all of the guesses you have made, into your Private Games Collection. You may resume any of the games from your Private Games Collection at any time during the same period (see Fig. 4; Area A).

II. 3 Posting a game You may decide to post a game by clicking Post (see Fig. 2; Area C). Doing so will transfer your game and all of the guesses you have made into the Public Pool (see Fig. 3; Area A).

The Public Pool:

The Public Pool is a collection of games that are visible to all people in this experiment.

Games in the Public Pool can be viewed and cloned by any people in this experiment. When a person clones a game, an exact copy of the game with the history of moves and the same hidden combination is transferred to the person. This person can work on this clone and take any of the three courses of actions listed above. Games in the Public Pool can be cloned multiple times by multiple people.

When the original game or any clones of it is completed, all clones and the original become void and are no longer able to be worked on.

If a person clones and solves your game, you will be awarded the number of points the game was worth, just as if you finished it yourself. However, when you post a game you can choose the amount of commission you wish to pay another person for solving your game. This number of points will be transferred from your account to his upon his completion of the game. For instance, if you post a game worth 10 points and offer a commission of 4 points you will receive 10 points when this game is solved by another person. Four of these points will be given to the person who solves the game as commission. Thus, you earn 6 points and the other person earns 4 points.

Once your game has been posted, there is no way to control the circulation of it. People may clone many copies of your game. You can, however, grab it back from the Public Pool. Doing so removes the game from the Public Pool so that other people can no longer clone it, but it does not affect the games people have already cloned.

Since everybody is seeing the same instructions you do, everybody in your group is able to clone and post games as you are.

III. Acquiring Games

There are three ways to acquire games to work on:

III.1 Request a game from the experimenter

Each period, the experimenter allots three games for you to work on. To request one of these games, you must click New Game (see Fig. 1; Area B). Each one of these games you complete will earn you 10 points.

III.2 Clone a game from the Public Pool

You may clone a game from the Public Pool to work on. Each one of these games you complete will earn you the commission amount for that game. The commission is chosen by the person who posts the game (see Fig. 3; Area B).

III.3 Clone or Retrieve a Private Game

At any time you may clone or retrieve games you have stored to your Private Games Collection (see Fig. 4; Area C).

Please work on Quiz 2 on P. 10 now. Continue with the instructions when you are done.

IV. Structure of the Experiment

The experiment is divided into periods. At the beginning of each period, everything except Total Earnings will be reset. Note that your Period Earnings will be added to your Total Earnings. Any games in the Public Pool or your Private Games Collection will be discarded.

A period ends when everyone has solved all three of his allotted games (i.e. Group Requirement Achieved becomes “true”), or in 7 min, whichever occurs first. The experimenter will make an announcement to remind you the remaining time when there are 2 min left in the period.

In this experiment, there will be 10 periods and 1 trial period.

V. How to Use the Software

V.1 Your active game

Your “Active Game” is the game in the left panel that you are working on. To make a guess, you must select a color for each of the four slots by clicking the slot and choosing the color from the dropdown menu. Once you have selected four colors, click Check to submit your guess and see the hint for it (see Fig. 2; Area A). Note that once you have clicked Check you cannot change your guess.

V.2 Work later

You may store your active game to your Private Games Collection at any time by clicking Work Later (see Fig. 2; Area B). This sends your active game to your Private Games Collection. Your Private Games Collection is the list of games under the panel titled “Your Games” on the right side of the screen (see Fig. 4; Area A).

V.3 Posting

To post your active game to the public pool, click Post. A window titled “Post Options” will appear (see Fig. 5). Here you can set the commission for this game. To the right of the window is a preview of your game as it will appear in the public pool. To cancel posting, exit the window by clicking the “X” in the upper right corner. To post the game, click Post (see Fig. 2; Area C).

V.4 Acquiring games

There are three ways to acquire a game:

1) New game

You can request one of your three allotted games from the experimenter by clicking New Game (see Fig. 1; Area B).

2) Retrieving a private game

You can retrieve a game from your Private Games Collection by looking at the list of games under the panel titled “Your Games.” Here you can see the basic information of the game: Name, Guesses, and Time Added (see Fig. 4; Area A).

Name.

This is the name of the game (in number). Note that a clone will have the same name as its parent game but with an extra level number. For example, a clone of Game 1 will have the name 1.1, and a clone of Game 1.1 will have the name 1.1.1 (see Fig. 4; Area B).

Guesses.

This is the number of guesses already made in the game.

Time Added.

This is the time you added the game into your Private Games Collection.

Clicking on one of the games in the list will load a preview of the game on the right hand side of the screen. You may then choose Clone or Retrieve (see Fig. 4; Area C). Cloning simply creates a copy of the game and leaves the original in your Private Games Collection, while retrieving it takes it out of your Private Games Collection.

3) Retrieving a public game

You can browse games in the Public Pool list just as you can for those in the “Your Games” list. Here you also have all the basic information of the game. In addition to Name, Guesses, and Time Added, you also have Commission and Posted By (see Fig. 3; Area A). Click on the column headers on the list to sort the games.

Commission.

This is the number of points you earn by solving the cloned game. Posted By This is the User Name of the person who posts the game. No participants will know which User Name corresponds to which participant.

Click on a game to load a preview of the game on the right hand side of the screen. To clone and work on this game, click Clone (see Fig. 3; Area B). If this game is yours, you will be able to Grab it out of the Public Pool. Grabbing removes the game from the Public Pool so other people will no longer be able to view and/or clone it. But this does not affect the games people already cloned.

Note: You can only acquire games when you do not have an active game. If you have an active game, you must complete it or store it to your Private Games Collection in order to work on a new game.

V.5 Information panel

You can keep track of various statistics by looking at the Information Panel on the bottom righthand part of the screen (see Fig. 1; Area C). Here is the available information:

User Name.

Every person in this experiment is identified by a User Name (e.g. User 1, User 2, and so on). Your real name will be anonymous.

Potential Period Earnings.

You will see an increase in your potential period earnings whenever you solve a game (or someone solves a game you post). The points you see here will be transferred to the field Period Earnings if Group Requirement Achieved becomes “True”.

Period Earnings.

This will be zero until everyone has solved all three of his allotted games.

Total Earnings.

This is the amount of US\$ you have accrued in ALL periods throughout the experiment. Your total earnings are simply the sum of your Period Earnings in dollars.

Games Left for You.

This is the number of games left from the three the experimenter has allotted for you in the current period. If it reaches 0, you will not be able to request more games from the experimenter, but you will be allowed to work on public games.

Your Allotted Games Solved.

This is the number of allotted games you have solved and/or the clones of your allotted games solved by others.

Group Requirement Achieved is “False” until everyone has solved three of his or her allotted games. It will become “True” when this requirement is fulfilled.

Time.

This is the current time.

At the end of the experiment, the experimenter will come to each of you to record your total earnings. After that, we will shut down your screens so other students will not be able to see your earnings.

This is the end of the instructions. Please work on Quiz 3 on P.11. Quiz 1.

Please provide the hints (the black pegs and/or white pegs you expect to see) by writing B (black peg) or W (white peg) in the boxes provided.

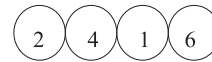
The numbers (1–6) in the circles represent the six different colors (blue, red, green, yellow, cyan, pink) that you will see in the actual experiment. However, in the experiment, you will see both the colors and the numbers (if you click on **Display Color Numbers**).

Note: keep in mind that the position of the black and white pegs does not necessarily correspond to the positions of the guesses. Black pegs are always shown first (i.e. to the left of white pegs).

Please turn to the next page.

Example:

The hidden combination is.



Your guess is:



Hint



1. The hidden combination is



Your guess is:



Hint:



Quiz 2.

Person 1 posts a game with the name, Game 2, which is worth 10 points and sets the commission to 5.

1. Person 2 clones this game. Therefore, the cloned game, Game 2.1 is created. How many points will Persons 1 and 2 each receive, if Person 2 solves Game 2.1?

Person 1: points.

Person 2: points.

2. After Person 2 has worked on Game 2.1, he however decides to repost it to the public pool and sets the commission to 3. Person 3 clones it, thereby creating Game 2.1.1. If Person 3 solves Game 2.1.1, how many points will Person 1, 2, and 3 each receive?

Person 1: points.
 Person 2: points.
 Person 3: points.

3. Now if Person 3 has not solved Game 2.1.1, and Person 2 is still working on Game 2.1 after he has posted it. This means that Person 2 and Person 3 are working concurrently on Game 2. If Person 2 solves Game 2.1 first, how many points will Persons 1, 2, and 3 each receive?

Person 1: points.
 Person 2: points.
 Person 3: points.
 Quiz 3.

1. Each person is allotted three games. You have solved two of your own games that are worth 10 points each, and your third game is solved by another person whom you have agreed to pay 4

points to. However, not every person in this experiment has solved all three of his games yet. What will you see in the following fields?

Potential Period Earnings: .
 Period Earnings: .
 Games Left for you: .
 Your Allotted Games Solved: .
 Group Requirement Achieved: .

2. Now every person has solved three games, what do you see in the following fields?

Potential Period Earnings: .
 Period Earnings: .
 Games Left for you: .
 Your Allotted Games Solved: .
 Group Requirement Achieved: .

Please Raise your hand when you are done so the experimenter can come to check your answers.

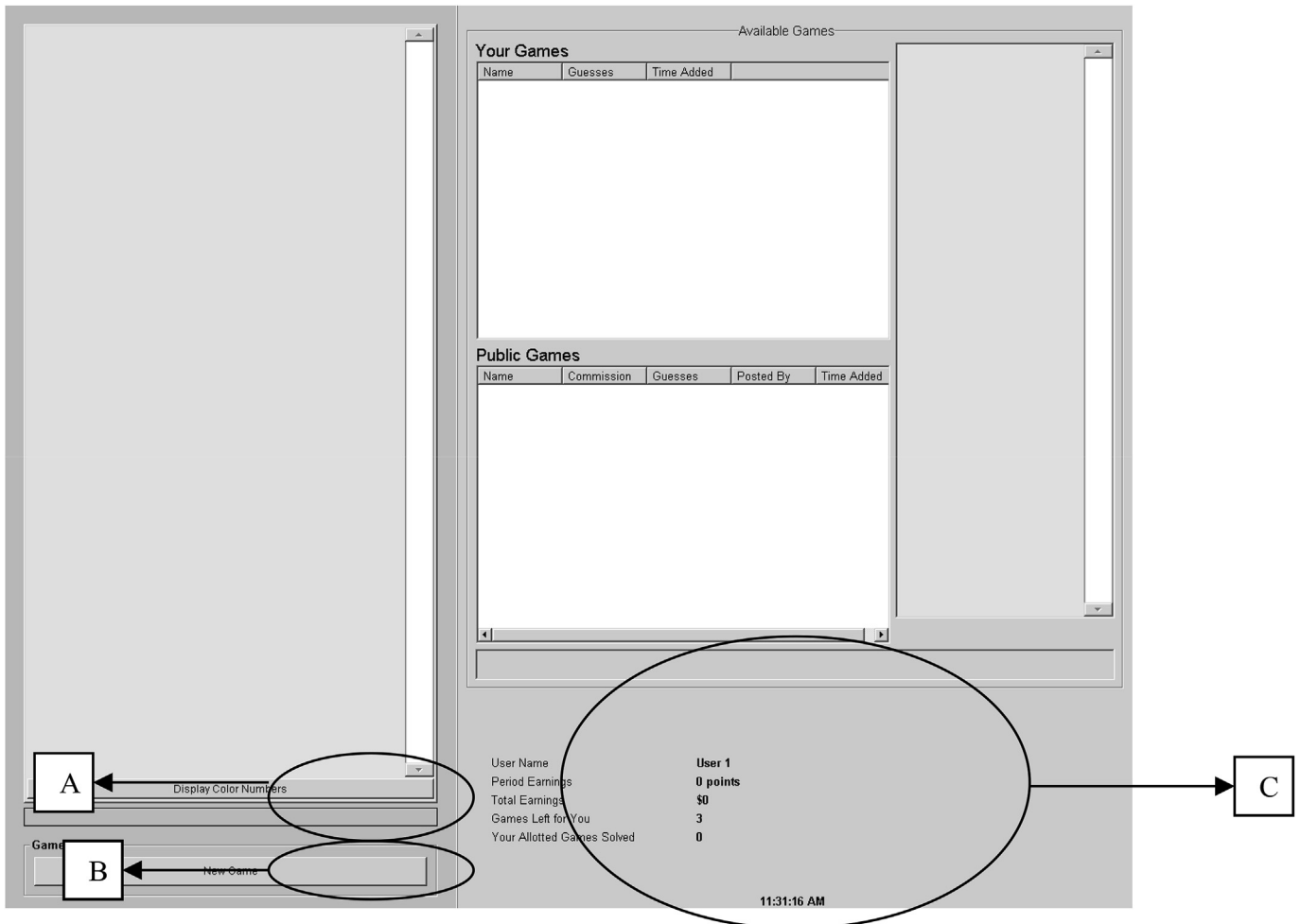


Fig. 1.

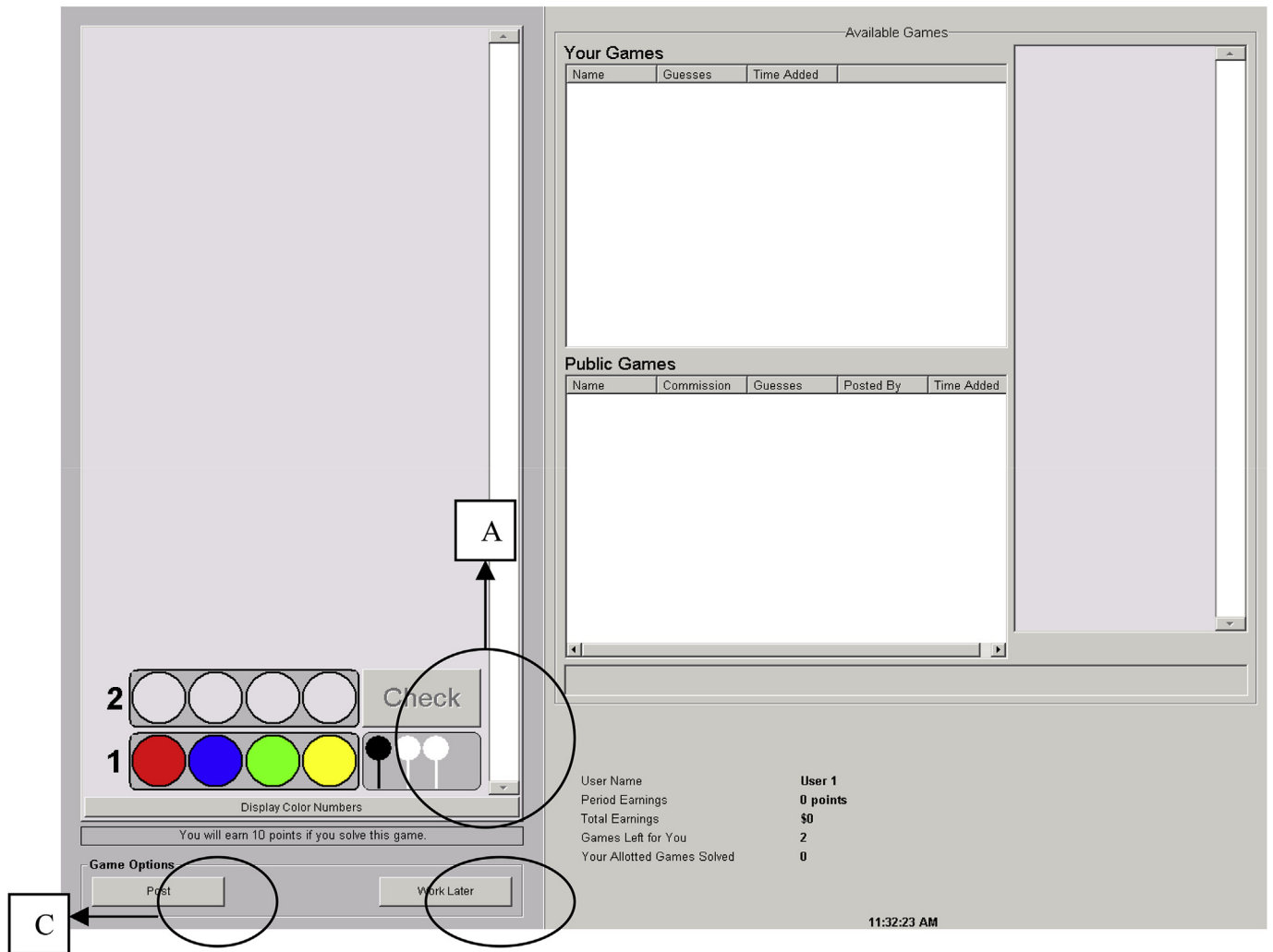


Fig. 2.

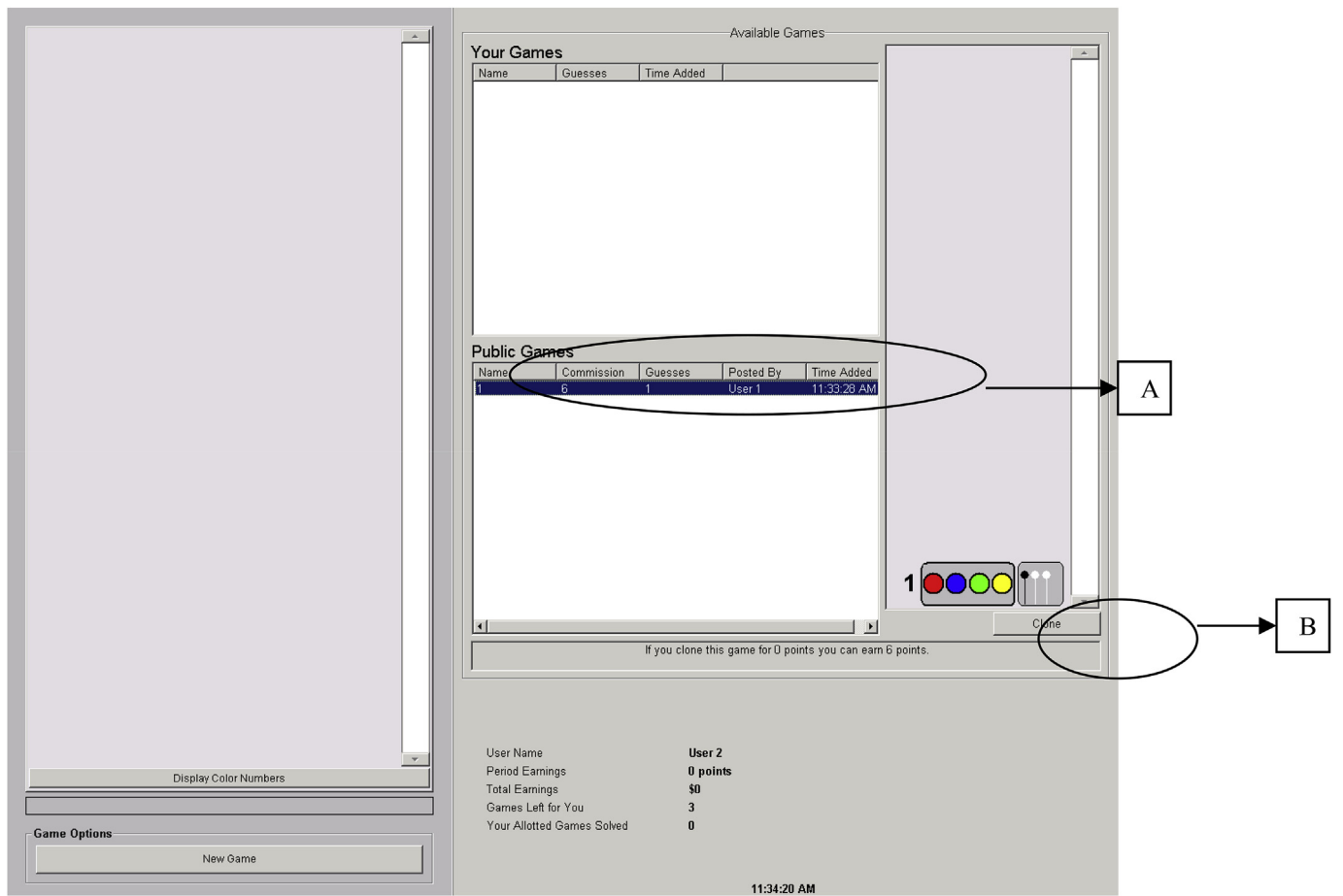


Fig. 3.

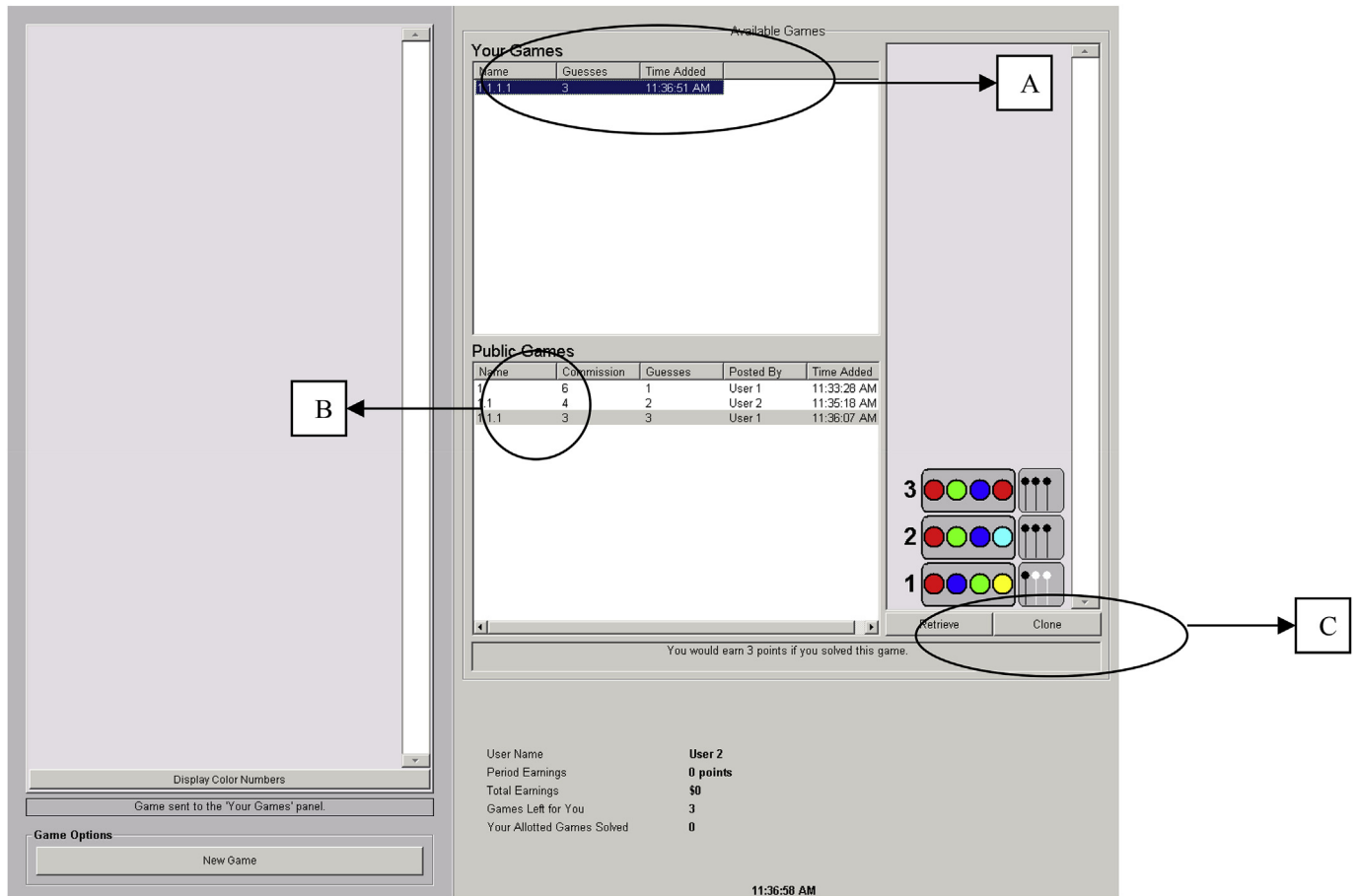


Fig. 4.

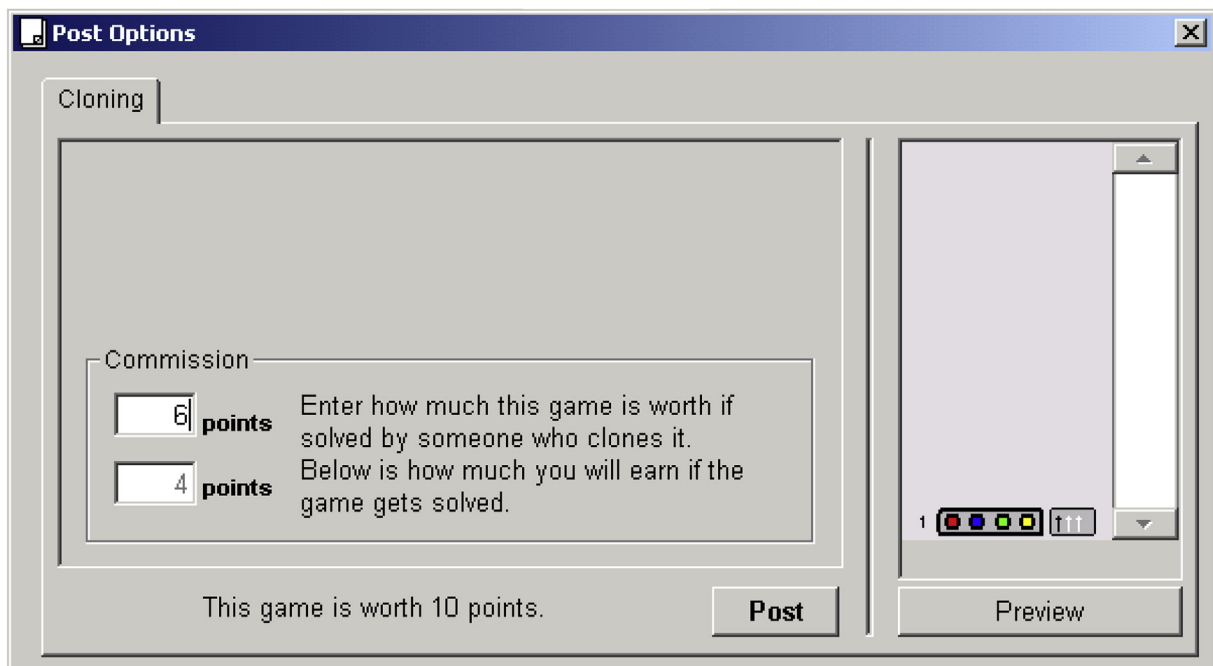


Fig. 5.

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Assessing Participation and Position of Vietnam in Global Value Chains

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ABSTRACT

Vietnam's policy of openness to trade and investment has made it integrated very quickly with the global production networks, also known as global value chains, which has brought many visible fortunes to it in terms of socio-economic achievements. To have a deeper insight into the prospects and constraints of its integration into global value chains, and also to assess its degree of integration, this paper has employed Koopman et al. (2010) approach to measure the participation index, and position index. The analysis shows that the participation of Vietnam in global value chains has increased significantly in the last two decades based on strengthening FDI-led exports of Vietnam. It also shows that most of the exporting industries are located in the middle-stream in the value curve and are net buyers of intermediate products for exports, which infers the presence of predominant I2E practices in Vietnam. The paper also identifies and assesses the risk I2E practices are prone to. Scenario analysis suggests that Vietnam shall focus on upskilling of its labour force and developing indigenous industrial base. In the meantime, domestic firms shall be encouraged to collaborate with foreign firms and densify into global value chains.

Keywords: Backward participation, forward participation, global value chains, position index, Vietnam

1. INTRODUCTION

Global value chains¹ have become a dominant feature of international trade and investment (OECD, 2015). Progress in information and communication technology reforms in trade policies, and reduction in the regulatory barriers, especially after the mid-1980s led the manufacturing firms in exploring the most efficient locations for production process which has resulted in fragmented production process across several locations in the world (Jones & Kierzkowski, 2001). Because of this new trend in the global production network, integrations of developing

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¹ Global value chain is a phenomenon in which a production process is fragmented into multi-stage tasks and is completed by different companies located over different countries (UNCTAD, 2015; WDR, 2020). The production process of mobile phones, automotive, textile and footwear, etc. are some common examples of global value chains.

countries like China, Mexico, Bangladesh, Vietnam, etc. have increased significantly in global value chains in comparison to what they used to have a couple of decades ago. Participation in global value chains has brought several fortunes to these developing countries, viz. (i) they did not need to build a whole course of production capacity; instead, they just needed to use their comparative advantages to concentrate on a specific production process (Kowalski et al., 2015); (ii) increased participation in global value chains generated new job opportunities (OECD, 2014); and (iii) also provided an opportunity for transfers and (or) spill-overs of the technology and management skills through local learnings (Taglioni & Winkler, 2016). However, the amounts of benefits and their distributions are not automatic and can vary considerably depending upon two things- firstly, the way a country predominantly participates in global value chains, that is, whether as a supplier of the intermediate products, also known as forwarding participation, or as a buyer of the intermediate products, also known as backward participation and secondly, the positions of exporting industries in the value curve². Empirical studies on mapping of global value chains, viz. Backer and Miroudot (2013), Kummritz (2014), Cheng et al. (2015), Herr et al. (2016), etc. infer that a country that predominantly supplies domestically produced intermediate products to assemblers will have strong forward participation and reaps higher domestic value addition in its exports, while a country that predominantly assembles the intermediate products into final goods and subsequently exports them, will have strong backward participation and reaps smaller domestic value addition in its exports. On the other side, by 'position of an industry in the value curve' means where exactly the reference industry is functioning in the production process, that is either on the left segment (upstream) or right segment (downstream) or middle segment (middle-stream) of the value curve. An industry's position in the value curve entirely depends on the specialized nature of the products or services it offers for trade. For example, mining industries offer unique input for other industries and thus position in the upstream. Likewise, R&D, designing, branding, etc. also position in the upstream. On the other hand, specialized services such as distribution, marketing, after-sales customer services, etc. position the downstream. The assembly activities position in the middle-stream of the value curve. In terms of value creation, both upstream and downstream activities add larger value to the products and services than the middle-stream activities.

Vietnam started its journey as one of the poorest countries back in 1990s, but quickly achieved the status of a 'middle-income country' by 2010 and enjoyed a GDP per capita of USD 2,786 in 2020 (World Bank, 2021) leveraging on its integration into global value chains. Vietnam has moved away from the exports of primary products to the exports of manufactures and services with the support of FDI firms, which still contribute over 72 percent of the country's gross exports (GSO, 2020). Chaudhary and Nguyen (2019) have found that intra-industry trade, which is simultaneous imports and exports of goods in the same industry, has increased in Vietnam. This practice is also reflected in the increasing gaps between the values of gross exports and domestic value-added exports³ of Vietnam. However, limited numbers of studies⁴ are available in the context of Vietnam in terms of examining the underlying characteristics of domestic value-added contents in gross exports of it and its participation in global value chains. Only Thanh et al. (2015)

²Also known as 'smile curve,' the industries located in the either extreme of the U shaped value curve generate higher value, and the industries located in the middle generate lower value to the economy.

³ Domestic value added export is the proportion of domestic value addition in the gross export of goods and services.

⁴ These include Nadvi and Thoburn (2003), Bui et al. (2008), World Bank (2011), Tran et al. (2011), Ha (2012), Trang (2012), Dao and Nguyen (2013), Thanh et al. (2015), and Hoang and Pham (2016). Moreover, most of these studies have focused on a particular sector, for example, textile and garment, footwear, agriculture, etc. rather than the overall economy of Vietnam.

and Tran et al. (2011, cited in Thanh et al., 2015) have attempted to analyze the overall picture of Vietnam by breaking down the gross exports into imported and domestic values. However, since both works have used domestic input-output table in their approaches, they have not been able to capture the flow of ‘export to re-import values for Vietnam, hence making their estimates differ significantly from that of the OECD-TiVA estimates. In addition, their approaches have had some assumptive limitations such as product homogeneity, consumption of imported inputs within the same year, etc. Moreover, none of these papers have had insight and discussion about the integration of Vietnam into global value chains, which is an important feature of the Vietnamese economy in recent time though. Therefore, the researcher got motivated to undertake this research to explore the recent status and prospects of Vietnam into global value chains. This paper is expected to contribute to developing an insight into the prospects and constraints of Vietnam’s integration into global value chains.

The rest of this paper has been organized as: Section 2 discusses the methodological framework adopted in this work followed by a description of data sources and the coverage of the study period in section 3. Section 4 presents the findings of the analysis and discussion, and section 5 presents the concluding remarks.

2. METHODOLOGICAL FRAMEWORK

This paper has employed three steps in assessing the participation and position of Vietnam in global value chains. Firstly, estimation of global value chains participation indices of exporting industries, and Vietnam itself; secondly, estimation of global value chains position indices of exporting industries; and thirdly, the position of the exporting industries in the value curve.

2.1 Estimation of Global Value Chains Participation Indices

In this framework, the work of Koopman et al. (2010) can be considered as the milestone that proposes measurement of ‘global value chains participation index’ for a reference industry ‘k’ in-country ‘i’ as below:

$$\text{Global value chains participation index} = \frac{IDC_{ik}^*}{GE} + \frac{FVA_{ik}}{GE} \quad (\text{Eq. 1})$$

The symbols used in the above relation can easily be generalized for Vietnam for a specific fiscal year as follow. IDC_{ik}^* is the value of domestic value-added exports of Vietnamese industry ‘k’ in the exports of importing countries. FVA_{ik} is the foreign value added embodied in the exports of the industry ‘k’. GE is the gross export of Vietnam. Thus, the first term on the right hand side also measures the industry k’s forward participation in global value chains, while the second term measures its backward participation in global value chains. The average value of the participation indices of all industries into consideration represents the participation index of Vietnam in global value chains.

2.2 Estimation of Global Value Chains Position Indices

Equation (1) does not shed light on the position of a reference industry in the value curve. Nonetheless, two approaches are available in the literature to estimate the position of an industry in the value curve- firstly, the ‘global value chains position index’ recommended by Koopman et al. (2010), and secondly, the ‘distance to final demand index’ recommended by Fally (2012). The ‘global value chains position index’ is a log ratio of an industry’s forward participation index to its backward participation index, while the ‘distance to final demand index’ is an index that measures how many production stages a product still requires to undergo before it reaches the final consumers. This means that a longer ‘distance to final demand’ suggests that industry is positioned upstream in the value curve, while a shorter ‘distance to final demand’ suggests that

the industry is positioned downstream in the value curve. Nonetheless, in this paper, the researcher has adopted the ‘global value chains position index’ for the specified purpose because this approach also sheds light on the way a reference industry participates in global value chains. Mathematically, the ‘global value chains position index’ can be expressed as below:

$$\text{Global value chains position index} = \text{LN}\left(1 + \frac{\text{IDC}_{ik}^*}{\text{GE}}\right) - \text{LN}\left(1 + \frac{\text{FVA}_{ik}}{\text{GE}}\right) \quad (\text{Eq. 2})$$

In equation (2), IDC_{ik}^* , FVA_{ik} and GE has the same interpretations as stated in equation (1), and LN stands for the natural logarithmic function of the terms inside parentheses. It is important to note that equation (2) has been formulated in such a way that when a reference industry predominantly participates in global value chains by exporting intermediate products to the importing partners for their exports, the first term on the right-hand side tends to be larger and the index tends to take a positive value. On the other hand, if the reference industry predominantly participates in global value chains by purchasing intermediate products for its exports, then the second term on the right-hand side tends to be larger and the index tends to take a negative value. Therefore, if the position index takes a positive value, it means the reference industry is more likely to position in the upstream of the value curve, while if the position index takes a negative value, it is more likely to position the downstream of the value curve.

However, there is a practical limitation in this way to position industries in the value curve, and that is, it does not differentiate between the industries that position in the higher-upstream (left upper end of the U shaped value curve) from the ones that lie in the lower-upstream industries (in the falling apart of the U shape near the minimum point). The same argument is applicable in the case of industries that position in the higher-downstream (right upper end of the U-shaped value curve) and the lower-downstream industries (in the rising part of the U shape near the minimum point) in the value curve. The researcher has used the term ‘middle stream for the segment in the value curve extending from the lower-upstream to the lower-downstream in the discussion onward, thus the middle-stream extends a bit in both sides of the minimum point of the value curve.

To overcome this state of confusion, the researcher has used a combination of the mean position index and the standard deviation of the position indices of all the 34 industries⁵ under consideration to estimate a range of ‘one standard deviation on the left side (mean plus one standard deviation) to one standard deviation on the right side (mean minus one standard deviation) of the mean position index’ for the base year⁶. This range represents the position for the ‘middle stream industries in the value curve. That means any industry with the position index falling within this range shall be considered to be positioned in the middle-stream segment. On the other hand, any industry falling on the left side of this range shall be considered to be positioned in the upstream, and that on the right side of this range shall be considered to be positioned in the downstream segment of the value curve. Nonetheless, this arrangement is based on two important underlying assumptions- firstly, that the shape of the value curve is symmetric around the mean position index; and secondly, that the position index series is normally distributed. These assumptions have been tested using the measure of skewness and the Shapiro-Wilk statistic in the series. The estimates of equations (1) and (2), and the above-mentioned measures have been presented in section 4.

⁵ There are 36 industries in total in the data series, however, two industries do not have any exports value, hence they have been excluded from analysis.

⁶2005 is the starting year of the new data series of OECD stat (2018). Since the mean position index is a negative value, an addition of standard deviation ($\text{sd} > 0$) will shift the position index towards left.

3. SOURCES OF DATA AND STUDY PERIOD

A bulk of data used in the analysis have been extracted from OECD-TiVA database 2018 edition⁷ (spanning over 2005 to 2015), and only a couple of aggregate values from its 2016 edition (spanning over 1995 to 2011) to extend the study period from 1995 to 2015 to have a better understanding of the historical pattern in participation index. However, in the analysis of industries' level position indices, the study uses data from OECD-TiVA 2018 edition only since the industries level classification of the 2016 edition is not directly comparable with that of the 2018 edition. They have adopted different versions of ISIC (International Standard Industrial Classification of All Economic Activities).

4. FINDINGS AND DISCUSSION

4.1 Participation of Vietnam in Global Value Chains

The participation of Vietnam in global value chains has significantly increased from 34 percent in 1995 to 56 percent in 2015 riding on its backward participation. During this period, the proportions of backward participation have increased substantially to over 44 percentage points while that of the forward participation has fallen to 11 percentage points, causing a large gap between them (Table 1). This also affirms the 'imports for exports (I2E)' practices that have been taken place in Vietnam, which, in the words of Nakamura (2016), has helped it to emerge as the Asian manufacturing powerhouse. With its recent level of participation in global value chains, Vietnam stands 9th in the world, while 3rd in the ASEAN region, and is expected to surpass Malaysia soon (Figure 1). However, in terms of forwarding participation, its rank is 61st in the world⁸ and stands at the end in the ASEAN region. Nonetheless, the imported items and services have supported Vietnam in maintaining its competitiveness in the world market. Despite having skills constraints, it is a leading exporter of computer and electronic products, and electrical equipment in the world.

Table 1

Global Value Chains Participation Indices of Vietnam by Years

Year	Forward participation index	Backward participation index	Total participation index
1995	12.6	21.6	34.2
2000	19.5	27.2	46.7
2005	14.5	36.1	50.6
2010	12.5	40.5	53.0
2015	11.1	44.5	55.6

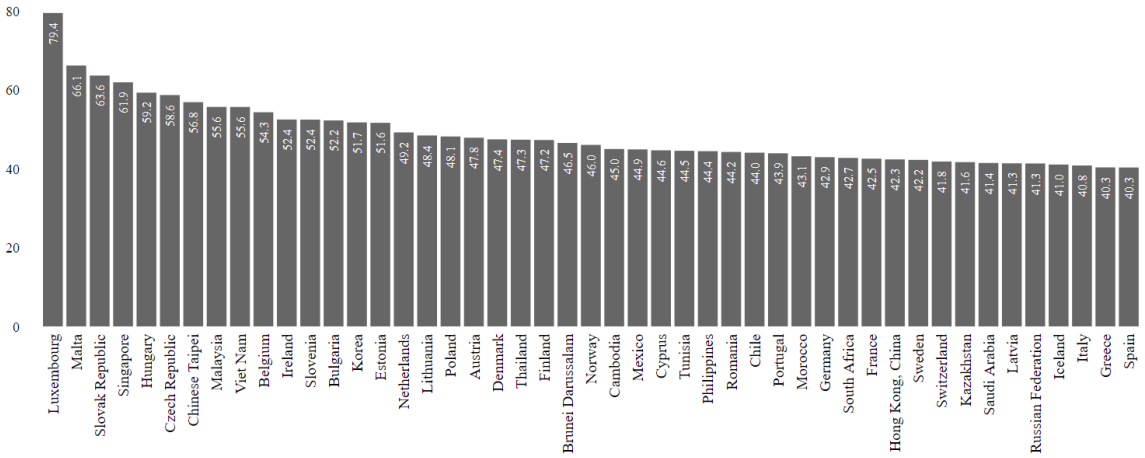
Source: Researcher's estimate. Data source: OECD.stat (2016 & 2018)

⁷ This is the most recent database published by OECD on Trade in Value Added (TiVA) indicators.

⁸ In the rank by forward participation index, Brunei, Saudi Arabia, and Kazakhstan which are rich in exporting crude oil and natural gases occupy the top three positions with shares 41.1, 36.8, and 35.1 percentage points respectively.

Figure 1

Global Value Chains Participation Index of the Top 47 Countries in the World in 2015.



Source: Researcher’s contribution. Data source: OECD.stat (2018)

A breakdown of the global value chains participation indices to the industry level shows that Vietnam has been highly active in computer and electronics, electrical equipment, machinery equipment, transport equipment, textile and footwear, and the processing industries, mainly through backward participation. Among the business-related services, the indices are higher for information and communication, and transport and storage (Appendix A). Notably, the participation of computer and electronics, and electrical equipment has grown remarkably in comparison to 2005, by 31 percent and 24 percent respectively. The global value chains participation of textile and footwear, foods and beverages, machinery equipment and transport equipment have also grown, albeit slowly. On the other hand, the global value chains participation of agriculture and mining industries has remained low since the beginning and has remained almost unchanged. Since the global value chains participation depends on the technical characteristics of industries’ products, for example, the electronics, computers and their parts, machinery and equipment are easy to separate into discrete components, easy to produce separately, and also easy to transport to the low-cost locations for assembly process; the observed pattern of global value chains participation of Vietnam is not surprising. These industries normally rank higher in terms of the global value chains of the host countries like Vietnam via increasing backward participation rate.

4.2 Position of Vietnamese Industries in Global Value Chains

The estimated values of global value chains indices for all 34 industries into consideration for years 2005, 2010, and 2015 have been provided in Appendix B. The position indices of all 34 industries are negative, which means that they are net buyers of intermediates for their exports. This is a clear indication that assembly activities have been taking place in those industries. Nonetheless, prior to going into the discussion of the positioning of these industries in the value curve, a confirmatory test has been undertaken by employing skewness, and Shapiro-Wilk test, to confirm that distribution of the series of the global value chains position indices are symmetric and normal. The results are presented in Table 2. Since the absolute values of skewness are less than 0.5, the distribution is confirmed to be symmetric. Likewise, the Shapiro-

Wilk statistics for none of the three series are found significant at 5 percent level, which means the null hypothesis that ‘data series is normally distributed’ cannot be rejected. This confirms the normality assumption of the global value chains indices.

Table 2

Normality Test for the Data Series of Global Value Chains Position Indices

Index series	Skewness	Shapiro-Wilk		
		Statistic	df	Sig.
Position indices (2005)	0.259	0.943	34	0.074
Position indices (2010)	0.180	0.945	34	0.088
Position indices (2015)	0.007	0.960	34	0.242

Source: Researcher's estimate

Next, as proposed in the methodological framework, the range for the middle-stream industries in the base year 2005, extends from negative 0.18 to negative 0.40, i.e. [-0.18 to -0.40]. This also infers that an industry with a position index greater than negative 0.18 is positioned upstream and that smaller than negative 0.40 is positioned downstream (Appendix B). Based on these criteria, it is seen that most of the manufacturing industries including textile and footwear, and foods and beverages are positioned in the middle-stream. They together have contributed over 62 percent to the domestic value-added exports of Vietnam in 2015. Other six manufacturing industries including fabricated metal, computer and electronics, electrical, machinery and other transport equipment are located downstream, and they together have contributed 14 percent in the domestic value added exports of Vietnam in 2015. Three industries are positioned upstream, which are related to the support services, and their contribution is less than one percent in the domestic value added exports of Vietnam. In terms of total contribution by categories, the middle-stream industries together contribute over 85 percent in the domestic value added exports of Vietnam and show their dominance in the export sector of Vietnam. Nonetheless, except for coke and refined petroleum products, and basic metals which are moving towards upstream, others are moving towards downstream in the value curve. Since, the major activities that take place in the downstream segment of the value curve are distributions, sales, and after-sales services, therefore, this trend indicates a gradual improvement in the connectivity of Vietnamese domestic firms in the international market.

5. CONCLUDING REMARKS

Vietnam's economy has grown rapidly in the past 25 years, and it has been able to maintain a stable GDP growth rate of over 5 percent, mainly relying on its strengthening exports⁹. With that its participation in global value chains has also increased significantly. The analysis has shown that most of the contributing industries are located in the middle-stream in the value curve and are net buyers of intermediate products for exports. That is why the gross exports value of Vietnam has risen significantly in comparison to its domestic value-added exports. With this I2E model of growth, Vietnam has made notable improvements in its socio-economic indicators since the start of its journey back in 1990s. However, this model, to work smoothly requires low-cost labour forces. Till now, Vietnam has had maintained its comparative advantage in a cheap labour force and has been able to attract baskets of foreign direct investment projects into the country. However, now it is time to assess how long more this strategy may work. With the rise in the

⁹According to Nguyen and Chaudhary (2018), both short-run and long-run relationship exists between value added exports and GDP of Vietnam. Moreover, one percent rise in domestic value added exports contributes in 0.73 percent rise in the real GDP value of Vietnam.

living standards of Vietnamese people, the wage rate is certain to rise sweeping away this comparative advantage in the future, which means a wave of assembly jobs is more likely to flow out of Vietnam. In addition, this model is also prone to the consequences of automation of assembly activities in the light of Industry 4.0¹⁰ buzz across the globe. Hence, Vietnam has two options ahead – either continue with the existing model as an export platform in global value chains, specializing in assembly activities, or move up (or down) along the value curve towards upstream (or downstream) to capture higher value addition for its activities by upskilling its labor force and developing own indigenous industrial base. The failure of the Mexican growth model has shown that wage suppression is not a sustainable strategy to reap the benefits of global value chains. Instead, some lessons from Germany, Japan, Asian Tigers¹¹ and China might be worthwhile in envisaging the future policies and ways ahead for Vietnam. German and Japanese export-led growth booms were based on their indigenous industrial-based exports. The Asian Tigers also followed a similar strategy, but they also added the acquisition of foreign technology in their strategies. On the other side, the Chinese model is an extension of the Mexican model with two adjustments in particular- firstly, aggressive investment in upskilling its workers, in domestic R&D, and ICT infrastructures, and secondly a policy in place for technology adoption by domestic firms. The Chinese economy has been doing well so far in comparison with the performances of other economies as mentioned above. Currently, it is not only an important player in global value chains but also has enhanced the domestic value-added exports significantly. Therefore, Vietnam shall focus on developing its indigenous industrial base and acquiring foreign technology in prioritized industries. This will require Vietnam to encourage collaboration of domestic firms with foreign firms so that local learnings can take place and the domestic firms can also densify into global value chains. These will help Vietnamese industries to upgrade their products, processes, and functions so that Vietnam overall can switch from assembling agent to the indigenous producer.

6. ACKNOWLEDGEMENTS

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¹⁰ Germany Trade and Invest defines Industry 4.0 as: ‘A paradigm shift . . . made possible by technological advances which constitute a reversal of conventional production process logic. Simply put, this means that industrial production machinery no longer simply “processes” the product, but that the product communicates with the machinery to tell it exactly what to do.’ (Sniderman et al., 2016: p. 4-5).

¹¹Hong Kong, Singapore, South Korea, and Taiwan.

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Appendix A

Global Value Chains Participation Indices of Vietnam by Selected Industries

Industries	Forward Participation			Backward Participation			Participation index		
	2005	2010	2015	2005	2010	2015	2005	2010	2015
Agriculture, forestry, & fishing	0.3	0.2	0.2	29.8	30.9	31.7	30.1	31.1	31.9
Mining & quarrying	0.7	0.6	0.3	28.0	27.6	30.3	28.7	28.2	30.6
Food, beverages, & tobacco	0.8	0.8	0.7	34.2	36.6	37.6	35.0	37.4	38.3
Textiles, apparel, & leather products	1.1	1.0	1.2	41.5	44.4	46.2	42.6	45.3	47.4
Wood & paper products; printing	0.2	0.2	0.2	46.2	46.8	48.9	46.4	47.0	49.0
Coke & refined petroleum products	2.1	0.9	0.6	49.3	36.5	32.4	51.4	37.4	33.0
Chemicals & pharma. products	1.1	0.9	0.7	49.1	50.2	48.1	50.2	51.1	48.8
Rubber & plastic products	0.3	0.3	0.3	50.0	52.8	53.2	50.3	53.1	53.5
Other non-metallic mineral products	0.1	0.1	0.1	34.1	35.5	35.6	34.2	35.6	35.7
Basic metals	0.7	0.6	0.4	50.7	50.9	46.1	51.4	51.5	46.5
Fabricated metal products	0.2	0.2	0.2	54.9	58.3	58.9	55.2	58.5	59.1
Computer & electronics products	1.7	1.9	1.7	47.0	52.2	62.3	48.8	54.1	64.0
Electrical equipment	0.5	0.5	0.5	47.4	55.0	59.0	47.9	55.5	59.5
Machinery & equipment, n.e.c.	0.6	0.6	0.6	56.2	60.0	63.5	56.8	60.6	64.1
Transport equipment	1.0	1.1	1.3	48.2	52.4	54.6	49.1	53.5	56.0
Wholesale & retail trade	0.7	0.6	0.5	19.1	22.0	24.8	19.8	22.6	25.3
Transportation & storage	1.0	0.8	0.6	35.3	33.2	33.4	36.4	34.0	33.9
Accommodation & food services	0.3	0.3	0.2	23.7	25.9	28.3	23.9	26.2	28.5
Information & communication	0.1	0.1	0.1	29.4	31.1	35.7	29.5	31.3	35.8
Financial & insurance activities	0.2	0.2	0.1	14.5	15.1	20.4	14.7	15.2	20.5
Manufacturing (aggregate)	10.9	9.4	8.9	41.8	45.5	48.2	52.7	54.9	57.1
Total business sector services (agg.)	2.6	2.1	1.7	26.2	26.5	28.5	28.7	28.6	30.2
Vietnam	14.5	12.5	11.1	36.1	40.5	44.5	50.6	53.0	55.6

Source: Researcher’s estimate. Data source: OECD.stat (2018)

Appendix B*Global Value Chains Position Indices of 34 Industries in Vietnam*

Industry	Position indices			Positions in the value curve		
	2005	2010	2015	2005	2010	2015
Agriculture, forestry & fishing	(0.26)	(0.27)	(0.27)	M	M	M
Mining & extraction of energy producing products	(0.24)	(0.24)	(0.26)	M	M	M
Mining & quarrying of non-energy producing products	(0.24)	(0.25)	(0.26)	M	M	M
Mining support service activities	(0.17)	(0.16)	(0.17)	U	U	U
Food products, beverages & tobacco	(0.29)	(0.30)	(0.31)	M	M	M
Textiles, wearing apparel, leather & related products	(0.34)	(0.36)	(0.37)	M	M	M
Wood & products of wood & cork	(0.38)	(0.39)	(0.40)	M	M	M
Paper products & printing	(0.36)	(0.37)	(0.37)	M	M	M
Coke & refined petroleum products	(0.38)	(0.30)	(0.28)	M	M	M
Chemicals & pharmaceutical products	0.39	(0.40)	(0.39)	M	M	M
Rubber & plastic products	(0.40)	(0.42)	(0.42)	M	M	M
Other non-metallic mineral products	(0.29)	(0.30)	(0.30)	M	M	M
Basic metals	(0.40)	(0.40)	(0.37)	M	M	M
Fabricated metal products	(0.44)	(0.46)	(0.46)	D	D	D
Computer, electronic & optical products	(0.37)	(0.40)	(0.47)	M	M	D
Electrical equipment	(0.38)	(0.43)	(0.46)	M	D	D
Machinery & equipment, n.e.c.	(0.44)	(0.46)	(0.49)	D	D	D
Motor vehicles, trailers & semi-trailers	(0.38)	(0.41)	(0.42)	M	D	D
Other transport equipment	(0.40)	(0.43)	(0.45)	M	D	D
Other manufacturing	(0.37)	(0.39)	(0.40)	M	M	M
Electricity, gas, water supply	(0.21)	(0.20)	(0.21)	M	M	M
Construction	(0.33)	(0.36)	(0.37)	M	M	M
Wholesale & retail trade; repair of motor vehicles	(0.17)	(0.19)	(0.22)	U	M	M
Transportation & storage	(0.29)	(0.28)	(0.28)	M	M	M
Accommodation & food services	(0.21)	(0.23)	(0.25)	M	M	M
Publishing, audio-visual & broadcasting activities	(0.23)	(0.24)	(0.28)	M	M	M
Telecommunications	(0.26)	(0.28)	(0.38)	M	M	M
IT & other information services	(0.15)	(0.15)	(0.23)	U	U	M
Financial and insurance activities	(0.13)	(0.14)	(0.19)	U	U	M
Real estate activities	(0.08)	(0.10)	(0.13)	U	U	U
Other business sector services	(0.17)	(0.18)	(0.22)	M	M	M
Education	(0.11)	(0.10)	(0.14)	U	U	U
Human health and social work	(0.25)	(0.28)	(0.30)	M	M	M
Arts, entertainment, recreation & other	(0.18)	(0.17)	(0.21)	M	U	M
Manufacturing (aggregate)	(0.25)	(0.28)	(0.31)	M	M	M
Total business sector services (aggregate)	(0.21)	(0.21)	(0.23)	M	M	M

Note. U = Upstream; M = Middle-stream; D = Downstream.

Source: Researcher's estimate. Data source: OECD.stat (2018)

On Coupled Systems of Lidstone-Type Boundary Value Problems

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Abstract. This research concerns the existence and location of solutions for coupled system of differential equations with Lidstone-type boundary conditions. Methodology used utilizes three fundamental aspects: upper and lower solutions method, degree theory and nonlinearities with monotone conditions. In the last section an application to a coupled system composed by two fourth order equations, which models the bending of coupled suspension bridges or simply supported coupled beams, is presented.

Keywords: coupled nonlinear systems, coupled lower and upper solutions, Lidstone-type boundary value problems, operator theory, suspension bridges.

AMS Subject Classification: 34A34; 34B10; 34B15; 47N20.

1 Introduction

Between 1938 and 1941, the English mathematician George James Lidstone (1870–1952) published notes on interpolation, where it was shown that poly-

nomial interpolation is the solution of boundary value problem given by

$$\begin{cases} u^{(2m)}(t) = 0, & t \in [a, b], \\ u^{(j)}(a) = A_j, & u^{(j)}(b) = B_j, \quad j = 0, 2, \dots, 2m - 2. \end{cases} \tag{1.1}$$

The BVP (1.1) can be generalized and coupled into the following problem

$$\begin{aligned} u^{(2m)}(t) &= f(t, u(t), u'(t), \dots, u^{(2m-1)}(t)) \quad t \in [0, 1], \\ u^{(j)}(0) &= A_j, \quad u^{(j)}(1) = B_j, \quad j = 0, 2, \dots, 2m - 2, \end{aligned}$$

which appears in the literature as Lidstone boundary value problems (see [17], and the references therein). It is also common to find in the literature the so called complementary Lidstone boundary value problems (see [22]),

$$\begin{aligned} u^{(2m-1)}(t) &= f(t, u(t), u'(t), \dots, u^{(2m-2)}(t)) \quad t \in [a, b], \\ u(a) &= A_0, \quad u^{(2j-1)}(a) = A_j, \quad u^{(2j-1)}(b) = B_j, \quad j = 0, 1, \dots, m - 1. \end{aligned}$$

Lidstone-type boundary value problems have applications in real phenomena such as the study of bending of simply-supported beams or suspended bridges (see [13, 14]). In [8], de Sousa and Minhós used Lidstone boundary conditions in a coupled system composed by two and fourth order differential equations, to model the bending of the main beam in suspension bridges. Likewise, Li and Gao [15], discuss models of a static bending elastic beam whose two ends are simply supported, given by Lidstone-type boundary conditions.

Over the course of several years, one can find several different approaches and techniques on problems or the family of problems with boundary value problems as Lidstone. For example, in [1], Agarwal and Wong deal with the existence of a positive solution of the complementary Lidstone boundary value problem

$$\begin{aligned} (-1)^m \gamma^{(2m+1)}(t) &= \lambda F(t, \gamma(t), \gamma'(t)) \quad t \in (0, 1), \\ y(0) = 0, \gamma^{(2\kappa-1)}(0) &= \gamma^{(2\kappa-1)}(1) = 0, \quad 1 \leq \kappa \leq m, \end{aligned}$$

where $m \geq 1$, $\lambda > 0$, and F is continuous at least in the interior of the domain of interest; in [11] the authors apply a different methodology to a similar Lidstone problem, analyzing the existence of solution via bifurcation techniques; in [3] it is studied the existence, multiplicity and nonexistence results for nontrivial solutions to a nonlinear discrete fourth-order Lidstone boundary value problem; in [6] Cid et al. consider Lidstone boundary value problem, applying the monotone iterative technique with fixed point theorems of cone expansion or compression type; in [21] the authors deal with the existence and uniqueness of solution for a class of elliptic Lidstone boundary value problems; on [2, 20], the authors study, respectively, Lidstone polynomials and boundary value problems and boundary layer phenomenon,...among others.

More recently on [5], Cabada and Somoza extensively study a family of problems involving Lidstone boundary conditions type. The existence of solution is proved through the usage of lower and upper solutions.

In addition, Lidstone boundary value problems can also be found on [18], where Minhós et al. prove an existence and location result for the fourth order fully nonlinear equation

$$u^{(iv)} = f(t, u, u', u'', u'''), \quad 0 < t < 1$$

with the Lidstone boundary conditions

$$u(0) = u(1) = u''(0) = u''(1) = 0,$$

where $f : [0, 1] \times \mathbb{R}^4 \rightarrow \mathbb{R}$ is a continuous function satisfying a Nagumo type condition.

Consequently, Fialho and Minhós in [9], study the nonlinear fully equation

$$u^{(iv)}(x) + f(x, u(x), u'(x), u''(x), u'''(x)) = 0,$$

for $x \in [0, 1]$, where $f : [0, 1] \times \mathbb{R}^4 \rightarrow \mathbb{R}$ is a continuous functions, coupled with the Lidstone boundary conditions,

$$u(0) = u(1) = u''(0) = u''(1) = 0.$$

The authors elaborate on how different definitions of lower and upper solutions can generalize existence and location results for boundary value problems with Lidstone boundary data.

An approach with Lidstone boundary conditions using system of differential equations can be found in [23]. The authors considered the existence of positive solutions for fourth-order nonlinear singular semipositone system

$$\begin{aligned} u^{(4)}(t) &= f(t, u(t), v(t), u''(t), v''(t)), \quad t \in (0, 1), \\ v^{(4)}(t) &= g(t, u(t), v(t), u''(t), v''(t)), \quad t \in (0, 1), \\ u(0) &= u(1) = u''(0) = u''(1) = 0, \\ v(0) &= v(1) = v''(0) = v''(1) = 0, \end{aligned}$$

with $f, g \in C((0, 1) \times [0, +\infty) \times [0, +\infty) \times (-\infty, 0] \times (-\infty, 0], \mathbb{R})$. The existence results were obtained by approximating the fourth-order system to a second-order singular one and using a fixed point index theorem on cones.

Motivated by the works mentioned above, this paper concerns the study of the fourth order coupled system

$$\begin{cases} u^{(4)}(t) = f(t, u(t), v(t), u'(t), v'(t), u''(t), v''(t)), & t \in [0, 1], \\ v^{(4)}(t) = h(t, u(t), v(t), u'(t), v'(t), u''(t), v''(t)), & t \in [0, 1], \end{cases} \tag{1.2}$$

with Lidstone boundary conditions

$$\begin{cases} u(0) = u(1) = A_1, \quad u''(0) = A_2, \quad u''(1) = A_3, \\ v(0) = v(1) = B_1, \quad v''(0) = B_2, \quad v''(1) = B_3, \end{cases} \tag{1.3}$$

where $f, h : [0, 1] \times \mathbb{R}^6 \rightarrow \mathbb{R}$ are continuous functions and $A_i, B_i \in \mathbb{R}$, for $i = 1, 2, 3$.

The method applies lower and upper solutions and degree theory. The authors would like to point out, that to the best of their knowledge, it is the first time where fourth order coupled systems of differential equations with dependence of the first and second derivatives is considered subject to Lidstone boundary conditions (1.3).

This paper is outlined as follows. In Section 2, the key definitions and considerations are stated. The main theorem is presented in Section 3. Finally, in Section 4, an application to a system of coupled suspension bridges is proposed, as an example of (1.2)–(1.3), based on [16].

2 Preliminaries

For system (1.2)–(1.3) we consider coupled lower and upper solutions given by next definition:

DEFINITION 1. A pair of functions $(\alpha_1, \alpha_2) \in (C^4([0, 1]))^2$ is a coupled lower solution of problem (1.2)–(1.3) if

(i)

$$\begin{aligned} \alpha_1^{(4)}(t) &\leq f(t, \alpha_1(t), \alpha_2(t), \alpha_1'(t), \alpha_2'(t), \alpha_1''(t), \alpha_2''(t)), \\ \alpha_2^{(4)}(t) &\leq h(t, \alpha_1(t), \alpha_2(t), \alpha_1'(t), \alpha_2'(t), \alpha_1''(t), \alpha_2''(t)); \end{aligned}$$

(ii)

$$\begin{aligned} \alpha_1(0) &\leq A_1, \quad \alpha_1(1) \leq A_1, \quad \alpha_2(0) \leq B_1, \quad \alpha_2(1) \leq B_1, \\ \alpha_1''(0) &< A_2, \quad \alpha_1''(1) \leq A_3, \quad \alpha_2''(0) < B_2, \quad \alpha_2''(1) \leq B_3; \end{aligned}$$

(iii)

$$\begin{aligned} \alpha_1'(0) - \beta_1'(0) &\leq \min \{ \beta_1(0) - \beta_1(1), \alpha_1(1) - \alpha_1(0), 0 \}, \\ \alpha_2'(0) - \beta_2'(0) &\leq \min \{ \beta_2(0) - \beta_2(1), \alpha_2(1) - \alpha_2(0), 0 \}. \end{aligned}$$

A pair of functions $(\beta_1, \beta_2) \in (C^4[0, 1])^2$ is a coupled upper solution of problem (1.2)–(1.3) if it verifies the reverse inequalities.

Remark 1. Forward, we denote $(a, b) \leq (c, d)$ meaning that $a \leq c$ and $b \leq d$, for $a, b, c, d \in \mathbb{R}$.

Remark 2. Note that if

$$(\alpha_1''(t), \alpha_2''(t)) \leq (\beta_1''(t), \beta_2''(t)), \quad \forall t \in [0, 1],$$

then from Definition 1, (iii),

$$(\alpha_1'(t), \alpha_2'(t)) \leq (\beta_1'(t), \beta_2'(t)), \quad \forall t \in [0, 1]$$

and from Definition 1, (ii),

$$(\alpha_1(t), \alpha_2(t)) \leq (\beta_1(t), \beta_2(t)), \quad \forall t \in [0, 1].$$

Below, a proposition of the degree theory that will be used to guarantee the existence of a solution for problem (1.2)–(1.3):

Proposition 1. (*[7, 10]*) *Let X be a Banach space, $\Omega \subset X$ be a bounded open set such that $0 \in \Omega$ and $T : \overline{\Omega} \rightarrow X$ be completely continuous linear operator such that $I - T$ is an homeomorphism. Then*

$$|d(I - T, \Omega)| = 1.$$

3 Main result

This section is dedicated to the main theorem which is an existence and location of solution for problem (1.2)–(1.3).

Theorem 1. *Let $f, h : [0, 1] \times \mathbb{R}^6 \rightarrow \mathbb{R}$ be a continuous functions. If there are coupled lower and upper solutions of (1.2)–(1.3), (α_1, α_2) and (β_1, β_2) , respectively, according Definition 1, such that*

$$(\alpha_1''(t), \alpha_2''(t)) \leq (\beta_1''(t), \beta_2''(t)),$$

and moreover, if f and h satisfy

$$\begin{aligned} f(t, \alpha_1(t), \alpha_2(t), \alpha_1'(t), \alpha_2'(t), x_2, \alpha_2''(t)) &\geq f(t, x_0, y_0, x_1, y_1, x_2, y_2) \\ &\geq f(t, \beta_1(t), \beta_2(t), \beta_1'(t), \beta_2'(t), x_2, \beta_2''(t)) \end{aligned} \tag{3.1}$$

for $t \in [0, 1]$, $\alpha_1^{(i)}(t) \leq x_i \leq \beta_1^{(i)}(t)$, $i = 0, 1, 2$, $\alpha_2^{(j)}(t) \leq y_j \leq \beta_2^{(j)}(t)$, $j = 0, 1, 2$, and

$$\begin{aligned} h(t, \alpha_1(t), \alpha_2(t), \alpha_1'(t), \alpha_2'(t), \alpha_1''(t), y_2) &\geq h(t, x_0, y_0, x_1, y_1, x_2, y_2) \\ &\geq h(t, \beta_1(t), \beta_2(t), \beta_1'(t), \beta_2'(t), \beta_1''(t), y_2), \end{aligned} \tag{3.2}$$

for $t \in [0, 1]$, $\alpha_1^{(i)}(t) \leq x_i \leq \beta_1^{(i)}(t)$, $i = 0, 1, 2$, $\alpha_2^{(j)}(t) \leq y_j \leq \beta_2^{(j)}(t)$, $j = 0, 1, 2$. Then there exists at least one nontrivial solution of (1.2)–(1.3), a pair $(u(t), v(t)) \in (C^4[0, 1], \mathbb{R})^2$ such that,

$$\alpha_1^{(i)}(t) \leq u^{(i)}(t) \leq \beta_1^{(i)}(t), \quad \alpha_2^{(i)}(t) \leq v^{(i)}(t) \leq \beta_2^{(i)}(t), \tag{3.3}$$

for $t \in [0, 1]$ and $i = 0, 1, 2$.

Proof. Consider the truncated, perturbed and coupled homotopic system

$$\begin{cases} u^{(4)}(t) = \lambda f \left(\begin{array}{l} t, \delta_{10}(t, u(t)), \delta_{20}(t, v(t)), \delta_{11}(t, u'(t)), \delta_{21}(t, v'(t)), \\ \delta_{12}(t, u''(t)), \delta_{22}(t, v''(t)) \\ + u''(t) - \lambda \delta_{12}(t, u''(t)) \end{array} \right) \\ v^{(4)}(t) = \lambda h \left(\begin{array}{l} t, \delta_{10}(t, u(t)), \delta_{20}(t, v(t)), \delta_{11}(t, u'(t)), \delta_{21}(t, v'(t)), \\ \delta_{12}(t, u''(t)), \delta_{22}(t, v''(t)) \\ + v''(t) - \lambda \delta_{22}(t, v''(t)) \end{array} \right), \end{cases} \tag{3.4}$$

where, for each $i = 1, 2, j = 0, 1, 2, \delta_{ij}$ are the truncature functions defined by

$$\delta_{ij}(t, w) = \begin{cases} \beta_i^{(j)}(t), & w > \beta_i^{(j)}(t), \\ w, & \alpha_i^{(j)}(t) \leq w \leq \beta_i^{(j)}(t), \\ \alpha_i^{(j)}(t), & w < \alpha_i^{(j)}(t), \end{cases} \tag{3.5}$$

together with the boundary conditions

$$\begin{cases} u(0) = u(1) = \lambda A_1, & (1 - \lambda)u'''(0) = \lambda|u''(0) - A_2|, \\ (1 - \lambda)u'''(1) = \lambda|u''(1) - A_3|, \\ v(0) = v(1) = \lambda B_1, & (1 - \lambda)v'''(0) = \lambda|v''(0) - B_2|, \\ (1 - \lambda)v'''(1) = \lambda|v''(1) - B_3|, \end{cases} \tag{3.6}$$

for $\lambda \in [0, 1]$.

Step 1: *There are $r_1, r_1^*, r_2, r_2^* > 0$, such that every solution $(u(t), v(t))$ of problem (3.4),(3.6) satisfies*

$$|u^{(i)}(t)| < r_1, \quad |u(t)| < r_1^*, \quad |v^{(i)}(t)| < r_2, \quad |v(t)| < r_2^*, \quad \forall t \in [0, 1], \tag{3.7}$$

for $i = 1, 2$, independently of $\lambda \in [0, 1]$. For $j = 1, 2$, take $r_j > 0$ large enough such that for every $t \in [0, 1]$,

$$-r_j \leq \alpha_j''(t) \leq \beta_j''(t) < r_j \tag{3.8}$$

$$r_1 > \max\{|A_2|, |A_3|\} := A, \quad r_1^* := r_1 + |A_1|, \tag{3.9}$$

$$r_2 > \max\{|B_2|, |B_3|\} := B, \quad r_2^* := r_2 + |B_1|,$$

$$\begin{aligned} f(t, \beta_1(t), \beta_2(t), \beta_1'(t), \beta_2'(t), \beta_1''(t), \beta_2''(t)) + r_1 - \beta_1''(t) &> 0, \\ f(t, \alpha_1(t), \alpha_2(t), \alpha_1'(t), \alpha_2'(t), \alpha_1''(t), \alpha_2''(t)) - r_1 - \alpha_1''(t) &< 0, \\ f(t, \beta_1(t), \beta_2(t), \beta_1'(t), \beta_2'(t), \beta_1''(t), \beta_2''(t)) + r_2 - \beta_2''(t) &> 0, \\ h(t, \alpha_1(t), \alpha_2(t), \alpha_1'(t), \alpha_2'(t), \alpha_1''(t), \alpha_2''(t)) - r_2 - \alpha_2''(t) &< 0. \end{aligned} \tag{3.10}$$

Assume that, by contradiction, for $i = 2$ there exists $t_0 \in [0, 1]$, such that

$$|u''(t_0)| \geq r_1.$$

In the case $u''(t_0) \geq r_1$ define

$$\max_{t \in [0,1]} u''(t) := u''(t_0) \geq r_1.$$

(I) If $t_0 \in (0, 1)$, we have $u'''(t_0) = 0$ and $u^{(4)}(t_0) \leq 0$. Therefore, for $\lambda = 0$ and by (3.4), (3.5), the following contradiction holds

$$0 \geq u^{(4)}(t_0) = u''(t_0) \geq r_1 > 0.$$

(II) On the other hand, if $\lambda \in (0, 1]$ and by (3.1), (3.4), (3.5), (3.8), and (3.10),

we have the following contradiction

$$\begin{aligned}
 0 &\geq u^{(4)}(t_0) = \lambda f \left(\begin{array}{c} t_0, \delta_{10}(t_0, u(t_0)), \delta_{20}(t_0, v(t_0)), \delta_{11}(t_0, u'(t_0)), \\ \delta_{21}(t_0, v'(t_0)), \beta_1''(t_0), \delta_{22}(t_0, v''(t_0)) \end{array} \right) \\
 &\quad + u''(t_0) - \lambda\beta_1''(t_0) \\
 &\geq \lambda f(t_0, \beta_1(t_0), \beta_2(t_0), \beta_1'(t_0), \beta_2'(t_0), \beta_1''(t_0), \beta_2''(t_0)) + u''(t_0) - \lambda\beta_1''(t_0) \\
 &= \lambda \left[\begin{array}{c} f(t_0, \beta_1(t_0), \beta_2(t_0), \beta_1'(t_0), \beta_2'(t_0), \beta_1''(t_0), \beta_2''(t_0)) \\ + r_1 - \beta_1''(t_0) \end{array} \right] > 0.
 \end{aligned}$$

If $t_0 = 0$, that is

$$\max_{t \in [0,1]} u''(t) := u''(0) \geq r_1 > A_2, \tag{3.11}$$

then $u'''(0) \leq 0$.

If $\lambda = 0$, we have $u'''(0) = 0$, $u^{(4)}(0) \leq 0$ and the arguments follow as in the previous case for interior points.

If $\lambda \in (0, 1]$, by (3.6), (3.9) and (3.11), this contradiction holds

$$0 \geq (1 - \lambda)u'''(0) = \lambda|u''(0) - A_2| \geq \lambda(r_1 - A_2) > 0.$$

So, $|u''(t)| < r_1$. Applying the similar method above, it may be shown that $|v''(t)| < r_2$, for r_2 verifying (3.9) and (3.10).

By (1.3) and Rolle’s theorem there exists $\xi \in (0, 1)$, such that $u'(\xi) = 0$. Therefore,

$$\begin{aligned}
 |u'(t)| &\leq \int_{\xi}^t |u''(s)| ds \leq r_1(t - \xi) \leq r_1, \\
 |u(t)| &= \left| u(0) + \int_0^t u'(s) ds \right| \leq |A_1| + r_1 t \leq r_1 + |A_1| := r_1^*.
 \end{aligned}$$

Similarly, it can be proved that $|v'(t)| < r_2$ and $|v(t)| < r_2^*$.

Step 2: For $\lambda = 1$ the system (3.4), (3.6) has a least solution $(u(t), v(t))$.

Define the operators $\mathcal{F} : C^4([0, 1]) \rightarrow C([0, 1]) \times \mathbb{R}^4$, $\mathcal{H} : C^4([0, 1]) \rightarrow C([0, 1]) \times \mathbb{R}^4$ by

$$\mathcal{F}u = \left(u^{(4)}, u(0), u(1), u''(0), u''(1) \right), \quad \mathcal{H}v = \left(v^{(4)}, v(0), v(1), v''(0), v''(1) \right)$$

and for $\lambda \in [0, 1]$ operators \mathcal{N}_λ , $\mathcal{N}_\lambda^* : C^3([0, 1]) \rightarrow C([0, 1]) \times \mathbb{R}^4$ by

$$\begin{aligned}
 \mathcal{N}_\lambda u &= \left(\begin{array}{c} \lambda f \left(\begin{array}{c} t, \delta_{10}(t, u(t)), \delta_{20}(t, v(t)), \delta_{11}(t, u'(t)), \\ \delta_{21}(t, v'(t)), \delta_{12}(t, u''(t)), \delta_{22}(t, v''(t)) \end{array} \right) + \mu_1(u), \\ \lambda A_1, \lambda A_1, \lambda (u'''(0) + |u''(0) - A_2|), \lambda (u'''(1) + |u''(1) - A_3|) \end{array} \right), \\
 \mathcal{N}_\lambda^* v &= \left(\begin{array}{c} \lambda h \left(\begin{array}{c} t, \delta_{10}(t, u(t)), \delta_{20}(t, v(t)), \delta_{11}(t, u'(t)), \\ \delta_{21}(t, v'(t)), \delta_{12}(t, u''(t)), \delta_{22}(t, v''(t)) \end{array} \right) + \mu_2(v), \\ \lambda B_1, \lambda B_1, \lambda (v'''(0) + |v''(0) - B_2|), \lambda (v'''(1) + |v''(1) - B_3|) \end{array} \right).
 \end{aligned}$$

where $\mu_1(u) = u''(t) - \lambda\delta_{12}(t, u''(t))$, $\mu_2(v) = v''(t) - \lambda\delta_{22}(t, v''(t))$.

As \mathcal{F}, \mathcal{H} have a compact inverses we can define the completely continuous operator

$$\mathcal{T}_\lambda, \mathcal{T}_\lambda^* : (C^3([0, 1]), \mathbb{R}) \rightarrow (C^3([0, 1]), \mathbb{R})$$

given by $\mathcal{T}_\lambda u = (\mathcal{F}^{-1}\mathcal{N}_\lambda) u$ and $\mathcal{T}_\lambda^* v = (\mathcal{H}^{-1}\mathcal{N}_\lambda^*) v$.

Define the set

$$\Omega = \left\{ (u, v) \in C^3([0, 1]) : \|u^{(i)}\|_\infty < r_1, \|u\|_\infty < r_1^*, \right. \\ \left. \|v^{(i)}\|_\infty < r_2, \|v\|_\infty < r_2^*, i = 1, 2 \right\},$$

where r_i and r_i^* are given by Step 1. So, $d(I - \mathcal{T}_\lambda, \Omega, 0)$ and $d(I - \mathcal{T}_\lambda^*, \Omega, 0)$ are well defined for every $\lambda \in [0, 1]$. The arguments follow for \mathcal{T}_λ , as for \mathcal{T}_λ^* they are similar.

By the invariance under homotopy,

$$d(I - \mathcal{T}_0, \Omega, 0) = d(I - \mathcal{T}_1, \Omega, 0).$$

The equation $\mathcal{T}_0(u) = u$ is equivalent to the problem

$$\begin{cases} u^{(4)}(t) = u''(t), \\ u(0) = u(1) = u'''(0) = u'''(1) = 0, \end{cases}$$

which has only the null solution. Then by Proposition 1,

$$|d(I - \mathcal{T}_0, \Omega, 0)| = 1,$$

and consequently $\mathcal{T}_1(u) = u$ has at least one solution. So, the problem (3.4), (3.6) has at least one solution $(u(t), v(t))$ in Ω , for $\lambda = 1$.

Step 3: *This solution $(u(t), v(t))$ is a solution of the system (1.2)–(1.3), too, if*

$$\alpha_1^{(i)}(t) \leq u^{(i)}(t) \leq \beta_1^{(i)}(t), \quad \alpha_2^{(i)}(t) \leq v^{(i)}(t) \leq \beta_2^{(i)}(t),$$

for $t \in [0, 1]$ and $i = 0, 1, 2$.

Suppose by contradiction, that there is $t \in [0, 1]$ such that $\alpha_1''(t) > u''(t)$ and consider

$$\min_{t \in [0, 1]} [u''(t) - \alpha_1''(t)] := u''(t_0) - \alpha_1''(t_0) < 0.$$

In fact $t_0 \neq 0$, as, by (1.3) and Definition 1 (ii),

$$u''(0) - \alpha_1''(0) = A_2 - \alpha_1''(0) > 0.$$

Analogously $t_0 \neq 1$.

For $t_0 \in]0, 1[$, then $u'''(t_0) - \alpha_1'''(t_0) = 0$ and $u^{(4)}(t_0) \geq \alpha_1^{(4)}(t_0)$. So, by Definition 1 and (3.1), we have the following contradiction

$$\begin{aligned} u^{(4)}(t_0) &= f \left(t_0, \delta_{10}(t_0, u(t_0)), \delta_{20}(t_0, v(t_0)), \delta_{11}(t_0, u'(t_0)), \right. \\ &\quad \left. \delta_{21}(t_0, v'(t_0)), \alpha_1''(t_0), \delta_{22}(t_0, v''(t_0)) \right) \\ &\quad + u''(t_0) - \alpha_1''(t_0) \\ &\leq f(t_0, \alpha_1(t_0), \alpha_2(t_0), \alpha_1'(t_0), \alpha_2'(t_0), \alpha_1''(t_0), \alpha_2''(t_0)) + u''(t_0) - \alpha_1''(t_0) \\ &< f(t_0, \alpha_1(t_0), \alpha_2(t_0), \alpha_1'(t_0), \alpha_2'(t_0), \alpha_1''(t_0), \alpha_2''(t_0)) \leq \alpha_1''(t_0). \end{aligned}$$

Therefore, $\alpha''(t) \leq u''(t)$ for $t \in [0, 1]$, and by similar arguments it can be proved that $u''(t) \leq \beta_1''(t)$, for $t \in [0, 1]$, and the correspondent inequalities for $v(t)$. Therefore,

$$\alpha_1''(t) \leq u''(t) \leq \beta_1''(t), \quad \alpha_2''(t) \leq v''(t) \leq \beta_2''(t), \quad \forall t \in [0, 1]. \tag{3.12}$$

By integration of (3.12), (1.3), Definition 1 (iii), and (3.1), we have

$$\alpha_1^{(i)}(t) \leq u^{(i)}(t) \leq \beta_1^{(i)}(t), \quad \alpha_2^{(i)}(t) \leq v^{(i)}(t) \leq \beta_2^{(i)}(t),$$

for $t \in [0, 1]$ and $i = 0, 1, 2$. \square

Remark 3. In Definition 1, the strict inequalities in assumption (ii) imply that lower and upper functions can not be constants, which is crucial for Theorem 1. This is highlighted by the following counter example:

Example 1. Consider the problem

$$\begin{cases} u^{(4)}(t) = -v(t) + \sin t, & \text{for } t \in (0, 1), \\ v^{(4)}(t) = -u(t) + \cos t, & \text{for } t \in (0, 1), \\ u(0) = u(1) = u''(0) = u''(1) = 0, \\ v(0) = v(1) = v''(0) = v''(1) = 0. \end{cases} \tag{3.13}$$

Assume that, in Definition 1, assumption (ii) is replaced by

$$\begin{aligned} \alpha_1(0) &\leq A_1, & \alpha_2(0) &\leq B_1, & \alpha_1(1) &\leq A_1, & \alpha_2(1) &\leq B_1, \\ \alpha_1''(0) &\leq A_2, & \alpha_2''(0) &\leq B_2, & \alpha_1''(1) &\leq A_3, & \alpha_2''(1) &\leq B_3. \end{aligned}$$

Then, the pairs of constant functions

$$(\alpha_1, \alpha_2) = (-1, -1), \quad (\beta_1, \beta_2) = (1, 1)$$

are coupled lower and upper solutions of problem (3.13) according Definition 1, for

$$A_1 = B_1 = A_2 = A_3 = B_2 = B_3 = 0.$$

The functions

$$\begin{aligned} f(t, x_0, y_0, x_1, y_1, x_2, y_2) &= -y_0 + \sin t, \\ h(t, x_0, y_0, x_1, y_1, x_2, y_2) &= -x_0 + \cos t \end{aligned}$$

satisfy the monotone assumptions (3.1) and (3.2). Then, by Theorem 1, system (3.13) would have at least one solution $(u, v) \in (C^4([0, 1]))^2$, such that,

$$-1 \leq u(t) \leq 1, \quad -1 \leq v(t) \leq 1, \quad \forall t \in [0, 1].$$

However, from (3.3), this solution must be constant and, from the boundary conditions of (3.13), it would be the trivial solution $(u, v) = (0, 0)$, which is not a solution of (3.13). Therefore, the strict inequalities in Definition 1, assumption (ii), can not be removed.

4 Bending of crossed suspension bridges

In this section a coupled system composed by two suspension crossed bridges is considered. To comply with the conceptual meaning of the model, the authors will adopt x as independent variable for this section, instead of t , as previously, as in these models, as x represents displacement. Such suspension crossed bridges can be approached via a coupled system of two fourth order differential equations, following the same principle as the original model suggested in [12], assuming the adapted form

$$\begin{aligned}
 & E_1 I_1 w_1^{(4)}(x) + H_1 \left(\frac{w_1'(x) + w_2'(x)}{1 + (y_1'(x))^2} \right) \\
 & \quad + (|w_1''(x)| w_2''(x) + y_1'(x)) + (w_1(x))^3 = p_1(x), \text{ for } x \in (0, L_1), \\
 & E_2 I_2 w_2^{(4)}(x) + H_2 \left(\frac{w_1'(x) + w_2'(x)}{1 + (y_2'(x))^2} \right) \\
 & \quad + (w_1''(x) |w_2''(x)| + y_2'(x)) + (w_2(x))^3 = p_2(x), \text{ for } x \in (0, L_2), \\
 & w_1(0) = w_1(L_1) = w_1''(0) = w_1''(L_1) = 0, \\
 & w_2(0) = w_2(L_2) = w_2''(0) = w_2''(L_2) = 0,
 \end{aligned} \tag{4.1}$$

where for $i = 1, 2$, H_i, p_i , are non negative forces, $w_i = w_i(x)$ are the vertical displacement of the beams, $y_i = y_i(x)$ are the position of the cable at rest, E_i and I_i are the elastic modulus of the material and the moment of inertia of the cross section respectively, combined they are the flexural rigidity related with the material used on each bridge. H_i are the horizontal tensions in each cable, subject to some loads $p_i = p_i(x)$ and L_i are the lengths of the respective beams.

As an example, the potential type of bridge described can be visualized in the diagram of Figure 1. This example stresses on the level of applicability of the theory developed.

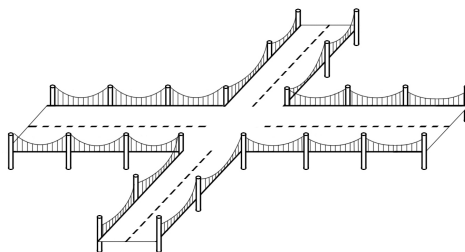


Figure 1. Diagram coupled bridges.

As a numeric example, we consider in (4.1) the values $E_1 I_1 = 3.93 \times 10^8 N.m$, $E_2 I_2 = 3.83 \times 10^8 N.m$, $H_1 = 3.4$, $H_2 = 2.5$, $p_1(x) = L_1 \sin(x)$, $p_2(x) =$

$L_2 \sin(x)$, $L_1 = 1$, $L_2 = 1$ also $y_1(x) = 3(x - \frac{L_1}{2})^2$ and $y_2(x) = 4(x - \frac{L_2}{2})^2$, that is, (4.1) becomes

$$\begin{aligned}
 & 3.93 \times 10^8 w_1^{(4)}(x) + 3.4 \left(\frac{w_1'(x) + w_2'(x)}{1 + (6x - 3)^2} \right) + |w_1''(x)| w_2''(x) \\
 & \quad - 6x + 3 + (w_1(x))^3 = \sin(x), \text{ for } x \in (0, 1), \\
 & 3.83 \times 10^8 w_2^{(4)}(x) + 2.5 \left(\frac{w_1'(x) + w_2'(x)}{1 + (8x - 4)^2} \right) + w_1''(x) |w_2''(x)| \\
 & \quad + 8x - 4 + (w_2(x))^3 = \sin(x), \text{ for } x \in (0, 1), \\
 & w_1(0) = w_1(1) = w_1''(0) = w_1''(1) = 0, \\
 & w_2(0) = w_2(1) = w_2''(0) = w_2''(1) = 0.
 \end{aligned} \tag{4.2}$$

The flexural rigidity values considered were based on [4]. It is clear to see that (4.2) is a particular case of (1.2), where

$$\begin{aligned}
 f(x, x_0, y_0, x_1, y_1, x_2, y_2) &= \frac{1}{3.93 \times 10^8} \\
 & \times \left(-3.4 \left(\frac{x_1 + y_1}{1 + (6x - 3)^2} \right) - |x_2| y_2 - 6x + 3 - (x_0)^3 + p_1(x) \right), \\
 h(x, x_0, y_0, x_1, y_1, x_2, y_2) &= \frac{1}{3.83 \times 10^8} \\
 & \times \left(-2.5 \left(\frac{x_1 + y_1}{1 + (8x - 4)^2} \right) - x_2 |y_2| - 8x + 4 - (y_0)^3 + p_2(x) \right).
 \end{aligned} \tag{4.3}$$

For this case, all conditions in Theorem 1 are satisfied and the pairs

$$(\alpha_1, \alpha_2) = (-x^2 - x, -2x^2 - 2x), \quad (\beta_1, \beta_2) = (x^2 + x, 2x^2 + 2x)$$

are coupled lower and upper solutions of problem (4.2) according Definition 1.

In addition the nonlinearities, (4.3) satisfy all the monotone assumptions, (3.1), therefore, by Theorem 1, the system (4.2) has at least one non trivial solution $(w_1, w_2) \in (C^4([0, 1]))^2$, that is,

$$\begin{aligned}
 -x^2 - x &\leq w_1(x) \leq x^2 + x, \quad \forall x \in [0, 1], \\
 -2x^2 - 2x &\leq w_2(x) \leq 2x^2 + 2x, \quad \forall x \in [0, 1].
 \end{aligned}$$

The authors would like to highlight that this solution is in fact a non-trivial solution, as the null function does not satisfy (4.2).

Moreover, we can estimate graphically the bending of both suspension bridges, as it is illustrated in the Figure 2.

5 Conclusions

In this paper the authors study and present an existence and location result for the problem (1.2)–(1.3) using the upper and lower solutions method. One

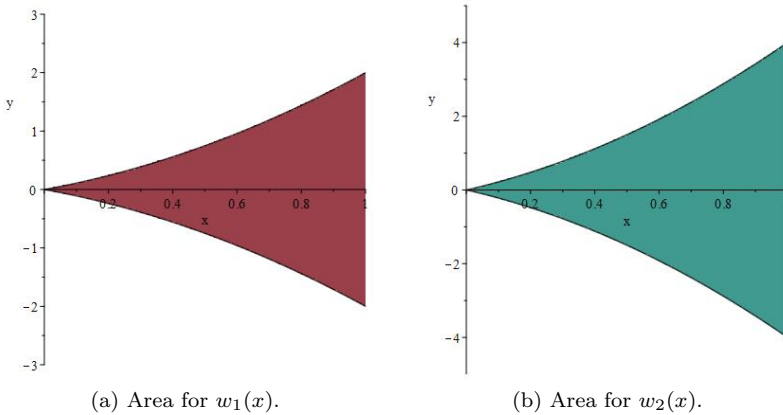


Figure 2. Localization of solutions $w_1(x)$ and $w_2(x)$.

of the key features of the method used lies on the extra-information that can be obtained on the solution. In fact, in addition to the existence of solution, the upper and lower solution provide details on the solution’s location and also on it’s derivatives. This type of information can, therefore provide some qualitative insight on the solution.

To highlight the level of applicability of the results shown, an application to crossed suspended bridges is presented, following some adjustments on the models suggested in [12].

Our method can be adapted to fourth order coupled systems with fully differential equations, applying the Nagumo condition to control the third derivatives, following the method suggested in [19].

To generalize into a fully higher order Lidstone problem it remains to find how to define lower and upper solutions to have some relation (well order or reverse order) on the odd derivatives of lower and upper solutions.

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Remittances, Economic Growth and Investment Nexus: Evidence from Nepal

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Abstract

This paper assesses the contribution of remittances on GDP and private gross fixed capital formation of Nepal by employing the ARDL bound test approach. The model incorporates the level of financial development, and the institutional quality of Nepal as regressors in addition to the macroeconomic regressors recognised by the literature. Perron's (1997) innovation outlier model of breakpoint unit root test has been used to confirm the suitability of the variables in the ARDL bounds test approach. The findings show a positive effect of remittances on GDP while a negative effect on private gross fixed capital formation. The paper concludes that remittances do not act as a source of capital flows in the context of Nepal, rather they behave as compensatory transfers to the recipient households. To align remittances in productive activities such as self-employment, financial investment, etc., a remittance-focused policy is advised to reach out the recipients and provide them rigorous advisory and training supports.

Key Words: ARDL, Economic Growth, Investment, Nepal, Remittance

JEL Classification: E22, E60, F20, F24

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I. INTRODUCTION

Remittances in Nepal started to surge from fiscal year 1999/00 surpassing 10 percent of GDP and making remittances a major source of foreign exchange reserve. In fiscal year 2019/20, Nepal recorded NPR 875 billion remittances (NRB, 2020) constituting 23.3 percent of GDP which is significantly larger than the collective amounts of gross exports, official development assistance, and foreign direct investment in Nepal. However, the studies of CBS (2011) and NRB (2012 & 2016) have shown that only about 3.5 percent of remittances has been used in the productive uses such as capital formation and business activities, while above 70 percent of remittances has been used in the daily consumptions in Nepal. Though the consumption of remittances on health and education can be seen as a long-term investment on human capital development, the policymakers intend to see the utilisation of remittances in creation of job opportunities, enhancement of entrepreneurship and production activities, boosting national economic growth, among others. Therefore, the debate over the productive use of remittances still prevails among the policy makers in Nepal who have perceived remittances as a source of capital flow and expect the recipients to invest a significant proportion of remittances in the activities that would contribute to the production and employment activities.

The direct economic benefits of remittances to the recipient economies pour via channels such as consumption of domestic items or domestic capital formation or creation of savings. However, these benefits of remittances are not granted. These depends upon some underlying factors such as motive of the majority of the migrant workers (Alper and Neyapti, 2006), years of migration (De Hass, 2003), level of financial development, institutional quality and investment climate in the recipient economies (Bjuggren et al., 2008)¹. Studies such as Barajas et al.,

¹ Alper and Neyapti (2006), based on evidence from Turkey, found that the productive investment of remittances is a long-run motive of migrant workers, while in short-run, they focus on smoothening of family consumptions. Based on evidence from Morocco, de Haas (2003) found that remittances are used for investments purpose only after 14 years of migration. In the first 14 years, remittances are used in housing investments. Bjuggren et al., (2008) after analysing the panel data of 79 developing economies, found that the productive uses of remittances depend on the level of financial development, the institutional quality and investment climate back in the home country.

(2009); Aggarwal et al., (2011); Lartey (2013); and Dzansi (2013) have found a positive impact of remittances on capital formation while Mallick (2012) and Tung (2018) have denied any such effect of remittances. A similar situation prevails in assessing the empirical relationship between remittances and economic growth. Chami et al., (2005) found a negative correlation between remittances and GDP growth rates concluding that remittances are not profit-driven rather compensatory transfers. Rapoport and Docquier (2005) also found that remittances discourage labor supply and work effort among recipients resulting in increased dependency, lower productivity and delayed growth. Nonetheless, Stark (1991) argues that remittance can be used to purchase both financial and physical assets which can support productive activities like farm investments and entrepreneurial formation. The literature review, therefore, does not provide a conclusive answer regarding the impact of remittances on investment and economic growth. A similar state of inconclusiveness also prevails in the context of Nepal (see section 2). Therefore, this study has assessed the nexus of remittances, economic growth, and private investment in the context of Nepal by incorporating the level of financial development, and the institutional quality of Nepal apart from some important macroeconomic indicators recognised from literature. Rest of the paper has been structured as follows. Section II presents a brief literature review undertaken in the context of Nepal in the course of this study while section III discusses the methodological framework that has been adopted in this study. Section IV presents the empirical findings followed by a brief discussion on the findings in section V. Section VI concludes the paper.

II. BRIEF LITERATURE REVIEW

A considerable number of studies viz. Ojha (2019), Dhungel (2018), Acharya (2017), Uprety (2017), Thagunna and Acharya (2013), Srivastava and Chaudhary (2007), Gaudel (2006), have been undertaken in the context of Nepal assessing the contribution of remittances to the growth variables such as real GDP, real GNP (gross national product) and real PCI (per capita income). All of these studies except Uprety (2017) agree that remittances generate a positive effect on GDP. In contrary, Uprety (2017) concludes a negative effect of remittances on GDP and per capita income of Nepal. Nonetheless, the degree of effect of remittances varies from each other depending upon differences in the study periods, approaches to data analysis,

and the choices of regressors. Moreover, these studies have employed macroeconomic indicators such as capital formation, exports, money supply, trade openness and foreign aid only as the regressors and have not incorporated the level of financial development and the institutional quality of Nepal as factors that might have affected the effectiveness of remittances. In addition, the studies that have spanned before year 2006 to beyond year 2015, for example Ojha (2019), Dhungel (2018), and Acharya (2017) have also not incorporated test for structural breaks² in the variables under consideration in their data analyses. Such structural breaks might have taken place in the series of macroeconomic variables due to the 2006 Democracy Movement, and (or) the 2015 Earthquake in Nepal. Therefore, exclusion of level of financial development and the institutional quality in the analytical models and ignoring structural breaks in the variables' series are noticeable research gaps in assessing the true contribution of remittances in Nepal. In addition, the impact of remittances on domestic capital formation has not been explicitly assessed yet. These gaps, therefore, were the sources of motivation for this study.

III. METHODOLOGY

This paper has examined the dual contributions of remittances in the context of Nepal- firstly, to the real GDP; and secondly, to the domestic private investment, proxied by private gross fixed capital formation, by employing the ARDL (autoregressive distributed lags) bounds test approach to confirm whether a long-run relationships exists among the variables in question. In this approach, though pretesting the order of integration of variables in question is not essential, it requires that none of the variables' series shall be integrated higher than one, $I(1)$. In light of this requirement, Perron's (1997) innovation outlier (IO) model³ of breakpoint unit root test has been used to confirm the suitability of the variables in ARDL bounds test approach. After bound test confirmation, Wald coefficients test has been

² Structural breaks are unexpected changes in the intercept and (or) trend of the time series of variables due to the effects of major events such as regime change, change in policy direction, external shocks, war, etc.

³ This method allows incorporation of structural breaks into analysis. The reason for choosing this approach of unit root test is the caution by Perron (1989) that the long-span data may include effects of major events, i.e. structural breaks, which may behave as outliers. His work on re-examining Nelson and Plosser's work (1982) has already established this fact. Also, in light of 2006 Democratic Movement and the devastating 2015 Earthquake, possibility of structural breaks cannot be ignored in the time series of macroeconomic variables of Nepal.

undertaken to confirm whether any short-run causality relationship exists between the dependent variable and the underlying regressors.

3.1 Sources of Data

This study covers a period of fiscal year 2000/01 to 2019/20⁴. The data of current GDP, GDP deflator, gross and private fixed capital formation, gross domestic savings, and gross exports of goods and services have been taken from the published reports of Central Bureau of Statistics (CBS, 2021), Nepal. Likewise, the data on remittances, and gross bank deposits have been taken from the published reports of Nepal Rastra Bank (NRB, 2021), and the data on the political stability index has been taken from the World Bank (2020a). The real value of variables in question have been computed by dividing their current values by GDP deflator of respective year.

3.2 Models

The following two models have been proposed to assess the dual objectives of the study as mentioned above. The equation (1) would assess the contribution of remittances on the real GDP; and the equation (2) would assess the contribution of remittances on private gross fixed capital formation, which has been treated as a proxy for domestic private investment. The final regressors have been selected after examining the statistical robustness of several permutations of probable regressors in the models.

The equation (1) proposes that the gross domestic product of Nepal is a function of remittances, gross fixed capital formation, and gross exports. In addition, an interactive term has been introduced in the model to examine any impact of remittances on gross domestic product via banking platform.

$$\ln GDP_r = f(\ln RM_r, \ln GFCF_r, \ln X_r, \ln RM_r * \frac{D}{GDP}) \dots\dots\dots (1)$$

Where ‘ln’ represents the log-transformation of the variables’ series. This transformation has been done to remove any exponential variance present in the

⁴ The proportion of remittances to the GDP of Nepal became significant only from fiscal year 1999/00 onward. In addition, the data of ‘political stability index’ are available from year 2000 onward only.

series. GDP_r is the real value of gross domestic product, RM_r is the real value of remittances inflows, $CFGFr$ is the real value of gross fixed capital formation, and X_r is the real value of gross exports, all for Nepal and base year in 2000/01. In this model, the real value of remittance has been introduced together with the gross fixed capital formation and gross exports so that a comparative assessment can be done on remittances' contribution to the real GDP. In addition, as reported by CBS (2011) and NRB (2012 & 2016), a part of remittances also forms the gross deposits in the banks and financial institutions which would contribute to the economic growth differently. Therefore, an interactive term, $\ln RM_r * \frac{D}{GDP}$ has been introduced as a proxy for the fraction of remittances in the banking channel. In this interactive term, $\frac{D}{GDP}$ is the current gross bank deposits (D) as percent of GDP which is also a proxy for the level of financial development⁵.

The equation (2) proposes that domestic private investment in Nepal is a function of remittances, domestic savings, level of financial development and institutional quality in Nepal.

$$\frac{P_GFCF}{GDP} = f\left(\frac{RM}{GDP}, \frac{GDS}{GDP}, \frac{D}{GDP}, DUM\right) \quad \dots\dots\dots (2)$$

Where $\frac{P_GFCF}{GDP}$ is the current value of private gross fixed capital formation as percent of GDP and a proxy for domestic private investment; $\frac{RM}{GDP}$ is the current remittances as percent of GDP; $\frac{GDS}{GDP}$ is the current gross domestic savings as percent of GDP; $\frac{D}{GDP}$ has the same interpretation as in equation (1); and DUM ⁶ is the dummy variable for

⁵ Giuliano and Ruiz-Arranz (2005) have recommended four proxies to represent financial development of an economy. These are: (i) liquid liabilities of the financial system ($M2/GDP$); (ii) the sum of demand, time, saving and foreign currency deposits to GDP (DEP/GDP); (iii) claims on the private sector divided by GDP ($LOAN/GDP$); and (iv) credit provided by the banking sector to GDP ($CREDIT/GDP$).

⁶ The dummy variable has been developed from the 'political stability index (-2.5 weak; 2.5 strong)' developed and published by the World Bank (2020a). For Nepal, this index has never been positive since year 2000. However, the score has shown a sign of improvement after year 2016 (score = -1.0), i.e. after 2016, the scores are less negative. Hence, the negative unity value has been set as a cutoff point, and the years that have had scores below negative unity has been coded as 1

political instability (1 if political stability index ≤ -1 ; otherwise 0), which is also a proxy for the institutional quality. In this relationship, remittances have been considered as a source of capital financing together with the gross domestic savings. Such a role of remittances is supported by many studies⁷ that argue that remittances have tendency to stimulate private investments through banking channels. Since the level of financial development is expressed as percent of GDP (i.e., $\frac{D}{GDP}$) in this model, both remittances and gross domestic savings have also been also measured as percent of GDP in order to make regressors aligned and comparable with the dependent variable. In equation (2), the effects of remittances, and financial development on investment are expected to be positive, while that of the gross domestic savings, and political instability are expected to be negative.

3.3 Selection of Variables

The studies mentioned in section (2) have used a range of regressors to examine the economic contributions of remittances on the growth variables (Table 1). Among these variables, remittances (RM), gross fixed capital formation (GFCF), and gross exports of goods and services (X) have been chosen as macroeconomic indicators and the gross bank deposits as percent of GDP as a proxy for the level of financial development. All of these regressors are expected to show positive effects on the real GDP of Nepal. Many other regressors viz. consumption, imports, number of school enrollment, grants, etc., have been dropped off from the model on the following three grounds: firstly, they are closely related with the chosen regressors, for example, trade openness is closely linked with the gross exports of goods and services; secondly difficult to quantify directly, for example, the purpose of number of secondary school enrollment is to incorporate the human capital effects of remittances, but the author realised that it will be a weak regressor to capture the human capital effects as such; and thirdly the robustness of the given model would get compromised if too many regressors are employed into the model. A similar approach has been undertaken while choosing the regressors for equation (2).

(one) to indicate years of political instability, otherwise 0 (zero) to indicate years of political stability.

⁷ Some of such studies are Giuliano and Ruiz-Arranz (2005), Chami et al., (2005), Bjuggren et al., (2008), Mundaca (2009), Aggarwal et al., (2011), Dash (2020), Gelb et al., (2021), etc.

**Table 1: Selection of significant regressors from the literature
in the context of Nepal**

Studies	Regressors used in the model	Highly significant regressors
Ojha (2019)	Remittance, capital formation, broad money supply, foreign aid, and import	Capital formation, remittance, import, and broad money supply
Dhungel (2018)	Remittance, trade openness, gross fixed capital formation, and secondary school enrollment	Gross fixed capital formation, Secondary school enrollment, remittance, and trade openness
Acharya (2017)	Remittance, fixed capital formation, and total merchandised exports,	Fixed capital formation, remittance, and total merchandised exports
Uprety (2017)	Remittance, consumption, and gross capital formation	Consumption, gross capital formation, and remittance
Thagunna and Acharya (2013)	Consumption, savings, investment, imports, and exports	No empirical estimates.
Srivastava and Chaudhary (2007)	Remittance, fixed capital formation, labour force, and gross exports	Fixed capital formation, gross exports, labour force, and remittance
Gaudel (2006)	Remittance, and grants	Grants, and remittance

Source: Author's contribution.

IV. EMPIRICAL FINDINGS

4.1 Test for Breakpoint Unit Root

The appropriate form of Perron's (1997) innovation outlier model, i.e., IO2 or IO1, has been chosen based on significance checks of ADF statistics, and is supported by significance checks of break type of the model⁸. The significance of break dummy

⁸ Checking significance of both intercept break and trend break in IO2 model; and intercept break in IO1 model.

has been examined additionally for the dependent variables. The break date has been chosen by minimizing the Dickey-Fuller t -statistics, and the optimal lag length was set automatic to be chosen by the software⁹ based on the Akaike information criteria (AIC). Estimated results have been presented in Appendix A.

The following five variables' series $\{\ln\text{GDPr}\}$, $\{\ln\text{GFCFr}\}$, $\{\ln\text{Xr}\}$, $\{\frac{\text{D}}{\text{GDP}}\}$, and $\{\frac{\text{GDS}}{\text{GDP}}\}$ have been found of integration order zero, $I(0)$ in their level forms; while four variables' series $\{\ln\text{RMr}\}$, $\{\ln\text{RMr}*\frac{\text{D}}{\text{GDP}}\}$, $\{\frac{\text{P}_\text{-GFCF}}{\text{GDP}}\}$, and $\{\frac{\text{RM}}{\text{GDP}}\}$ were found of integration order one, $I(1)$. The explanation on the appropriate models and significance checks of break type, and break dummy have been provided under remarks in Appendix A. Nonetheless, none of these variables' series have shown integration of order two, $I(2)$, and thus ARDL bounds test can be applied to examine a long-run relationship among the variables in question¹⁰.

⁹ Eviews 10

¹⁰ The order of integration of $\{\ln\text{GDPr}\}$, the dependent variable for equation (1) is found to be zero. In some online discussion forum (for example, Can we use an ARDL model if dependent variables are stationary at level while independent variables have mixed order of integration? (researchgate.net)), there is an argument that in such a situation, an ARDL approach shall not be applied though, but there is no concrete evidence to support this claim. Pesaran et al., (1999 and 2001) have also not explicitly discussed about such requirement in their works. Nonetheless, literature implies that if a long-run relationship statistically exists among variables in question, then the orders of integration of variables, whether $I(0)$ or $I(1)$ really do not matter in ARDL bounds test approach.

4.2 Selection of Optimum Lag Lengths

The optimal lag lengths to incorporate in the ARDL bounds test for both models (eq. 1 and eq. 2) have been determined by undertaking unrestricted VAR equation on the respective endogenous variables used. Since the number of annual observations is less, i.e., 20, the maximum lags allowed by the system was 2. The majority of the criteria including AIC indicate a suitable lag length of 2 for both models (Table 2).

Table 2: Lag lengths selection by criteria

Model	Lag	LogL	LR	FPE	AIC	SC	HQ
Eq. 1	0	-53.1014	NA	0.000438	6.455716	6.703042	6.4898
	1	48.0918	134.9243*	1.05e-07	-2.0102	-0.5262*	-1.8056
	2	81.9366	26.3237	9.34e-08*	-2.9929*	-0.2724	-2.6178*
Eq. 2	0	-199.5036	NA	5083.803	22.7226	22.9699	22.7567
	1	-123.6989	101.0730*	20.5051	17.0777	18.5616*	17.2823
	2	-89.8103	26.3578	18.1101*	16.0900*	18.8106	16.4652*

* Indicates lag order selected by the criterion; LR: Sequential modified LR test statistic (each test at 5% level); FPE: Final prediction error; AIC: Akaike information criterion; SC: Schwarz information criterion; HQ: Hannan-Quinn information criterion.

Source: Author's estimate.

4.3 Estimation of ARDL Models and Checking Their Robustness

Various permutations of lag lengths 1 and 2 on dependent variable and regressors, and trend specification were examined under automatic selection setting, with one time break-dummy of dependent variable as fixed regressor to obtain the most suitable ARDL model for each equation. In the end, ARDL(1, 2, 2, 1, 0) with specification 'restricted constant and no trend' was found the most suitable model for equation (1); and ARDL(1, 2, 2, 2, 0) with specification 'restricted constant and no trend' was found the most suitable model for equation (2). After this, Breusch-Godfrey LM test was applied to confirm that the errors of these models were not serially correlated; results of which have been presented in Table 3. Since the 'observed R-square' values for both models are insignificant within 5 percent level, the null hypothesis of the test that 'there is no serial correlation in the model's

residual' cannot be rejected. This confirms that the chosen ARDL models are free from serial correlation. After this, the stability of these models has been examined by using CUSUM test and found that the CUSUM statistics for both models lie within 5 percent critical bands, thus showing absence of any instability of the coefficients in the selected models.

Table 3: Results of Breusch-Godfrey Serial Correlation LM Test

Model	F-statistic	Probability	Observed R-square	Prob. Chi-Square (2)
Eq. 1	0.4928	F(2,4) = 0.6437	3.5584	0.1688
Eq. 2	0.0817	F(2,3) = 0.9235	0.9302	0.6281

Source: Author's estimate.

4.4 Bounds Test of Cointegration and Error Correction Model

The F-statistics of bounds test for both ARDL models have been found larger than the asymptotic critical value of Pesaran et al., (2001), and the finite sample critical value of Narayan (2005) at 1 percent level (Table 4). That means the null hypothesis of 'no long-run relationship exists among the underlying variables in their level forms' can be rejected at 1 percent level, thus validating the existence of a long-run relationship between dependent variables and respective regressors in their level forms.

Table 4: Results of Bounds Test

Model	F-statistic	Significance asymptotic: n=1000 Pesaran et al., (2001), k = 4				Significance finite sample: n=30 Narayan (2005)			
		1%		5%		1%		5%	
		I0	I1	I0	I1	I0	I1	I0	I1
Eq. 1	60.2758***	3.29	4.37	2.56	3.49	4.28	5.84	3.06	4.22
Eq. 2	19.9558***	3.29	4.37	2.56	3.49	4.28	5.84	3.06	4.22

*** Significant at 1 percent level, k = the number of regressors in the model.

Source: Author's estimate.

After establishing a long-run relationship among the underlying variables, the cointegration equations for both models have been estimated. The coefficients and other statistical characteristics of those regressors have been presented in Table 5. The remittances and gross fixed capital formation have shown positive effects on GDP and are significant within 5 percent level. The effect of gross exports of goods and services on GDP is also positive, though significant at 10 percent level only. Interestingly, the interactive term of remittances with the financial development, proxied by gross deposits as percent of GDP has shown a negative and marginal effect on GDP. This observation has been discussed in detail in section V. In terms of comparative contributions, the remittances fall behind the gross fixed capital formation and gross exports of goods and services. One percent increase (decrease) in the real value of remittances causes the real GDP to increase (decrease) by 0.45 percent only while that of the gross fixed capital formation causes by 1.11 percent, and the gross exports by 0.59 percent. The value of error correction term is negative and significant at 5 percent level and shows that a disequilibrium in the value of the real GDP due to nonproportionate contributions of regressors is corrected by 18.5 percent per year towards maintaining its long-run equilibrium relation with the regressors, *ceteris paribus*, which is a moderately slow speed of adjustment.

On the other hand, remittances, gross domestic savings, and political instability have shown negative effects on the domestic private investment. Numerically, one percent increase (decrease) in remittances as percent of GDP causes a decrease (increase) of 0.30 percent in domestic private investment. The gross domestic savings as percent of GDP causes the domestic private investment to shrink by 0.90 percent; while a politically unstable year causes it to shrink by 3.2 percent. In this way, the political instability has had a massive consequence on the domestic private investment. As expected, the level of financial development has shown a positive effect, and one percent increase in gross bank deposits as percent of GDP causes domestic private investment increase by 0.26 percent. The value of error correction term is negative and significant at 1 percent level and shows that any disequilibrium in the value of domestic private investment is corrected by 92.1 percent every year towards maintaining its long-run equilibrium relation with the regressors, *ceteris paribus*, which is a quick adjustment.

Table 5: Results of cointegration equation

Equation 1				Equation 2			
Dependent variable: lnGDP _t				Dependent variable: $\frac{P_GFCF}{GDP}$			
	Co-eff.	SE	t-stat		Co-eff.	SE	t-stat
lnRM _t	0.450**	0.1316	3.4173	$\frac{RM}{GDP}$	-0.299*	0.1275	-2.3437
lnGFCF _t	1.113**	0.3330	3.3440	$\frac{GDS}{GDP}$	-0.903***	0.1570	-5.7538
lnX _t	0.588*	0.2804	2.0993	$\frac{D}{GDP}$	0.259***	0.0564	4.5832
$lnRM_t * \frac{D}{GDP}$	-0.002*	0.0007	-2.2827	DUM	-3.191**	1.0954	-2.9134
Constant	-10.141	7.5736	-1.3389	Constant	22.433***	2.5159	8.9167
ECT	-0.185**			ECT	-0.921***		

***, ** & * indicate significant at 1 percent, 5 percent, and 10 percent level. ECT = Error correction term.

Source: Author's estimate.

4.5 Short-Run Causalities in the Model

The short-run causality in the models has been examined by using Wald coefficients test on each model, to confirm the joint significance of the lagged regressors on the dependent variables¹¹. The estimates have been presented in Table 6. Since the estimated F-statistics of all the regressors except $\frac{RM}{GDP}$ in equation (2) are greater than the upper bound value of Pesaran et al., (2001) within 5 percent level of significance, the short-run causality runs from these regressors in question to the dependent variable, that means these variables have had short-run effect too, on the dependent variables. Thus, the remittances do have effect on GDP of Nepal in short-run too, but it does not have effect on the domestic private investment in short-run.

¹¹ The guideline is that if the estimated F-statistic in Wald test is greater than the upper bound value, (i.e. I1) of Pesaran et al., (2001) within 5 percent level of significance, the short-run causality runs from the regressor in question to the dependent variable.

Table 6: Results of Wald Test

				Asymptotic critical value bounds for the F-statistic#, k=4 (Case II: Restricted intercept and no trend)			
				1% Significance		5% Significance	
	Regressor	F-statistic	df	I0	I1	I0	I1
Eq. 1	lnRMr	7.0404***	(3,6)	3.29	4.37	2.56	3.49
	lnGFCFr	33.4928***	(3,6)	3.29	4.37	2.56	3.49
	lnXr	28.6613***	(2,6)	3.29	4.37	2.56	3.49
	lnRMr* $\frac{D}{GDP}$	59.8506***	(1,6)	3.29	4.37	2.56	3.49
Eq. 2	$\frac{RM}{GDP}$	1.5572	(3,5)	3.29	4.37	2.56	3.49
	$\frac{GDS}{GDP}$	12.5972***	(3,5)	3.29	4.37	2.56	3.49
	$\frac{D}{GDP}$	5.6519***	(3,5)	3.29	4.37	2.56	3.49
	DUM	16.2835***	(1,5)	3.29	4.37	2.56	3.49

Pesaran et al., (2001, p.300), k= number of regressor, *** indicates significant at 1 percent level.

Source: Author's estimate.

V. DISCUSSION

5.1 Discussion on the Findings of Equation (1)

The positive effect of remittances on GDP is in line with the findings of many other studies in the context of Nepal, and the estimated contribution is higher than the estimates of Dhungel (2018) and Acharya (2017), and slightly smaller than the estimate of Srivastava and Chaudhary (2007). Since a larger chunk of remittances is spent on the daily consumptions which has led to the increased import bills of Nepal (Bhatt, 2013), the positive effect of remittances on GDP is oozing out as net of the positive contribution of private domestic consumptions and negative contribution of imports on GDP. Nonetheless, remittances are still not a prime mover for the economic growth of Nepal and lags significantly behind the contributions of gross fixed capital formation and gross exports. The findings clearly establish that gross

fixed capital formation is the prime mover for the economic growth of Nepal. This conclusion is additionally important for the policymakers of Nepal in terms of recognizing the lags for struggling economic growth in the country. A sluggish change in gross fixed capital formation, which is a usual story in the context of Nepal, is ultimately expected to result into a sluggish GDP growth rate. Therefore, a leap in GDP growth will require a similar leap in the level of gross fixed capital formation as well. Priority to exports can also spur economic growth to Nepal by allocating resources to the most competitive sectors, increasing the efficiency of the economy, and generating employment opportunities for unskilled labourers. However, it will require a massive investment in infrastructures to improve its connectivity, and also strategic recognition of competitive export products based on their value addition. In addition, the sustainability of the export-led economic growth model also requires Nepal to participate into deep preferential trade agreements with the strategic trade partner nations. Interestingly, the coefficient of interactive term of remittances with the level of financial development is negative. Though its value is very small and is also found statistically significant at 10 percent level only, the sign is alarming. It indicates that the fraction of remittances deposited in the banks and financial institutions does not make productive impact on GDP which is a subject matter for future research.

5.2 Discussion on the Findings of Equation (2)

Giuliano and Ruiz-Arranz (2005) and Aggarwal et al., (2011) argue that remittances increase bank deposits which increases loanable funds which in turn will increase credit to the private sector, thus leading to a positive relationship with investment. However, the coefficient of remittances in this model is negative though loosely significant at 10 percent level. Such outcome of remittances happens in the following three situations: firstly, when remittances are extremely used for consumption leading to withdrawal of resources from investment activities (Ahamada and Coulbaly, 2013; Tung, 2018); secondly, when the recipient households are not economically stable and lack entrepreneurial abilities (Buckley and Hofmann, 2012), and thirdly when recipient households gradually draw their engagement from productive investment activities, also known as dependency syndrome (Mallick,

2012). In light of key demographic findings of NRB (2016)¹², all of these factors seem applicable in the context of Nepal. Therefore, this finding indicates that remittances do not act as a source of capital flow for economic growth. Ghosh (2005) also argues that remittances in themselves are not capital flows and are mainly a contribution to the family budget. Chami et al., (2005) also have had a similar conclusion and argue that remittances are compensatory transfers characterised by altruism of the senders in terms of compensating the recipients' bad economic outcomes. Defining remittances as compensatory transfers has a special implication at this juncture. That is, remittances will increase when there is uncertainty in the income of the recipient households. This is evidenced by a recent realisation of Nepal. The remittances to Nepal increased by 8.2 percent in fiscal year 2020/21 (NRB, 2021) despite a decrease in the foreign employment approvals due to pandemic, and a prediction to contract by 12 percent by the World Bank (2020b). Nonetheless, political instability in the country, which has become an acute macroeconomic disease of Nepal has been seen as the main accuse of harming the domestic private investment.

VI. CONCLUDING REMARKS

This paper has assessed the contribution of remittances on economic growth and domestic private investment of Nepal by employing the ARDL bounds test approach. The empirical findings show a positive long-run effect of remittances on GDP and a negative long-run effect of it on domestic private investment. The positive contribution of remittances on GDP oozes out from larger domestic consumptions which on the other hand, has affected the domestic private investment of Nepal negatively. The use of remittances for domestic private investment depends upon the institutional quality and the level of financial development at macrolevel and the purpose for migration at household level. In the current scenario of Nepal, extreme

¹² According to the survey undertaken by NRB (2016), agriculture and foreign employment are the main sources of family's income for over 83 percent of the surveyed households. In addition, 44 percent of the foreign employment workers have had less than 10 years of schooling while 3 percent are illiterate; 73 percent of them are married with at least one child; and 84 percent have had their destinations to either gulf countries or Malaysia. Thus, the majority of the foreign employment workers belong to the marginalised families of the Nepalese society. Therefore, the daily consumption of remittances is basically the need of the recipient families back in Nepal and the remitters are supporting their families altruistically.

use of remittances for consumptions, weak and unstable financial background of the recipient households and prevalence of dependency syndrome together constrain remittances not to act as a source of capital flow for economic growth. The paper concludes that remittances to Nepal behave as compensatory transfers to the recipient households. That is why, remittances increase when there are external shocks to the Nepalese economy.

In light of socio-economic and education background of majority migrant workers' households, the policymakers shall not expect the recipients to get engaged into entrepreneurial activities by themselves. They need rigorous advisory, and training supports in order to have a minimum level of confidence and skills for undertaking any physical and (or) financial investment related decisions. This will require a remittance-focused policy in action. Occasional issuance of the 'Foreign Employment Saving Bonds (FESB)' by Nepal Rastra Bank is an appreciable initiative for reallocating remittances towards productive use; however, low sales percent of it (about 5 percent on average) is really a matter of concern and requires Nepal Rastra Bank to identify the hinderances in due time. The finding also indicates that the fraction of remittances deposited in the banking system do not create positive effect on GDP. Therefore, a remittance-focused policy to reach out the remittance recipients and get them engaged in the rigorous advisory and training supports is necessary to align their income in productive activities such as self-employment, financial investment among others. In comparison to remittances, the contribution of gross fixed capital formation on GDP is significantly larger. However, political stability is the necessary condition for gross fixed capital formation to play its influential role in GDP of Nepal.

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APPENDICES

Appendix A: Results of breakpoint unit root test, Perron's (1997) Innovation Outlier model

Variable series	Type	Level			First Difference			I(p)	Remarks
		TB	k	ADF stat.	TB	k	ADF stat.		
lnGDP _r	IO2	2015	4	-9.1764***	-	-	-	I(0)	Intercept break, trend break, and dummy break were found significant within 1 percent level.
lnRM _r	IO1	2017	0	-3.3643	2005	0	-5.6104***	I(1)	Intercept break was found significant within 10 percent level.
lnGFCF _r	IO1	2017	3	-6.2963***	-	-	-	I(0)	Intercept break was found significant within 1 percent level.
lnX _r	IO2	2013	1	-6.1451***	-	-	-	I(0)	Intercept break was found significant within 1 percent level. Trend break was found significant within 10 percent level.
$\ln RM_r \cdot \frac{D}{GDP}$	IO1	2015	4	-4.6540*	2016	2	-6.3107***	I(1)	Intercept break and break dummy are found significant within 1 percent level.
$\frac{P_GFCF}{GDP}$	IO1	2015	4	-5.2843**	2019	0	-5.6516***	I(1)	Intercept break, and break dummy were not found significant within 5 percent level in the level form. They became significant in the first difference within 5 percent level.
$\frac{RM}{GDP}$	IO1	2017	0	-2.7593	2016	1	-5.6493***	I(1)	Intercept break and break dummy are found significant within 5 percent level.
$\frac{GDS}{GDP}$	IO2	2015	4	-5.8915***	-	-	-	I(0)	Trend, intercept break, trend break, and break dummy all are found significant within 1 percent level.
$\frac{D}{GDP}$	IO1	2014	4	-5.4944***	-	-	-	I(0)	Intercept break was found significant within 1 percent level.

Source: Author's estimates.

Appendix B: Variables' series used in data analysis

FY	GDP _c	GDS _c	RM	GFCF	P_GFCF	Gross Exports	Gross Deposits	POL INDEX	GDP Deflator	$\frac{RM}{GDP}$	$\frac{D}{GDP}$	$\frac{GDS}{GDP}$
2000/01	441,519	51,501	47,216	84,751	66,687	99,610	181,203	-1.17	100	10.7	41.0	11.7
2001/02	459,443	43,599	47,536	89,889	72,450	81,492	183,728	-1.44*	104	10.3	40.0	9.5
2002/03	492,231	42,141	54,203	98,073	83,354	77,280	202,734	-1.72	107	11.0	41.2	8.6
2003/04	536,749	63,064	58,588	109,181	94,226	89,544	232,576	-1.89	111	10.9	43.3	11.7
2004/05	589,412	68,110	65,541	117,539	100,326	85,958	250,465	-2.15	118	11.1	42.5	11.6
2005/06	654,084	58,757	97,689	135,532	118,023	87,952	289,976	-2.10	126	14.9	44.3	9.0
2006/07	727,827	71,453	100,145	153,337	128,692	93,567	334,453	-1.89	135	13.8	46.0	9.8
2007/08	815,658	80,188	142,683	178,446	145,453	104,207	421,524	-1.88	143	17.5	51.7	9.8
2008/09	988,272	93,230	209,699	211,039	166,761	122,737	550,677	-1.83	166	21.2	55.7	9.4
2009/10	1,192,774	136,589	231,725	264,888	211,223	114,298	620,609	-1.62	190	19.4	52.0	11.5
2010/11	1,374,953	190,924	253,552	292,730	228,924	121,714	823,235	-1.58	212	18.4	59.9	13.9
2011/12	1,536,000	167,805	359,554	317,185	235,829	153,863	1,011,823	-1.42	226	23.4	65.9	10.9
2012/13	1,695,011	178,882	434,582	382,972	307,586	181,180	1,188,090	-1.38	238	25.6	70.1	10.6
2013/14	1,964,540	234,227	543,294	462,013	367,034	226,022	1,406,770	-1.13	259	27.7	71.6	11.9
2014/15	2,130,150	196,103	617,279	595,823	485,568	247,565	1,688,830	-0.72	272	29.0	79.3	9.2
2015/16	2,253,163	91,644	665,064	647,294	486,792	213,338	2,016,816	-1.00	286	29.5	89.5	4.1
2016/17	2,674,493	359,206	695,452	840,693	671,150	240,392	2,299,808	-0.85	312	26.0	86.0	13.4
2017/18	3,044,927	506,418	755,059	1,051,957	790,450	270,105	2,742,103	-0.69	331	24.8	90.1	16.6
2018/19	3,458,793	656,235	879,271	1,164,939	928,579	300,222	3,235,067	-0.60	344	25.4	93.5	19.0
2019/20	3,767,043	681,971	875,027	1,059,966	825,624	264,367	3,839,727	-0.47	369	23.2	101.9	18.1

c = at current price values, * Since the POLINDEX value was missing for year 2001, it has been estimated by averaging the preceding and succeeding indices.

Source: CBS (2021), NRB (2021), World Bank (2020a), and author's estimates.

Research Article

Multivariate Analysis for Overcoming Complexities of Corporate Governance and Managerial Dilemma Using Data Mining Techniques

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The increased number of corporate dirty pools raised serious concerns about the interest of the shareholders. The board room politics, conflict of interest, and bully pulpit proclivity gave birth to the “agency complexities.” The complexities of the corporate world made a buzz for the serious thoughts on corporate governance. This analysis aims at an objective and scientific inquiry about the relationship between corporate governance complexities and firm performance by utilizing data mining tools. It aims at overcoming the corporate dilemma over profitability vs. good governance and presenting a scientific model to eradicate the complexities in the corporate governance system and aims at providing a scientific basis to overcome the complex issues of governance faced by the corporate. The multivariate analysis in this paper utilizes a data mining tool for regression analysis and ANOVA. This paper also proposes a mathematical model that supports the study outcomes. The investigation outcomes are not only backed by the mathematical model and scientific tools but also by a comprehensive comparative analysis. The outcome of the investigation clearly mentions the significance and the primacy of each variable in the corporate decisions making process, which will facilitate the organizations in framing their corporate governance policies and will also be helpful to the managers in overcoming the corporate dilemma faced by them.

1. Introduction

The advent of a new era of science, technology, and information revolution paved the way for several structural and regulatory reforms around the world. The great journey of trade and commerce from barter to sole trader and to the gigantic multinational corporations is like a metamorphic transformation of a caterpillar into a beautiful butterfly. This transition played a pivotal role in the genesis of the complex organizational structures which further led to operational framework failures, frauds, and unethical business practices. The increased number of corporate dirty pools raised serious concern about the interest of the investors. “Corporate dirty pools” is a comprehensive term used for insider trading, tunneling, and window dressing. It includes intentional

implementation of a lame corporate governance framework, poor risk mitigation policies, fraudulent accounting practices, and fabricated financial reporting.

Accountability, truth and fairness, responsibility, transparency, and disclosure are some of the founding principles of corporate governance. Adherence to higher standards of corporate governance standards involves a cost to the organization. Harvard law school forum on corporate governance, in their report on global and regional trends in corporate governance for the year 2022 has mentioned the climate change and increased demands of assertive investors for sustainable ways of doing business (Fields et al.). Implementing the provisions related to financial reporting and disclosures on sustainability efforts of management for tackling the climate change challenges and simultaneously

fixing the responsibility and accountability of directors and executives for the climate risk oversight are some of the biggest contemporary challenges of corporate governance. Many regulations and standards in this context have already been merged into the International Sustainability Standards Board (ISSB) under IFRS. The pressure for decarbonizing the globe is higher than ever before in the corporate sector. The decision of complying with sustainability standards impacts the profitability of a company negatively, as it is a “costly affair” for any organization. The poor financial performance of the company questions the efficiency and effectiveness of management. This is one of the typical cases of an ethical dilemma for the managers in which they have to choose between good corporate governance that advocates environmental sustainability or profitability.

The board room politics, conflict of interest, and bully pulpit proclivity gave birth to the “agency problems.” The term “bully pulpit proclivity” refers to the management’s unethical acts. It includes running a self-inclined agenda at the cost of investors’ interest and misusing their powerful positions for whitewashing their acts in the public domain. All these collectively increased the complexities of corporate governance and gave a buzz to serious thoughts on the issue. Though the stringent laws and regulative framework endeavors investors protection, but in the recent past a number of corporate swindles unnerved the measures taken by the government to strengthen corporate governance. An abysmal downfall of corporate ethics and morality alarmed the world to rethink this complex governance issue and come up with a better and stronger governance mechanism.

This corporate pandemonium drew the attention of many researchers and academicians around the globe. The archive is flooded with various empirical and descriptive studies on this complex matter. Each investigation has its own pattern and different outcomes. There are some studies that reveal a positively significant relationship between corporate governance and firm performance; some studies reveal a negative and insignificant relationship; and a few studies even show the mixed result.

This study attempts at providing new dimensions to the investigation by focusing on the complexity of corporate governance issues. The relationships between the organizations and their stakeholders in general and the stockholders are highly complex in nature (Georgian et al.). The majority of the previous studies are based on two or maximum up to three corporate governance elements whereas, we have taken six independent variables as the components of corporate governance. Our study aims at an objective and scientific inquiry about the relationship between the complexities of corporate governance and firm performance. In this multivariate analysis, we have utilized various data mining tools such as SPSS, regression analysis, and ANOVA. We have also proposed a mathematical model which supports the study outcomes. The investigation outcomes are not only backed by the mathematical model and scientific tools but also by a comprehensive comparative analysis. For our investigation purpose the board composition (BO), ownership structure (OW), board remuneration (BOR), board and shareholders meetings (BM),

transparency and shareholders rights (TSR), and corporate governance policies of the firm (CGCP) are primarily taken as corporate governance components for measuring financial performance accounting-based parameter, i.e., return on capital employed (ROCE) is used. The study is based on the 121 small caps, mid-cap, and large-cap companies listed on the Bombay stock exchange (BSE). The data are collected through the Prowess database. The key contribution of the paper are as:

- (i) The study aims at providing a scientific basis to overcome the complex issues of governance faced by the corporate.
- (ii) We have applied a combination of data mining tools such as Support Vector Machine (SVM) with the help of Hyperplane. Data mining tools along with mathematical modeling make our methodology robust and study outcomes more rational and scientific.
- (iii) We have applied a multidimensional approach by focusing on key corporate governance variables in a single study.
- (iv) The outcome of the investigation clearly mentions the significance and the primacy of each variable in the corporate decisions making process, which will facilitate the organizations in framing their corporate governance policies and will also be helpful to the managers in overcoming the corporate dilemma faced by them.

2. Related Work

In the past decade, many researchers investigated corporate governance from various paradigms but failed to reach a common stand on governance and profitability association. Many authors discussed the complexities of modern organizational structures and the dynamics of corporate governance. The study outcomes differed with the change in the methodology, size of the company, and the governance framework of the countries. Some results advocated positive association, some revealed negative and nonsignificant associations and there are some which showed mixed results [1]. Manson and Zaman [2] also questioned the legitimacy of the controllers who are at the helm of affairs and yet only want to reap the benefits without being held responsible for their deeds. Another study by [3]; Kim and Lee [4] show that corporate governance has a strong positive impact on the firm’s performance. The study revolves around the East Asian financial crisis period, i.e., in the year 1997-98, that further glorifies the independent directors’ traditional role of improving and monitoring management.

Dwivedi and Jain [5] in their empirical analysis for the time-period of 1997–2001 on 340 Indian companies revealed a positive and significant association between corporate governance and firm performance. Board size and ownership were taken as the variables for corporate governance and firm performance was evaluated using Tobin Q. Similarly in another study based on Indian companies

Gupta [6] investigated the level of adherence to corporate governance norms in selected automobile companies and found that those automobile companies' policies and practices were in line with the regulatory framework of corporate governance in the country.

Monks and Minow [7] in their book titled corporate governance attempts to explain the significance of the practical applicability of corporate governance by using various real-life corporate examples. A study based on Iranian companies listed on Tehran stock exchange for the two consecutive financial years 2005 and 2006 by Mashayekhi and Bazaz [8] on the same issue by utilizing the regression analysis revealed that a larger board size will affect the performance of the company. They also strongly advocated the role of independent directors in improving the firms' financial out-turn.

Wang et al. [9] in their study based on 106 High techs, medium, and small-size Chinese firms found a positive relationship between ownership concentration and corporate performance. They also proved that the firms which have a greater number of board meetings take better decisions and they perform well. Furthermore, they state that there is a direct relationship between the board remuneration and corporate performance, i.e., the companies, which pay their director's good remuneration, perform better in terms of financial efficiency.

On the other hand, there are some studies that outrightly reject the premise of any type of significant association between good governance of corporate and firm financial efficiency. Some studies reveal a weak or insignificant relationship between corporate governance and the firm's performance. Bhagat et al. [10] in their study found no correlation between board independence and long-term firm performance. Similarly, another study by Bauer et al. [11] on European firms found a negative association between governance standards for corporate and the performance of the firms.

By using generalized linear model (GLM) Fauzi and Locke [12] proposed that the board, Board committees, managerial ownership, and block holding ownership have a positive influence on the firms' performance in New Zealand. The study results based on 79 firms in New Zealand were indicative of poor firm performance due to block holding ownership patterns and nonexecutive director's excessive interference.

Vo and Phan [13] in their research investigation based on Vietnamese firms found that Board compensation is positively associated with firm performance whereas Board size has a negative relationship with firm performance. It further advocated that there is no link between independent directors and a firm's performance. It shows a nonlinear relationship between ownership and corporate governance. The study utilized feasible generalized least square (FGLS) regression. Board size, board independence, and board remuneration were a parameter for corporate governance whereas the return on assets (ROA) was taken as representative of a firm's performance.

Moscu [14] In their investigation based on Romanian companies utilized debt-equity ratio as the firm efficiency

yardstick and board characteristics as corporate governance parameters and utilized regression analysis to investigate the relationship between them. Their research outcome revealed a direct relationship between board sizes and firm performance. It implies that the larger the board size better is the firm's output. On the other side nonexecutive directors (NED) and firm performance were found negatively associated. On similar lines, in a study on the firms in the life science sector in Canada, Cook [15] propounded that nonexecutive directors have minimal influence on a firm's efficiency.

Kim and Kim [16] in their study on governance social responsibility and credit rating found that corporate social responsibility and corporate governance have a positive impact on the firm's credit rating. Higher the corporate social responsibility and corporate governance scores better is the credit rating of the firm and vice versa. Another study on a similar line found a direct association between corporate governance and firm performance, Jaser and Quasim [17] applied regression analysis on 281 firms listed on Abu Dhabi stock exchange (UAE). They have used return on assets (ROA) and Tobin Q as the parameters for the firm's performance.

Kandukuri et al. [18] in their study on Indian companies found similar results. The study results revealed the imbrications of private companies over public companies globally. Al-Gamrh and Ku Ismail [19] in their research investigation found that return on equity and profitability were not associated with the corporate governance variables. But overall corporate governance had a positive influence on the performance of the firm. The study covered 20 companies in the Indian manufacturing sector.

Naimah and Hamidah [20] in their research found that board audit committee meetings and quality of audit were directly related to the profitability of the company, whereas leverage, board independence, and size of the company were indirectly associated with the profitability of the company. The authors utilized regression analysis for the study.

Ilham et al. [21] in their investigation of the Turkish companies found that corporate governance and performance of the firms were positively associated. The study outcomes are suggestive of a significantly positive relationship between ownership concentration and board size. On the other hand, Balagobei [22] in her study based on Sri Lankan firms found smaller board sizes more suitable for better firm performance. The study also found a negative impact of the audit committee on the firm's performance.

A study based on Sri Lankan financial institutions Danoshana and Ravivathani [23] found that the size of the board and audit committee matters. Larger the size of the board and audit committee better the performance of the company but, on the other hand, frequency of the board meetings were found to be indirectly associated with the firm performance. It means that the firms having a greater number of board meetings did not perform financially well. Another study by Bhagat and Bolton [24], which is a sequel of their previous investigation in the year 2008 on corporate governance and firm performance took the data for the period of 2003 to 2016. Based on the long-term analysis the

study results suggested that director stock ownership helped in improving the performance of the firms and helped risk mitigation as well.

Similarly, Bijalwan et al. [25] in their exploratory analysis of corporate governance using supervised data mining tools found that there is a significantly positive relationship between board meetings and firm performance. They found that the firms with a greater number of board meetings performed better as compared to the firms with a lower number of board meetings. The study outcomes further showed that the remuneration paid to directors had no effect on the firm performance.

The recent study based on the firms listed on Abu Dhabi stock exchange (ADX) in the United Arab Emirates (UAE) by Al-Gamrh et al. revealed that more investment opportunities lead to poor firm performance. The study characterized UAE firms with lame corporate governance practices. The study further mentions that stronger corporate governance helps in mitigating the negative impact of investment opportunities. Malhotra et al. [26] on 242 companies listed on Bombay stock exchange (BSE) for the period of 2015 to 2019 that consisted of both public sector and private sector firms found that the public sector firms had a better corporate governance practice as compared to the private sector firms in India.

Fatma and Chouaibi [27] examined the impact of the characteristics of two CS mechanisms, i.e., board of directors and ownership structure. It is based on the firm value of European financial institutions. Salehi et al. [28] aimed to measure the relationship between corporate sectors and managerial entrenchment in companies listed on Tehran stock exchange. They used panel data regression to test the hypothesis. Almaleki et al. [29] aimed to investigate the comparability between the impact of managerial pride and overconfidence on financial statements. Velte [30] showed the link between corporate governance and corporate financial misconduct. Guluma [31] aimed to investigate the impact of CG that measures on firm performance and the role of managerial behavior in the relationship between CG mechanism and firm performance. This analysis was based on Chinese listed firms.

Li and Nguyen [32] focused on small and medium-sized enterprises in emerging economies. Their study aimed at the impact of CG on firm value by exploring the mediation mechanism of CSR and organizational identification aligned with CG and firm value. Almaleki et al. [33] aimed to seek the potential impact of board member's characteristics, the level of the firm's CSR. They found from their study that in Iran innovation is willing to be transmitted into firms by industry sources though, In Iraq regardless of the industry index, a positive association between interlocked bounds and firm innovation is established. Their analysis also depicts that board interlock is not considered a mechanism to transmit information about CSR.

There have been many studies in the past covering corporate governance issues from various dimensions which applied either market-based or accounting-based parameters on standard governance key components. Most of the studies utilized two or maximum up to three variables with

the standard statistical tools to investigate the nature and degree of relationship among governance variables. Our study is based on the six key components of corporate governance such as board composition (BO), ownership structure (OW), board meeting (BM), board remuneration (BOR), corporate governance codes and policies (CGCP), transparency, disclosure, and shareholders rights (TSR). In this study, corporate governance variables are independent variables, whereas the return on capital employed is used as a dependent variable for determining the financial efficacy of the firm.

After an intense analysis of the literature on the subject, finally, the null hypothesis was developed, whose validity was subjected to a robust scientific investigation.

H0: There is no significant relationship between corporate governance complexity variables and the firm's financial efficacy.

3. Study Design

3.1. Variable Selection and Model Construction. The study uses corporate governance complexity as the independent variable which is made up of six different components viz. board composition (BO), ownership structure (OW), board meeting (BM), board remuneration (BOR), corporate governance codes and policies (CGCP), transparency, disclosure, and shareholders rights (TSR). Whereas firm's performance is a dependent variable which is denoted by return on capital employed (ROCE). Some other factors such as size of the firm (TA), Leverage (LEV), Liquidity (COR) of the firm, and Inventory turnover (IR) are taken as control variables for the study.

3.1.1. Independent Variables. The description of key components of the corporate governance complexity used as an independent variable is described in table no 1. Table 1 includes an explanation of the independent variables, their indicators, description thereof, and the symbolic representation for the validation through a mathematical model.

3.1.2. Dependent Variable. Firm's financial efficacy is the dependent variable for the study. In the previous studies on corporate governance, the financial efficacy of the firm was majorly assessed via market-based measures or accounting-based parameters. This study utilizes the accounting-based ratio, i.e., return on capital employed (ROCE) as a yardstick to measure the financial efficacy of the firm. ROCE is a financial ratio that can be expressed as earnings before interest and tax/capital employed. An ideal ROCE is one, that is, greater than the cost of borrowings of the firm.

3.1.3. Control Variables. Sizes of the firm, leverage, liquidity condition, and inventory ratio are taken as the control variables for the study. Size of the firm is measured according to the total assets held by the company; leverage condition is determined by the debt-equity ratio. For assessment of the liquidity condition of the company, liquidity

TABLE 1: Independent variables.

Sr.no.	Factors	Indicators	Description	Symbolic
1	Board composition (BC)	(a) board size (b) board independence	(a) total no. of BOD sitting on board (b) ratios of DIRs to ID and ED to NED etc	x
2.	Ownership structure (OS)	Ownership structure	Percentages of shares held by various stake holders in the company	u
3.	Board meetings and share holders' meetings (BSM)	(a) board meetings (b) shareholders meetings	(a) Total no. of board meetings held during the year (b) Total no. of shareholders meetings held during the year. (including provisional meetings)	v
4.	Board remunerations (BR)	Board remunerations	Remuneration paid to the top 3 executives in their natural algorithm	w
5.	Corporate governance codes and practices (CGP)	Corporate governance codes and initiatives	Corporate governance codes and initiatives are taken by the company	z
6.	Transparency and shareholders rights (TSH)	(a) Transparency and disclosure (b) Shareholders rights.	(a) transparency and disclosure norms followed by the company. (b) right to shareholders	t

TABLE 2: Control variables.

SN	Control variables	Explanation	Symbol
1	Size of firm	Total assets	TA
2	Leverage	Debt/equity	LEV
3	Liquidity	Current assets/current liabilities	COR
4	Inventory turnover	Cost of goods sold/average inventory	IR

ratios are utilized and Inventory turnover is measured with the help of inventory turnover ratio. Table 2 shows control variables utilized for the study.

3.1.4. *Model Development.* For making the methodology more robust we have proposed two different models. First model is a conceptual support vector machine (SVM) mathematical model which fits a hyperplane for testing the research outcomes as mentioned in below equation:

$$y = a + bx + cu + dv + kw + fz + gt, \tag{1}$$

where $x, u, v, w, z,$ and t are independent variables as explained in the Table 1 and y is dependent variable. The second is an OLS regression model which investigates the relationship between corporate governance and firm's efficacy and is explained with the help of belowmentioned equation:

$$ROCE = \beta_0 + \beta_1BZ + \beta_2BO + \beta_3OW + \beta_4BM + \beta_5BOR + \beta_6TSR + \beta_7CGCP + \epsilon, \tag{2}$$

where the Board size (BZ), Board composition (BO), Ownership structure (OW), Number of Board and shareholders meetings (BM), Board remuneration (BOR), Transparency and shareholders' rights (TSR), and corporate governance Codes and policies (CGCP) are the independent variables. In the equation Return on capital employed (ROCE) is the dependent variable. β_0 is constant and $\beta_1, \beta_2, \beta_3, \dots$ are regression coefficients.

3.1.5. *Sampling.* The dataset for study is derived from the Bombay stock exchange. The sample consisted of 121 companies, which are inclusive of the companies from all the brackets of corporate for the period of 2015 to 2020. For

maintaining the comprehensiveness of the sample stratified random sampling technique was utilized and the sample size was determined by using Cohen's formulae, i.e.:

$$\text{Cohen's } d = \frac{(M_2 - M_1)}{SD_{\text{pooled}}}, \tag{3}$$

$$\text{where } SD_{\text{pooled}} = \left(\sqrt{(SD_1^2 + SD_2^2)/2} \right).$$

3.1.6. *Measurement of Corporate Governance Scores (CGSs).* The corporate governance scores are measured by using a structured questionnaire consisting of 51 questions. The questions strictly adhere to the international benchmarks set for good corporate governance. The scorecard based on governance, management, accountability metrics, and analysis (GAMMA) was used for the corporate governance scores (CGS) and weights were developed for corporate governance factors (variables) used in the study. Each segment had an independent score for its subcomponent and weights were assigned to each factor.

4. Results and Discussion

First model Support Vector Machine (SVM) requires fitting hyperplane when y is a dependable variable and others are independent variables. In which:

$$y = a + bx + cu + dv + kw + fz + gt \text{ where } x, u, v, w, z, \text{ and } t \text{ are independent variables and } y \text{ is dependent variable.}$$

Let us explain the proposed model with the help of hyperplane.

Put

$$x_1, x_2, x_3, \dots, x_m \text{ for } x.$$

$$u_1, u_2, u_3, \dots, u_m \text{ for } u.$$

$v_1, v_2, v_3, \dots, v_m$ for v .
 $w_1, w_2, w_3, \dots, w_m$ for w .
 $z_1, z_2, z_3, \dots, z_m$ for z .
 $t_1, t_2, t_3, \dots, t_m$ for g .

$y_2, y_3, y_4, y_5, \dots, y_6 = a + bx_6 + cu_6 + dv_6 + kw_6 + fz_6 + gt_6$ where y_1, y_2, y_3, y_4, y_5 and y_6 are expected values of y with reference to $(x_1, u_1, v_1, w_1, z_1, t_1), (x_2, u_2, v_2, w_2, z_2, t_2), \dots, (x_6, u_6, v_6, w_6, z_6, t_6)$

The values y_1, y_2, \dots, y_m are called observed values of y corresponding to x, u, v, w, z , and t . The expected values are different from the observed values. The difference $y_r - y'_r$ for different values of x, u, v, w, z , and t are called residuals.

$$\sum_1^6 (y - y')^2. \tag{4}$$

By introducing a new quantity U , which is the sum of squares of residuals from 1 to 6.

$$U = \sum_1^6 (y_r - y'_r)^2 = \sum_1^6 [y_r - (a + bx_r + cu_r + dv_r + kw_r + fz_r + gt_r)]^2. \tag{5}$$

The constants a, b, c, d, k, f , and g are selected in a manner that sum of the squares of the residuals is minimum. After this the proviso for U to be maximum or minimum is as:

By simplifying the ratios, we got If $\partial U / \partial a = 0$, then $\sum 2 (y_r - a - bx_r - cu_r - dv_r - kw_r - fz_r - gr) = 0,$ (7)

$$\frac{\partial U}{\partial a} = \frac{\partial U}{\partial b} = \frac{\partial U}{\partial c} = \frac{\partial U}{\partial d} = \frac{\partial U}{\partial k} = \frac{\partial U}{\partial f} = \frac{\partial U}{\partial g} = 0. \tag{6} \quad \text{or}$$

$$\sum y = ma + b \sum x + c \sum u + d \sum v + k \sum w + f \sum z + g \sum t \dots \tag{8}$$

By applying the same logic to

We have derived the Equations (10)–(15).

$$\frac{\partial U}{\partial a}, \frac{\partial U}{\partial b}, \frac{\partial U}{\partial c}, \frac{\partial U}{\partial d}, \frac{\partial U}{\partial k}, \frac{\partial U}{\partial f}, \frac{\partial U}{\partial g}. \tag{9}$$

$$\sum xy = a \sum x + b \sum x^2 + c \sum xur + d \sum vx + k \sum wx + f \sum zx + g \sum tx, \tag{10}$$

$$\sum yu = a \sum u + b \sum xu + c \sum u^2 + d \sum vu + k \sum wu + f \sum zu + g \sum tu = 0, \tag{11}$$

$$\sum yv = a \sum v + b \sum xv + c \sum uv + d \sum vv + k \sum wv + f \sum zv + g \sum tv = 0, \tag{12}$$

$$\sum yw = a \sum w + b \sum xw + c \sum uw + d \sum vw + k \sum ww + f \sum zw + g \sum tw = 0, \tag{13}$$

$$\sum yz = a \sum z + b \sum xz + c \sum uz + d \sum vz + k \sum wz + f \sum zz + g \sum tz = 0, \tag{14}$$

$$\sum yt = a \sum t + b \sum xt + c \sum ut + d \sum vt + k \sum wt + f \sum zt + g \sum t^2 = 0. \tag{15}$$

These would be taken as normal equations and can be solved for a, b, c, d, k , and f .

For a ,

$$\begin{aligned}
 & m \sum x \sum u \sum v \sum w \sum z \sum t - \sum y \\
 & \sum x^2 \sum xu \sum vx \sum wx \sum zx \sum tx - \sum xy \\
 & \sum xu \sum u^2 \sum vu \sum wu \sum zu \sum tu - \sum yu \\
 & \sum xv \sum uv \sum v^2 \sum wv \sum zv \sum tv - \sum yv \\
 & \sum xw \sum uw \sum vw \sum w^2 \sum zw \sum tw - \sum yw \\
 & \sum xz \sum uz \sum vz \sum wz \sum z^2 \sum tz - \sum yz \\
 & \sum xt \sum ut \sum vt \sum wt \sum zt - \sum t^2 \sum yt.
 \end{aligned} \tag{16}$$

Same can be applied to $b, c, d, k, f,$ and g .

$$D = \begin{bmatrix} m & \sum x & \sum u & \sum v & \sum w & \sum z & \sum t \\ \sum x & \sum x^2 & \sum xu & \sum vx & \sum wx & \sum zx & \sum tx \\ \sum u & \sum xu & \sum u^2 & \sum vu & \sum wu & \sum zu & \sum tu \\ \sum v & \sum xv & \sum uv & \sum v^2 & \sum wv & \sum zv & \sum tv \\ \sum w & \sum xw & \sum uw & \sum vw & \sum w^2 & \sum zw & \sum tw \\ \sum z & \sum xz & \sum uz & \sum vz & \sum wz & \sum z^2 & \sum tz \\ \sum t & \sum xt & \sum ut & \sum vt & \sum wt & \sum zt & \sum t^2 \end{bmatrix} \begin{bmatrix} a \\ b \\ c \\ d \\ k \\ f \\ g \end{bmatrix}$$

$$= \begin{bmatrix} \sum y \\ \sum xy \\ \sum yu \\ \sum yv \\ \sum yw \\ \sum yz \\ \sum yt \end{bmatrix}. \tag{17}$$

The condition for U to be minimum is $\partial^2 u / \partial a^2 \geq 0$, for the given data.

It reveals that for the existence of $a, b, c, d, k, f,$ and g variables it is a necessary and sufficient condition that a company will survive if cost function, i.e., $D \neq 0$.

Furthermore, in order to accomplish the research objective and to have a robust outcome, the null hypothesis was put to the test to check its validity. Various statistical tests were applied for a scientific and objective conclusion. To investigate the effect of corporate governance on the firm's efficacy, the regression analysis was applied to the dependent variables, i.e., Firm performance and the independent variables as components of corporate governance complexity as mentioned in Table 1. The investigation outputs are revealed as follows.

Table 3 shows the descriptive statistics for every component of independent variable. The mean represents the average value observed and the standard deviation reveals spread of the values and N is the number of firms utilized for study, i.e., sample size and min and max stands for the minimum and maximum usual values.

Table 4 is about Pearson's correlation coefficients of normally distributed data. The table is about the relationship between independent variables, i.e., corporate governance complexity components, and dependent variables, i.e., firm's financial efficacy parameter (Return on capital employed). Upon statistical investigation is observed that the correlation coefficient is 0.8210 between corporate governance codes and practices (CGCP) and transparency and shareholders' rights (TSR), which shows a positive relationship between the two components of independent variables. As the observed value is greater than 0.50 it can be said that the relationship between CGCP and TSR is very strong. Upon further analysis, it is observed that no other values were found to be significant as all of them were less than 0.50. The observed significance level or p value among these two variables also satisfies the condition of being strongly related as observed $p < 0.001$, which is less than 0.05. Hence, it can be strongly said that these two variables as strongly and positively correlated.

Table 5 is about model summary the superscript is about constants, i.e., corporate governance components utilized for the study such as board size, board composition, ownership structure, number of board and shareholders meetings, board remuneration, transparency and shareholders' rights and corporate governance codes and policies and b indicates a dependent variable, i.e., return on capital employed.

It also manifests about R, R square, adjusted R square, and standard error. The observed value of R in the proposed model is 0.822 which is within the boundaries of the regression analysis range, i.e., 0 -to 1. As the observed value of R in the given model is more than 0.5 it shows a very strong and positive relationship between independent variables and dependent variables. Furthermore, the value of R square is also high, i.e., 0.675 which falls within the range of 0 to 1 it suggests the goodness of the model to fit and accommodate the data well. The Adjusted R squared is 0.661 which further consolidates the claims of R Square.

Table 6 shows the ANOVA test results, it reveals the observed value of sum of squares, degree of freedom (Df), and mean squared for regression and residual. In the table regression outcome is shown as 9519.27 and the residual output is 4574.320 which shows both variations accounted and not accounted for the model, respectively. As it is evident that the sum square of regression output is more than the sum square of residual it means the model exhibits a higher level of variation in the dependent variable. This may need a supporting factor to facilitate the account for a higher degree of variation observed in the dependent variable. Furthermore, the observed F value is 47.86, which is derived by dividing regression mean square (1903.854) from residual mean square (39.77). The total number of degrees of freedom is the number of cases minus 1. The significance value of

TABLE 5: Model summary b.

Model	R	R square	Adjusted R square	Standard error	R square change	F change	Df1	Df2
1	0.822	0.675	0.661	6.306	0.675	47.864	6	114

TABLE 6: ANOVA.

Model	Sum of squares	Df	Mean square	F	Sig.
Regression	9519.27	6	1903.854	47.86	0.000
Residual	4574.320	114	39.77		
Total	14093.592	120			

TABLE 7: Coefficients.

	Unstandardized coefficients		Standardized coefficients Beta	T	Sig.	Correlations		
	B	Std. error				Zero-order	Partial	Part
(Constant)	2.255	15.63		0.144	0.886			
Board composition	0.050	0.061	0.078	0.821	0.413	0.106	0.077	0.075
Ownership structure	0.312	0.406	0.082	0.769	0.443	0.095	0.072	0.071
Board and shareholders meeting	-0.077	0.110	-0.073	-0.70	0.483	-0.019	-0.066	-0.06
Board remunerations	-0.052	0.063	-0.077	-0.81	0.415	-0.059	-0.076	-0.07
Corporate governance codes	0.058	0.136	0.069	0.424	0.672	0.119	0.040	0.039
Transparency and shareholders' rights	0.048	0.151	0.052	0.317	0.752	0.116	0.030	0.029

TABLE 8: Residuals statistics.

	Minimum	Maximum	Mean	Std. deviation	N
Predicted value	7.6527	24.7834	17.8812	3.08994	121
Residual	-2.02594E1	95.80276	0.00000	15.96239	121
Std. predicted value	-3.310	2.234	0.000	1.000	121
Std. residual	-1.237	5.850	0.000	0.975	121

$F \leq 0.001$, which is much lower than the desired less than 0.05 condition.

As it is evident in Table 6, the observed residual value of 4574.320 is less than regression value of 9519.27 and the significant value of $F \leq 0.001$ with this it can be concluded that the components of independent variables have done a good job in explaining the variations in the dependent variable.

Table 7 is about coefficients both standardized and unstandardized. In the given model the dependent variable (return on capital employed) = 0.050 board composition 2.255. Independent variables can be measured in different units. The standardized coefficients = 0.078 or betas try to make coefficients more comparable. The $t = 0.144$, which is less than +2 makes the value of regression more nonsignificant.

Table 8 is about residual statistics that explain the mean and standard deviations of predicted value, residual value, standard predicted value, and standard residual value.

By applying them to proposed OLS Regression model no I, we have derived the belowmentioned regression output for the model.

$$Y = 2.255 + 0.050 x + 0.312 u - 0.077 v - 0.052 w + 0.058 z + 0.048 t \dots\dots\dots 8, \tag{18}$$

where, Y = Return on capital employed x = Board composition u = Organization structure v = Board and Shareholders Meetings w = Board Remuneration z = Corporate governance policies t = Transparency and shareholders rights.

Many researchers have worked on the same issue in line with investigating the relationship between corporate governance and the firm's efficacy using different tools and techniques. Our contributions to the subject matter can differentiate in Table 9.

TABLE 9: Comparative table.

Related work	Point of difference											
	Neeraj Dwivedi and Arun Kumar Jain (2005)	Gupta (2006)	Zhen Yi Wang, Li Su and Ying Tang (2007)	Sanghoon Lee (2008)	Fauzi, F and Locke, S.C. (2012)	Cook, R. (2013)	Vo, D. and Phan, T. (2013)	Amare Mohammed Jaser, Quasim (2014)	Rajya Lakshmi Kanduri, Laila Memdani, P. Raja Babu (2015)	Akshita Arora, Chandan Sharma (2016)	Zahroh Naimah and Hamidah (2017)	Bijalwan J.G, Bijalwan. A
ANOVA	X	X	X	X	X	X	X	X	X	X	X	✓
Correlation	X	✓	✓	X	✓	X	X	✓	✓	✓	X	✓
Regression	✓	X	X	✓	X	✓	✓	X	X	X	✓	✓
Multivariate analysis	X	X	X	✓	✓	X	X	X	X	X	X	✓
Mathematical model	✓	X	X	✓	✓	X	✓	X	X	X	X	✓
Standard governance scoring scale	X	X	X	X	X	X	X	X	X	X	X	✓
Comprehensiveness of sample	X	X	X	X	X	X	X	X	X	X	X	✓
Positive relations	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓
Negative relations	X	X	X	X	X	✓	✓	X	X	X	X	✓

5. Conclusion and Future Scope

In order to conclude the investigation, outcomes of both models need to be discussed one by one. In the case of the first proposed model which applies hyper plane reveals that for U to be minimum for the given data as:

$$\frac{\partial^2 u}{\partial a^2} \geq 0. \quad (19)$$

It refers that the existence of $a, b, c, d, k, f,$ and g variables are a necessary and sufficient condition that a company will survive if cost function, i.e., $D \neq 0$.

On the other hand, the second model utilized for study results into regression equation (8) which states that the board composition, corporate governance policies, and transparency have positive and significant relationship with firms' performance which is evident with the respective coefficients 0.050, 0.058 and 0.048. The coefficients of variables Board remuneration and Board meeting are -0.052 and -0.077 which shows a negative relationship with firms' performance. Furthermore, it can be said that the variables corporate governance policies and transparency and shareholders' rights are positively and significantly correlated with each other and do have a positive relationship with the firms' performance. A sound ownership structure is indicative of good firm performance on the other hand board and shareholders' meeting and board remuneration show negative coefficients -0.077 and -0.052 , respectively, which clearly evident a negative relationship with firms' financial efficacy. Our experimental results showed that the residual value of 4574.320 is less than regression value of 519.27 and the significant value of $F \leq 0.001$ with this it can be concluded that the components of independent variables have done a good job in explaining the variations in the dependent variable.

In the nutshell, it can be said that both the models come to the same conclusion, and it can be strongly said that firms with sound board composition with adequate number of independent directors have a good impact on the firm's financial efficacy. Similarly, companies with good corporate governance policies and transparency in their financing and reporting produce better financial results. A sound organizational structure is a supportive factor in the long run. On the other hand, the company management shall abstain from spending excessive time and funds on board meetings and high perks and payouts to the directors as it is a futile expense and will not guarantee any returns. It can be said that for better financial rewards organizations must pay heed on complex corporate governance elements like board composition, sound governance policies, and transparency in their conduct and in handling the material facts.

"The might is right" approach is futile in the realm of good governance. Therefore, the managers and the directors should work in a positive and constructive frame of mind. They should keep the interest of the organization at the apex level of their priority list. It is quite evident from the outcome of both the models that the complexity of corporate

governance and the managerial dilemma of profitability vs. good governance can be overcome by balanced board composition, sound governance policies, and transparency in the organizational conduct. In conclusion it can be said that we have applied the multivariate model to study six independent variables however, the same mathematical model and machine learning approach can be applied for studying the relationship between n numbers of variables in the future [34–37].

Data Availability

The source of the author's framework along with the datasets and analysis during the current study is already publicly available on <https://prowessiq.cmie.com/> which is maintained by CMIE. SPSS software was used for processing and classification purposes during the author's research experiment.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

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Academic Integrity considerations of AI Large Language Models in the post-pandemic era: ChatGPT and beyond

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Academic Integrity considerations of AI Large Language Models in the post-pandemic era: ChatGPT and beyond

Abstract

This paper explores the academic integrity considerations of students' use of Artificial Intelligence (AI) tools using Large Language Models (LLMs) such as ChatGPT in formal assessments. We examine the evolution of these tools, and highlight the potential ways that LLMs can support in the education of students in digital writing and beyond, including the teaching of writing and composition, the possibilities of co-creation between humans and AI, supporting EFL learners, and improving Automated Writing Evaluations (AWE). We describe and demonstrate the potential that these tools have in creating original, coherent text that can avoid detection by existing technological methods of detection and trained academic staff alike, demonstrating a major academic integrity concern related to the use of these tools by students. Analysing the various issues related to academic integrity that LLMs raise for both Higher Education Institutions (HEIs) and students, we conclude that it is not the student use of any AI tools that defines whether plagiarism or a breach of academic integrity has occurred, but whether any use is made clear by the student. Deciding whether any particular use of LLMs by students can be defined as academic misconduct is determined by the academic integrity policies of any given HEI, which must be updated to consider how these tools will be used in future educational environments.

Practitioner Notes

1. Students now have easy access to advanced Artificial Intelligence based tools such as ChatGPT. These tools use Large Language Models (LLMs) and can be used to create original written content that students may use in their assessments.
2. These tools can be accessed using commercial services built on this software, often targeted to students as a means of 'assisting' students with assessments.
3. The output created by these LLMs is coherent enough for it not to be detected by academic staff members, or traditional text-matching software used to detect plagiarism, but falsified references may hint at their use if unchanged by students.
4. The use of these tools may not necessarily be considered as plagiarism if students are transparent in how they have been used in any submission, however it may be a breach of academic integrity policies of any given Higher Education Institution (HEI).
5. There are legitimate uses of these tools in supporting the education of students, meaning HEIs must carefully consider how policies dealing with student use of this software are created.

Keywords

Artificial Intelligence, Large Language Models, GPT-3, ChatGPT, plagiarism

Introduction

During the COVID-19 pandemic Higher Education Institutions (HEIs) institutions worldwide were forced to rapidly alter the delivery and assessment of programmes traditionally taught and assessed in-person, as international restrictions on movement and gatherings prevented programmes from being delivered as planned (Kaqinari et al., 2021). This rapid transition to online learning meant that students were faced with entirely new assessment situations, and ever-changing regulations both from HEIs, and from their respective governments. At the same time, HEIs were being faced with the challenge of attempting to maintain academic integrity to assure the quality and standards of their degrees (Clarke et al., 2022; Rapanta et al., 2021) while using alternative, and often novel, modes of assessment.

Although online learning does not necessarily equate to higher amounts of academic misconduct occurring amongst students (Grijalva et al., 2006; Stuber-McEwen et al., 2009) online assessment has been shown to be associated with increased risks to academic integrity (Miller & Young-Jones, 2012; St-Onge et al., 2022), as well as more cases of academic dishonesty occurring (Clarke et al., 2022; Lanier, 2006; Watson & Sottile, 2010). The particular situation of the pandemic has also resulted in a unique set of circumstances which has been demonstrated to lead to both an increase in detected cases of AD (Henderson et al., 2022; Jenkins et al., 2022; Lancaster & Cotarlan, 2021), as well as increases in student or academic staff perceptions of AD (Amzalag et al., 2021; Reedy et al., 2021; Walsh et al., 2021) occurring.

During the period of the pandemic, research has shown that students sought out and adapted to new technologies (Vargo et al., 2021) as they were faced with large scale disruptions to their educational experience. As we emerge into a post-pandemic situation of learning, writing, and assessment, the availability of new digital tools is increasing the options that students have available to them in supporting assessments involving digital writing. This paper will explore one of these still-developing technologies that can enable new opportunities in digital writing, but also raises significant concerns related to academic integrity: Artificial Intelligence (AI) tools using Large Language Models (LLMs).

This paper delves into the evolution of AI based digital tools and the emergence of LLMs and discusses several key areas to better understand LLMs, the key ethical concerns related to them, and the future of their use in digital writing and beyond. Firstly, we describe and demonstrate the potential that these tools have in creating original, coherent text that can avoid traditional methods of detection by text-matching software. Secondly, we evaluate whether the use of LLM based tools to support students in writing assignments can be considered as plagiarism, academic misconduct, or a breach of academic integrity. Thirdly, we identify the potential these tools have for supporting the education of students, and whether academic staff can detect any such use of

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these tools. We end with a discussion on how academic integrity policies of HEIs must be updated to include the recognition of these tools.

By exploring these areas, we contribute to the literature by increasing the awareness amongst practitioners of an emerging technological tool which may be used by students to evade traditional methods of detecting breaches of academic integrity. We also identify key considerations for HEIs as they begin to consider how their academic integrity policies may need to be adjusted to account for the emergence and use of these tools by students, and highlight specific areas which may need to be considered. By determining where boundaries may lie in relation to academic integrity, academic misconduct, and plagiarism, we support HEIs in the broader development of their academic integrity policies. Therefore, clarifying how student use of these digital tools may be considered either an acceptable usage of a potentially paradigm shifting educational tool, or an academic integrity violation.

Literature

The evolution of AI powered digital writing tools

Students have used digital writing tools to aid them in their assessments since their rise to prominence in the 1980s (Palmquist, 2003), with the development of style and grammar analysis software integrated into word processor technology. These tools have seen a long history of evolution and change, and students believe that these tools are able to support them in improving their writing output (Nobles & Paganucci, 2015). Although digital writing has long been used in HEIs (Kozma, 1991), new technologies mean that there is a constant need to evaluate which tools are available to students, and provide clear guidelines on how these may be used.

Apart from the spelling, grammar, and style checkers built into word processing software, tools have emerged which are designed to go beyond the basics of pointing out more basic errors in composition and provide additional guidance to students on improving their writing. For example, Digital Writing Assistants (DWAs) such as Grammarly, WordTune and Perusall, use Artificial Intelligence (AI) to improve student writing (Fitria, 2021), and are perceived by students to be helpful tools in improving their work (Cavaleri & Dianati, 2016; O'Neill & Russell, 2019). These tools have also demonstrated a particular ability to support English as a Foreign Language (EFL) writers in improving their skills at expressing ideas in written English (Gayed et al., 2022; Nazari et al., 2021; Zhao, 2022), but it is vital that these EFL learners are supported in knowing how to use these responsibly so that they do not accidentally breach any academic integrity policies.

Another category of AI based software tools which have been used by students to support them with their writing are those of Automated Paraphrasing Tools (APTs). APTs are applications which use machine translation in order to transform one text into another (Rogerson & McCarthy, 2017). These tools were initially developed in order to support commercial enterprises in search engine optimisation (Q. Zhang et al., 2014) but have been adapted into tools that can be used to support students in the paraphrasing of text. Although the developers behind these tools may make claims that paraphrasing using these tools may not constitute plagiarism (QuillBot, n.d.-b), and technically discourage students from using these tools without correct citation of where original text was taken from (QuillBot, n.d.-a), these claims are disingenuous, given the wide variety of policies that may be in place by various HEIs related to what constitutes AD and plagiarism (Sun,

2013). Passing the burden of paraphrasing text to a digital tool and adjusting the output to enhance readability and reduce the likelihood that any original text will be spotted by text-matching software is considered to be a case of academic dishonesty and an example of paraphrasing plagiarism (Roe & Perkins, 2022).

Legitimate uses of this software can be again demonstrated in EFL education, where these tools can support students being taught the skill of correct paraphrase (Chen et al., 2015; Park & Yang, 2020; Zhao, 2022). However, it is clear from other reports that students do use these APTs for academically dishonest purposes (Dinneen, 2021), even if this may be unintentional (Prentice & Kinden, 2018). Spotting whether students have used APTs in their work can potentially be identified through the ‘word-salad’ that these tools may produce as an output (Rogerson & McCarthy, 2017), or through technological detection methods which aim to identify machine translated text (Wahle, Ruas, Foltýnek, et al., 2022; Q. Zhang et al., 2014), but this remains an emerging challenge, especially as we consider the next evolution of digital writing tools available to students: LLMs.

The emergence of Large Language Models

Tools using Artificial Intelligence (AI) to support in the creation of original text have emerged in recent years, in the form of Large Language Models (LLMs) which are able to develop significant amounts of brand-new text based on short input requests. This contrasts with the APT and DWA tools described above, which focus primarily on the manipulation of existing text—paraphrasing, suggesting alterations to text, or providing predictions for sentence completion. These models, trained on broad data sets are also referred to as foundation models (Bommasani et al., 2022).

These tools started to achieve prominence from 2017 with the emergence of a range of transformer based machine learning models which allow for improved performance on language based tasks when compared to previous machine learning techniques (Vaswani et al., 2017). Of particular note are the BERT transformer developed by Google in 2018, and the subsequent releases of the Generative Pre-trained Transformer 2 (GPT-2) by OpenAI in November 2019, and the Generative Pre-trained Transformer 3 (GPT-3) in June 2020 (Dale, 2021). These LLMs have received significant attention in popular media (Dale, 2021), including multiple reports of the eventual publication of Alarie and Cockfield’s (2021) journal paper which was generated entirely by GPT-3. There has also been increasing awareness of these tools and how they relate to the future of academic and scientific work as demonstrated by the publication in *Nature* of an overview of the advances in this area (Hutson, 2022). The broad release to the public in November 2022 of ChatGPT by OpenAI marked a significant increase in the ability of the underlying software to create new text using further refined models (GPT-3.5), coupled with a markedly improved user interface (OpenAI, 2022). This release has led to an increased public dialogue on how LLMs may impact academic integrity, with multiple opinion pieces written on this topic (see for example Marche (2022) and Hern (2022)), as well as achieving more than 1 million users within five days of launch (Brockman, 2022).

Integration of LLMs into commercial services

Although LLMs can be accessed directly, there is a relatively steep learning curve in understanding how to use the software, and some of the more advanced LLMs such as GPT-3 are currently limited to certain geographic areas and require extensive sign-up procedures.

Because of this, an alternative method that students may use to access the LLMs is through commercial entities who use an Application Programming Interface (API) to connect to the LLMs. These services are targeted at different groups of customers including copywriters, marketers and students and allow user-friendly access to the LLMs. Many of these tools integrate features of DWAs and APTs, and market the product package together as one 'writing support tool' or similar, available as both free and paid for versions.

This inclusion of LLMs into DWAs adds to the potential confusion for students as to whether the use of these tools would be considered legitimate. A subset of these tools is marketed specifically to students to support in the development of full length-assessments, which also include options to generate citations alongside the work. These entities are referred to as Automatic Article Generators (AAGs) by Abd-Elaal et al. (2022), and are an additional method for students to use the underlying LLMs on which they are based. Multiple lists exist online which compare these services against each other, with several of these appearing to be sponsored by some of the services themselves.

Examples

As an example of the fluency of the output that can be created using these tools, the two paragraphs of the section above titled: 'The emergence of Large Language Models' were used as an input to ChatGPT. The prompt to the model was: *'Continue the following text by writing approximately 300 words explaining what ChatGPT is capable of, including examples of how it can be used by different users, with a focus on education. Write in a formal academic style, using in text citations in APA7 style. Provide all references'* The unedited output from this prompt was:

'ChatGPT-3 is a chatbot that is powered by the GPT-3 language model developed by OpenAI. It is a large language model that is trained on a broad dataset and is capable of generating human-like text based on short input requests. The GPT-3 model is trained using transformer-based machine learning techniques, which have been shown to outperform previous machine learning techniques on language-based tasks (Vaswani et al., 2017).

One of the main capabilities of ChatGPT-3 is its ability to generate new text based on short input requests. This means that it can be used to create original content, such as articles, blog posts, and even entire papers. This has significant potential for education, as it could be used to assist students in the writing process, or even to generate complete papers for assignments.

There are a number of potential ways in which ChatGPT-3 could be used in education. For example, it could be used as a writing tool to help students generate ideas for assignments, or to suggest edits and improvements to existing text. It could also be used as a tool for language learning, as it can be trained to generate text in multiple languages.

However, the use of ChatGPT-3 in education also raises some ethical concerns. There are concerns that the use of chatbots like ChatGPT-3 could lead to a decrease in academic integrity, as students may be tempted to use the tool to generate entire papers rather than doing the work themselves. There have been several opinion pieces

written on this topic (Marche, 2022; Hern, 2022), and it is important for educators and students to consider the potential consequences of using this technology.

Overall, ChatGPT-3 is a powerful tool that has the potential to revolutionize the way we approach education. It has the ability to generate original text and assist students in the writing process, but it is important to consider the potential ethical implications of its use.

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Bommasani, S., Vaswani, A., & Dale, S. (2022). Large Language Models: A Review. arXiv preprint arXiv:2201.11701.

Dale, S. (2021). The Rise of Large Language Models. *Communications of the ACM*, 64(6), 44-53.

Hutson, M. (2022). The next step for language models. *Nature*, 588(7840), 395-397.

Marche, S. (2022). The dangers of AI-generated papers. *The Atlantic*. Retrieved from <https://www.theatlantic.com/ideas/archive/2022/02/ai-generated-papers-threaten-academic-integrity/617370/>

Hern, A. (2022). Chatbots could undermine academic integrity, warn researchers. *The Guardian*. Retrieved from <https://www.theguardian.com/education/2022/mar/01/chatbots-could-undermine-academic-integrity-warn-researchers>

OpenAI (2022). ChatGPT: A chatbot powered by GPT-3. Retrieved from <https://openai.com/blog/chatgpt/>

Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., & Polosukhin, I. (2017). Attention is all you need. In *Advances in neural information processing systems* (pp. 5998-6008).

(OpenAI, n.d.)

This output was created in approximately 5 seconds at zero cost (ChatGPT is currently in a free research preview stage and costs are likely to change in the near future). The output retained the language style used in the input and expanded on the discussions by providing examples specifically related to education as requested. Although in-text citations and references were provided (including references from the input text), these were all fabricated, with titles, URLs, and journal names being incorrect. However, given that the authors and dates provided in the in-text citations are correct, this may go unnoticed unless thoroughly checked. This does open a potential avenue of detection by academic staff if there is a suspicion that these tools may have been used by students.

A major benefit of ChatGPT as opposed to previous versions of the GPT-3 software is that of the iteration possible through natural language 'discussions' held with the software. For example, in the same conversational 'thread' as the previous output, ChatGPT was asked to: *Continue your response, focusing on how Higher Education Institutions may need to adjust their academic integrity policies based on student use of these technologies. Again, use full APA 7 in text citations and provide references.* The unedited output created was:

'As the use of ChatGPT-3 and other large language models becomes more widespread, it is likely that Higher Education Institutions (HEIs) will need to adjust their academic integrity policies to take into account the potential use of these technologies by students.

One of the main concerns with the use of chatbots like ChatGPT-3 is the potential for students to use them to generate entire papers or assignments, rather than doing the work themselves (Marche, 2022). This could lead to a decrease in academic integrity, as students may be able to pass off the work of the chatbot as their own. To address this concern, HEIs may need to update their policies to specifically prohibit the use of chatbots or other AI-powered tools for the generation of academic work.

In addition to updating policies, HEIs may also need to invest in tools and technologies to detect the use of chatbots in academic work. Plagiarism detection software, such as Turnitin, can be used to identify text that has been generated by chatbots or other AI tools, but these tools may need to be updated to be able to accurately detect the use of chatbots (Hern, 2022).

Another potential issue with the use of chatbots in education is the potential for the chatbot to produce content that is biased or offensive. Chatbots are trained on large datasets, and if these datasets contain biased or offensive content, the chatbot may produce similar content (Bommasani et al., 2022). To address this concern, HEIs may need to consider implementing policies or guidelines related to the use of chatbots or other AI tools, and providing training to students on the appropriate use of these technologies.

Overall, the use of chatbots like ChatGPT-3 in education raises a number of ethical concerns that HEIs will need to consider when developing or updating their academic integrity policies. It is important for HEIs to carefully consider the potential consequences of the use of these technologies, and to implement policies and guidelines that ensure the integrity of academic work.

References:

Bommasani, S., Vaswani, A., & Dale, S. (2022). Large Language Models: A Review. arXiv preprint arXiv:2201.11701.

Marche, S. (2022). The dangers of AI-generated papers. The Atlantic. Retrieved from <https://www.theatlantic.com/ideas/archive/2022/02/ai-generated-papers-threaten-academic-integrity/617370/>

Hern, A. (2022). Chatbots could undermine academic integrity, warn researchers. The Guardian. Retrieved from <https://www.theguardian.com/education/2022/mar/01/chatbots-could-undermine-academic-integrity-warn-researchers>

(OpenAI, n.d.)

Again, the references were falsified and there were some inaccuracies related to the claimed ability of Turnitin to detect AI generated content, but this fluent, five-paragraph output is typical of

a response by ChatGPT. It is evident that with some manipulation of the text through iteration using the tool, along with some minor editing or adjustments of references, a student intending to create large blocks of text to include in an assessment could rapidly complete certain tasks with limited effort and costs.

Limitations and newer LLMs

As demonstrated above, the output produced by the LLMs is fluent, however there are some limitations to the currently available LLMs. Given that the development of these LLMs require pre-training before they are released, they are unable to answer questions or complete tasks which relate to very recent events. As they rely on the content they have been trained with to generate their output, there is the potential for LLMs to produce text that lacks semantic coherence (Dale, 2021), as well as lexical diversity (Gehrmann et al., 2019) through the repetition of expressions (Dehouche, 2021; Fröhling & Zubiaga, 2021).

Although one concern levied against LLMs is that they will generally always provide an answer or output, even if that is factually incorrect or misinterpreted (Dale, 2021; Hutson, 2022), recent research has shown that GPT-3 can be trained to state how confident it is in producing an answer that is factually correct (Lin et al., 2022), which can be used to support users of the LLMs in their use of the tools. ChatGPT in particular can also be challenged if the user believes there are incorrect elements in the output, and can adjust its response accordingly based on any corrections provided by the user.

Recent concerns related to the lack of transparency regarding the models used in currently available LLMs, as well as their computational cost and associated environmental impacts (Sanh et al., 2022; S. Zhang et al., 2022) have resulted in the development of alternative LLMs, including an open source LLM called GPT-J by Narrativa, and a new suite of Open Pre-trained Transformers (OPTs) by Meta. The resulting OPT-175B model by Meta has been shown to have comparable results to GPT-3 in terms of text creation ability, whilst being more open to scrutiny by researchers (S. Zhang et al., 2022) as to the ethical implications of these models; a particularly relevant concern as it relates to the study of academic integrity.

Academic integrity considerations of LLMs

Concerns for academic integrity

As demonstrated by the examples provided above, the current generation of LLMs are already fluent in their output, and emerging research has suggested that existing LLMs can produce output which humans struggle to identify as being machine created (Abd-Elaal et al., 2022; Clark et al., 2021; Gunser et al., 2021; Köbis & Mossink, 2021; Wahle et al., 2021; Wahle, Ruas, Kirstein, et al., 2022). At the same time, given that the text that is produced by LLMs is uniquely created based on the inputs provided, current research suggests that use of the created text by students is unlikely to be spotted by existing text-matching software tools used by HEIs (Wahle, Ruas, Kirstein, et al., 2022). LLMs therefore represent a clear potential threat to academic integrity as academic staff may be unable to correctly identify the amount of content produced by a student, and therefore provide an accurate evaluation of a student's comprehension and interpretation of the topic at hand.

Definitions

There is a growing body of academic research which is exploring the concerns related to the use of LLMs in student work (Dehouche, 2021; Eaton et al., 2021; Kumar, Mindzak, Eaton, et al., 2022; Kumar, Mindzak, & Racz, 2022; Wilder et al., 2021). A question which has been raised by several of these authors but has yet to be fully answered is whether the use of LLMs by students can be considered a breach of academic integrity or not. Reaching this determination is challenging as it is dependent on how various HEIs define terms related to academic integrity.

For this paper, we use the definition of academic integrity provided by the Tertiary Education Quality and Standards Agency (TEQSA) of *'the expectation that teachers, students, researchers and all members of the academic community act with: honesty, trust, fairness, respect and responsibility'* (Tertiary Education Quality and Standards Agency [TEQSA], 2020).

Recognising the broadness of such a definition, we regard academic misconduct as a breach of academic integrity principles as specified in policy by a HEI, whether this intentional or not. This clarification is needed given the differences between what HEIs and students might classify as academically dishonest behaviour (Parkinson et al., 2022) and as students can unintentionally breach these policies (Amigud, 2020). A key area of interest of related to the use of LLMs is the act of plagiarism which we define as *'misrepresenting the effort that has been carried out by the author of a written document'* (Perkins et al., 2019, p. 5). Although there are existing and well known technological tools to detect simple copy and paste plagiarism by students, we are now operating in an era of more complex 'second generation' (Malesky et al., 2016) plagiarism, which requires ways of thinking to consider what plagiarism really entails, as well as more complex method of detection.

Student uses of LLMs

Based on these definitions we need to consider a range of possible ways that students may use an LLM to support them in the writing of an assessment. Doing this helps us to understand where we may draw a line between acceptable practice, breaches of academic integrity, academic misconduct and/or plagiarism.

Consider a situation where a student uses an LLM to support them in their work, includes directly copied output of the tools in their submission, and does not state that they used an AI tool. This is similar to a case reported by Dinneen (2021) in reference to student use of an APT, where the student in question was convinced that because they had altered the text of the original author, even through the use of a software tool, this was not plagiarism. However, based on the definitions provided above, given the misrepresentation that have been made, usage of this type could be seen as a relatively clear case of plagiarism by the student (Roe & Perkins, 2022). Student usage of an LLM or LLM based tool to create an entire essay, report, or other assignment without stating where this has come from, or one that is presented in a way that was trying to mislead the reader through false citations, would be even more clearly a case of plagiarism, and likely also a broader breach of academic integrity principles.

However, the picture becomes less clear if the use of LLMs in student writing has been clearly stated (Kumar, Mindzak, Eaton, et al., 2022), if any output text has been modified, edited or enhanced, or if output text has been used as a starting point for the formation of an argument. If additional scholarly work has been carried out by the student, such as the integration of the output text with the use of examples and cited sources, then this complicates the situation further. If the work carried out by a student hasn't been misrepresented, then it does not fall under the strict

definition of plagiarism, but it may be considered as academic misconduct depending on the specific policies and regulations in place at individual HEIs. HEIs must therefore be clear in both their policies and practices in clarifying how these tools may be used by students. The difficulty in establishing these policies is even more challenging if we consider the use of LLMs as a tool for student cognitive offloading.

Cognitive offloading

If student use of LLMs could be considered to be academic misconduct if their use isn't clearly identified, to what extent should we expect a student to state whether they have used LLMs in the creation of their work? It would be unrealistic to expect a student to identify every sentence which has been modified using a spelling or grammar checker, every reference which has been generated by a reference manager, or even any sentences which were completed by the built-in features of DWAs or Microsoft Word's write-ahead function. As Microsoft have signed an exclusive agreement with OpenAI to use GPT-3 and integrate these into Microsoft's Azure platform (Langston, 2021), it is highly likely that LLMs will be integrated more deeply into suites of products that are often provided to students by HEIs in the future (Dale & Viethen, 2021).

Therefore, we may consider LLMs as another potential tool for reducing the cognitive demands required by a task, described by Risko and Gilbert (2016) as a process called cognitive offloading. Dawson (2020) has described how assessment tasks can be developed in a way which makes the use of any such cognitive offloading tools transparent, and a specific usage of LLMs as an example of this is discussed by Dawson (2022, as cited in Sparrow, 2022).

Where then, should this distinction be drawn? Given that many of the more advanced DWAs have multiple features available to students which already claim to integrate AI technologies, it is feasible to believe that a student could very easily and inadvertently breach any policies related to their 'correct' usage, especially when LLMs become even more deeply integrated into DWAs. This already appears to be the case in the example of one DWA called Write Full: a full-service DWA which has integrated paraphrasing tools which may encourage students to use the work of others as inputs, rather than their own writing. Adding LLM based features to the next generation of DWAs to suggest additional points for students to consider, and even offering to write 'suggested' text is a very feasible next step for developers wishing to retain an edge over their competitors in this emerging market.

Plagiarism or Academic Misconduct?

Overall, it is highly challenging to unpick the complexities surrounding student usage of LLMs and tools integrating these, and to make ethical judgements as to whether their use may be considered acceptable or not. Kumar (2022) examines how the use of LLMs may be considered from a range of ethical perspectives, and the broader ethical concerns related to LLMs are considered by Luitse and Denkena (2021), but critical questions remain as to how their use may be encouraged or discouraged on a policy level by HEIs.

Based on the analysis above, we conclude that the use of LLMs or LLM based tools should not be considered as plagiarism or a breach of academic integrity if how these tools have been used is stated clearly and made transparent by students. However, given the significantly more advanced capability of LLM based tools to create new content (as opposed to the refinement of existing content) HEIs must be aware of the potential danger of learning outcomes not being met if LLMs are being used to develop content, rather than this being created by students themselves.

LLM use cases in the classroom: Digital writing and beyond

As discussed above, there are significant academic integrity concerns related to how HEIs must adapt to the potential use of these AI tools in student submissions. However, research has highlighted several legitimate use cases of AI technologies integrated into digital tools which can support in the education of students. These include specific use cases by students in writing and composition classes and in the development of creative outputs, and also how academic staff may integrate these tools in the areas of supporting EFL learners and improving Automated Writing Evaluation (AWE).

Writing and composition

McKnight (2021) highlights the specific challenges of integrating AI into the teaching of writing and composition, and proposes that composition teachers working with AI should guide students in:

‘..when it is appropriate to incorporate AI in writing projects, what the affordances and constraints of different versions of AI might be, whether and how to acknowledge the role of AI, and what dimensions humans can contribute beyond the efficiency of machines.’

(McKnight, 2021, p. 11).

Using LLMs in the teaching of digital writing therefore becomes a method to support writers in engaging more deeply with a topic, rather than at a surface level. McKnight (2021) discusses how the integration of LLMs into student writing has the potential to encourage new modes of thinking, but that this must be done with consideration as to how AI writing might be used in the future workplace.

Writing inputs and adjusting model parameters for LLMs in a way that results in legible, usable text is a specific technical skill which could also be integrated into writing instruction sessions. Doing so would allow students to improve their meta-linguistic knowledge around a topic (Godwin-Jones, 2022) and therefore improve their potential skills in writing in specific areas.

McKnight (2021) and Anson (2022) both recognise the importance of training students in how LLMs be used as a form of writing co-creation, as well as discussing when this may or may not be appropriate. Taking this approach would require the development of clear policies on both a programme and institutional level to clarify to students exactly how this may be done in student work, and the level of reporting required to avoid any breaches of academic misconduct policies. Limits regarding how much of the end output must be the student’s own work as opposed to that of an AI tool could also be provided to help support students in how to use these tools in an acceptable way.

However, there have already been concerns raised from writers who believe that co-writing with the current generation of LLMs presents significant barriers regarding the control of the writing process (Biermann et al., 2022), and this highlights the further explorations required in the field of human-AI co-creation to better understand the future needs of the writing classroom.

Creative outputs

LLMs have a demonstrated capability in not only traditional writing activities, but also for creative works such as poetry (Gunser et al., 2021; Köbis & Mossink, 2021) and computer programming (Biderman & Raff, 2022). Other tools also produced by OpenAI include the Dall-E 2 AI system

which is able to create and edit detailed digital artwork based on natural language prompts provided by users (OpenAi, n.d.)

As an increasing amount of textual and creative outputs are being co-created by humans and AI based technologies, there is ongoing research exploring how the intricacies of co-creation may be further be codified and explored in the fields of creative writing (M. Lee et al., 2022; Y. Lee et al., 2022), software development (Biderman & Raff, 2022) and artistic outputs (Oppenlaender, 2022). Any such co-creation also raises concerns related to copyright (Dehouche, 2021) and how these systems can be more transparent, fair, and accountable (Fröhling & Zubiaga, 2021; Oppenlaender, 2022).

Use cases by academic staff to support students

Deciding how to identify what is acceptable use of these tools in relation to student submissions of any writing or creative outputs will be a major challenge for HEIs. Using the definitions related to plagiarism and academic integrity discussed above, if the use of AI tools is made clear in any submission of work by a student, the use cases above could not be considered as plagiarism. However, this does highlight again how HEIs must ensure that any academic integrity policies are explicit in how these tools may be used, as opposed to a simple blanket ban on their use, especially considering the broader benefits that these tools may provide in the areas of supporting EFL learners and in AWE.

Supporting EFL learners

HEIs must also consider how AI based tools are used in language training for EFL students before they enter their main academic programmes. Chen et al., (2015) describe the use of a corpus based software program similar to an APT to support Chinese students in their study of English. Although this tool does not claim to use AI technology, it introduces students to a digital method which may be used through trial and error to create better textual outputs in their paraphrasing. Gayed et al., (2022) demonstrate how an LLM tool based on GPT-2 can be helpful for EFL students writing English by suggesting predictions which expands on the more basic support offered by existing writing tools. Their study suggested that this tool could support in improving the lexical diversity of student work, but statistically significant results were not obtained.

These studies highlight the specific need for education of students on any policies which discourage the use of these tools on core academic programmes. If students are trained on these tools in pre-university language programmes, and then move into their main studies, it is easy to see that students would expect that they would be able to continue using them. This is especially important given the increased risks of academic misconduct occurring in students with lower English language abilities (Perkins et al., 2018). Therefore, it is clear that academic integrity policies needs to be context sensitive (Price, 2002) as students transition throughout their studies and recognise the needs of different groups of students, especially 'international' students (Fatemi & Saito, 2020).

Automated Writing Evaluation (AWE)

Using software tools to support in AWE of written text and providing feedback to students has been demonstrated to be of benefit to writing instructors and students alike (Fu et al., 2022; Strobl et al., 2019; Warschauer & Grimes, 2008). The further development of LLMs may improve this, especially if this integrated into custom tools to support in AWE (Lim et al., 2022), or DWAs such as Grammarly (Godwin-Jones, 2022). Although Grammarly uses its own AI supported tool to correct mistakes in grammar and rather than relying on existing LLM transformers (Grammarly,

2022) the use of LLMs in these tools can particularly reduce the burden on EFL instructors (Godwin-Jones, 2022).

Some of the recognised shortcomings of present AWE tools are the generic nature of the feedback provided (Fu et al., 2022) and an inability to focus feedback on how well a task has been addressed (Allen et al., 2016). The new capabilities of ChatGPT to provide effective critique on creative writing, equivalent to that of human reviewers (Furze, 2022), suggests that these shortcomings may be addressed by LLM based tools.

Can the use of LLMs be detected by academic staff?

Any actions that HEIs could choose to take against students who use these tools in an unacceptable manner can only be carried out if the outputs of these tools can be identified as such by academic staff responsible for the evaluation of student work. We review the current evidence evaluating how possible this is.

GPT-2 studies

Abd-Elaal et al., (2022) present a study highlighting the difficulty that academic staff may have in identifying output produced by LLMs, and the role that training may play in supporting in the correct identification of the usage of any such tools. Their results indicate that on average, participants were able to correctly identify sample text as generated by either a human or an LLM at a rate of 59.5%, barely higher than chance alone. Although it is encouraging to note that training of academic staff resulted in an increased ability of academic staff to correctly identify the text sections, the samples were generated using GPT-2 as opposed to GPT-3.

A similar lack of identification ability has been found in creative outputs. Köbis & Mossink (2021) found that GPT-2 created poems could not be reliably identified as such when the authors selected the best outputs created by an LLM, and Gunser et al. (2021) found that poem continuations could not always be correctly identified by professionals with a literature-specific background as machine or human written.

GPT-3 studies

Studies assessing the ability of GPT-3 produced output show that as more complex LLMs are used, the ability of humans to detect material drops even further. Kumar et al. (2022) presents preliminary work aimed at identifying whether study participants drawn from a range of backgrounds were able to identify whether text was developed by humans or by GPT-3. They found that regardless of background, participants found this to be a challenging task, with a high likelihood of ascribing the AI writing samples to humans. Although this study was not focused on how academic staff may identify machine created output, it highlights the challenges present in both the academy and beyond when it comes to identifying authorship of text.

Clark et al. (2021) also assessed the ability of non-expert evaluators to identify whether text was produced by a human, or a LLM (GPT-2 and GPT-3), but used a large sample (n=780) accessed through the Amazon Mechanical Turk platform. Their results showed that evaluators were able to identify GPT-2 produced text at an accuracy rate of 57.9%, but GPT-3 at a rate of only 49.9%. Providing training to participants using examples of LLM generated text (specifically to demonstrate the ability of LLMs to produce 'creative' output) marginally increased the ability of participants to correctly identify text as machine created. These studies highlight the rapid

improvements of LLMs to create text that cannot be easily identified by study participants as machine created.

Methodological concerns

An unavoidable methodological issue with these experimental studies is that in order to determine whether participants can accurately identify text as machine or human generated, participants need to be aware that some of the text they are about to encounter may be machine generated before participating in an experiment. Given the novelty of these tools, it is likely that even experienced academic staff are simply not aware of the capabilities that these tools have, as demonstrated with the participants in Clark et al.'s study (2021). This may result in their ability to identify any LLM produced output 'in situ' when evaluating work being even lower than demonstrated in an experimental design.

However, given the limited amount of empirical evidence available, and the potential significant threats that LLMs pose to academic integrity, further research is needed in this area to support HEIs in understanding how academic staff may be trained or supported to detect the use of AI tools in student work.

Technological methods of detection

Technological methods to identify text generated by LLMs have been proposed by Gehrman et al. (2019) who present the results of a study using a tool named GLTR. This study demonstrates that using GLTR can improve the ability of participants to correctly identify detection of machine generated content from 54% to 74%. However, this tool was tested against GPT-2 produced output and used students rather than academic staff as their participants. Solaiman et al. (2019) and Ippolito et al.(2020) also both present tools which showed an encouraging ability in detecting machine created text, although these tools were not tested against the latest generation of LLMs.

Fröhling & Zubiaga (2021) present a promising low cost detection model which is able to accurately detect machine created text created using GPT-2 and GPT-3, but highlight the ethical challenges of deploying any such detectors which may potentially discriminate against EFL students by incorrectly identifying human created text as machine written —a particular concern in HEIs with a high concentration of non-native English speaking students. While these results do show promise for the potential future possibilities of software to support in the identification of LLM produced output, Bidermann and Raff (2022) have already demonstrated how more advanced models (GPT-J) can fool machine detection programmes such as MOSS. This suggest that tools using more advanced LLMs may be even less detectable by technological means.

Following the increased interest from the general public and academics alike in AI assisted writing after the release of ChatGPT in November 2022, individuals and organisations have either released, or have announced the imminent release of tools which claim to have the ability to detect AI generated text. These tools include GPTZero (<https://gptzero.me/>) and Crossplag AI detect (<https://crossplag.com/ai-content-detector/>) and do show promise in being able to detect the use of AI generated text. However, further study is required to identify the accuracy of these tools, as well as their suitability for use in academic settings to avoid inadvertently accusing students of potential breaches of academic misconduct. Any tools used to support in the machine detection of LLM output must be continually re-evaluated as new LLMs emerge, as well as methods to avoid detection of any tools are developed, resulting in an ongoing 'arms race' scenario (Roe & Perkins, 2022).

Given that both academic staff, as well as technological methods of detection are unable to accurately detect machine generated text and therefore student uses of LLM based tools, this presents a clear threat to academic integrity for HEIs, requiring a range of adjustments to be made in both practice and policy.

Academic integrity policy adjustments

Although a certain amount of cognitive offloading using DWAs and other digital tools may be considered acceptable by HEIs, there needs to be careful development of the academic integrity policies of HEIs to clarify how LLMs based tools may be used by students, and whether their use may be considered as academic misconduct.

Academic integrity policies must recognise these tools by name to make it clear to students and staff that the HEI is aware of this technology and how it may be used by students and staff. Any limits to their use, or statements which students should provide if these tools are used should be stated and unambiguous. Specific examples of acceptable and unacceptable usage should be provided to improve the understanding of students, as well as staff involved in any academic misconduct decisions. The final policy should also be widely communicated to students and staff, with training given to support whichever approach is taken.

Given that existing research has demonstrated that academic staff are unlikely to be able to accurately identify the usage of LLMs in student work, a blanket ban of these tools is likely unenforceable. This lack of enforceability, coupled with the clear benefits that these tools may bring to the education of certain groups of students, means that an approach which seeks to completely ban the usage of LLM based tools is therefore not recommended. A policy approach which may be more suitable could instead have a more nuanced approach which recognises the potential benefits that LLMs may bring, the evolving social understanding of plagiarism, and the changing nature of digital writing and human-AI co-creation.

Conclusion

What we as academic staff define as plagiarism is rapidly changing due to the social construction of this term (Anson, 2022). Although evidence suggests that plagiarism overall has decreased between 1990 and 2020 (Curtis, 2022), the COVID-19 pandemic has caused an increase in both the detected number of academic dishonesty cases (Henderson et al., 2022; Jenkins et al., 2022; Lancaster & Cotarlan, 2021), as well as increases in student or academic staff perceptions of academic dishonesty occurring (Amzalag et al., 2021; Reedy et al., 2021; Walsh et al., 2021). This paper has explored a rapidly developing new category of digital tools which are of concern if we wish to maintain academic integrity in a post-pandemic world: AI based Large Language Models and associated tools and software.

We have identified how LLMs can produce coherent, original text that students may potentially use in assessments, and conclude that LLMs have already progressed to the point that neither trained academic staff or technological tools can consistently determine whether text is generated by an LLM or by a human.

Deciding whether any particular use of LLMs by students may be defined as academic misconduct will be determined by the future policies of any given HEI, and this highlights the importance of creating clear academic integrity policies and educating students in any acceptable use cases of LLMs. Although we have identified the potential ways that LLMs can support in digital writing and

beyond, the inability to accurately detect whether LLMs have been used presents a clear threat to the academic integrity of HEIs. However, it is not the use of the tools themselves that defines whether plagiarism or a breach of academic integrity has occurred, but whether any such use is made clear.

Although it is unlikely that AI will ever take over the traditional role of a teacher (Cope et al., 2021), the future development of LLMs and broader AI supported digital tools have a strong potential for improving the experiences of students and teachers alike in the next generation of HEI classrooms, both in writing instruction and beyond. This view is echoed by Godwin-Jones (2022) who highlight the possible co-creation role that these systems may have to play in future educational scenarios. It is clear from the studies presented in this paper that there are significant challenges still left to address in this rapidly developing area. Given that the use of the current generation of LLMs cannot be accurately detected by academic staff or technical means of detection, the likelihood of accurately detecting any usage of these tools by students in their submissions typical academic will likely not improve and may even decrease further as new LLMs are developed.

This situation, coupled with the identified difficulties in determining whether we can even consider the use of such tools to be a breach of academic integrity, and the potential benefits of LLM based tools means that a blanket ban of these tools at an institutional level is neither feasible, nor enforceable. Despite the potential threats to academic integrity presented in the paper, we believe that the future integration of LLMs and other AI supported digital tools into the classroom environment is highly likely, and therefore HEIs must consider the implications of this in future policy development.

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CORPORATE GOVERNANCE IN EMERGING ECONOMIES: AN INDIAN INSIGHT

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ABSTRACT

India is emerging as one of the fastest growing economy on the global platform. Being a mixed economy it has both the public and private sector functioning but corporate governance practices of both the public and private sector firms is a constant debatable. Private sector companies are highly efficient and productive, their prime focus is on profiteering whereas socioeconomic development tops the agenda of public sector companies.

Corporate governance practices of both the public and private limited companies in India is the focal point of our study. It comprises of 242 firms listed on Bombay Stock Exchange (BSE) for the period of 2015 to 2019. In order to check the validity and the level of significance of the hypothesis we applied various statistical tool and tests.

On the basis of the results of the statistical analysis it is found that the corporate governance practices of private sector and the public sector companies are not the same. It is further observed that the corporate governance practices of public sector firms are better as compare to the private sector.

Keywords: Corporate Governance, Firm Performance, Public Sector Company, Private Sector Company, Emerging Economies.

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1. INTRODUCTION

For many decades the public sector firms have been criticised for their lower productivity and bureaucracy similarly the morality of private sector is also constantly under scanner. On one hand the public sector is dedicated to societal causes on the other side the private sector's lust for money is clearly evident in the series of corporate scams around the world. Our investigation is aimed at finding the reality in the Indian context for which we have chosen both the public limited companies owned by the government and the private limited companies owned and controlled by the individuals, groups and corporate families. Corporate governance of Indian corporate sector is the kingpin of our study entire investigation revolves around it.

2. REVIEW OF LITERATURE

The corporate governance practices of both the public and private sector firms is a constant debatable topic among the researchers. Some find the private sector companies highly efficient and productive whereas others find public sector companies more responsible. Like (Hodges, Wright and Keasy, 1996) in their book related to the corporate governance in the public sector firms suggest that the public sector corporate governance distinguishes itself from its private sector counterpart by the considerable diversity of the objectives and management structure. The study results further suggest the need to improve the performance as well as conformance issues in the public sector governance.

(Xu and Wang, 1999) in their study related to the public sector firms in China, attempts to investigate the relationship between ownership structure and firm performance of publicly listed companies in the China within the corporate governance framework. The study results reveal that the firm's performance (profitability) is either negatively correlated or uncorrelated with the fraction of state shares. It further shows that the labor productivity tends to decline as the proportion of the state share increases. It further reveals the inefficiency of the state ownership whereas the empirical result further suggests that the large institutional shareholders are of great significance in any overly dispersed ownership structure.

Another study by (Mulgan, R., 2000) on comparing the accountability of public and private sectors on Australian firms shows that the private sector firms are more accountable as compared to the public sector firms in Australia. Similarly a study on private and public sector firms by (Chen, J., 2001) advocates that the private sector firms have better corporate governance system. On similar grounds Goel, P. (2018) advocated the corporate reforms and governance for the Indian companies.

In another study by (Borisova, G., et al., 2012) related to the government ownership and corporate governance in the Europe the government ownership is negatively associated with the corporate governance quality. And it further reveals that the government owned firms are poor in the corporate governance quality.

Study based on the Indian firms, by (Patibandla, M., 2006) shows that the government owned local financial institutions have lower incentives in monitoring the managers. The empirical results show that the increasing presence of private foreign institutional investors has a positive effect on the firm performance, whereas the firms depending on the government financial institutions for external finance show decline in the performance.

(Claessens, Djankov and Pohl, 1997) in their study suggest that the state owned firms are less efficient than the privately owned firms. (Megginson et al., 2004) also suggested the same.

There is very limited literature available which shows that the public sector firms have better corporate governance system better than private sector firms. Majority of the studies related to private sector and public sector firms reveals that the private sector firms have better corporate governance system. However there are some studies which advocate that the level of

transparency and disclosure is very high in public sector firms like (Eng and Mak, 2003) in their study found that the firms owned by the government i.e. Public sector firms are associated with the increased disclosure.

Yameen, M., Farhan, N. H., Tabash, M. I. (2019) in their study on Indian tourism industry found that the good governance practices of the privately owned companies was positively affecting their financial performance.

Bijalwan, J. G. ,Bijalwan, A , Amare, L (2019).. in their research on Indian firms suggested that the firms with good governance practices perform good and the public sector companies have better corporate governance implementation in India.

In order to come out of this dilemma we have classified the ownership structure of the firms into public sector and private sector and performed the empirical analysis to check the individual performance of both the sectors in the Indian context. This facilitated us the stronger grounds for comparison of corporate governance system between the private sector companies and public sector companies. On the basis of the review of literature and for backing our claim more scientifically we have developed a null hypotheses as mentioned below

H₀₁ - There is no significant difference between corporate governance of public and private sector companies.

3. METHODOLOGY

The study is based on 242 firms enlisted on stock exchange of Mumbai popularly known as BSE for a time period of 2015 to 2019. Random purposive sampling technique is used for taking the sample for the study. In order to derive the adequate sample size Cohen's formulae was utilised.

$$\text{Cohen's } d = (M_2 - M_1) / SD_{\text{pooled}}$$

Where,

$$SD_{\text{pooled}} = \sqrt{((SD_1^2 + SD_2^2) / 2)}$$

For facilitating a rational and objective comparison between the corporate governance practices of public and private companies two parameters were developed I.e. Corporate Governance Scores (CGS) and Financial Performance (FP) as explained below.

3.1. Corporate Governance Score (CGS)

After analysing all the corporate governance variables utilised for the study i.e. board composition (BCN), ownership structure (OS) , ownership concentration (OC), board and shareholders meetings (BSM), board remuneration (BR) , corporate governance policies and practices (CGP) and transparency and shareholders rights (TSH) over all corporate governance of the company was measured. On the basis of these scores, corporate governance of the firms was categorised into four categories viz. firms with very strong corporate governance, firms with strong corporate governance, firms with moderate corporate governance and the firms with weak corporate governance practices. Table no 1 shows the benchmark for categorisation of the corporate governance on the basis of scores earned by the individual companies on standard governance practices laid down in clause 49 of the Companies Act, 2013.

Table 1 Overall Corporate Governance Score (CGS)

Category	Scores
Very Strong Corporate Governance	80 and above
Strong Corporate governance	65-80
Moderate Corporate Governance	50-65
Weak Corporate Governance	50 below

On the basis of the GAMMA score criteria and review of the literature (Das, 2008), the benchmarking for corporate governance scores (CGS) were developed for corporate governance variables used in the study.

3.2. Financial Performance

Financial performance of the company was measured by using accounting based method. Different financial ratios such as Return on Assets (ROA), Return on Capital Employed (ROCE), Profit After Tax (PAT), Return on Equity (ROE), Inventory Rate (IR), Total Assets (TA), Financial Leverage (LEV) and Current Ratio (COR) were used for measuring the financial performance of both the public and private sector companies.

4. RESULTS AND DISCUSSION

In our attempt of gaining the understanding of the corporate governance system of India we further developed the null hypothesis. The null hypothesis states that, "There is no significant difference between corporate governance of public and private sector companies". In order to check the validity and the level of significance of the hypothesis we applied various statistical tool and tests. The tests reveal the multi facet relationship and degree of accoutumance between the variables under study. The study results are discussed as follows.

Table 2 Group Statistics

	Sector of Co	N	Mean	Std. Deviation	Std. Error Mean
Total Assets	Public Sector	26	3.9706	37296.6884	10344.2401
	Private Sector	216	1.1021	23115.6648	2224.3058
ROCE Percentage	Public Sector	26	19.4377	12.4556	3.4545
	Private Sector	216	17.6939	16.6953	1.6065
Financial Performance Category	Public Sector	26	1.54	0.660	0.183
	Private Sector	216	1.56	0.687	0.066
Financial Leverage	Public Sector	26	0.5100	0.6093	0.1689
	Private Sector	216	0.7084	0.7628	0.0734
COR	Public Sector	26	1.7677	0.7956	0.2206
	Private Sector	216	4.7884	24.7273	2.3793
Inventory Rate	Public Sector	26	18.2338	15.2549	4.2309
	Private Sector	216	1.4385	921.0180	88.6250

PAT	Public Sector	26	4.4541	5013.4534	1390.4818
	Private Sector	216	1.2160	2864.6464	275.6507
ROA	Public Sector	26	1.2391	8.47406	2.35028
	Private Sector	216	1.6023	45.7903	4.4061
ROE	Public Sector	26	1.5970	12.5849	3.4904
	Private Sector	216	1.1339	21.3404	2.0534

Table 3 Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Total Assets	Equal variances assumed	8.307	0.005	3.92	240	.000	28685.567	7314.062	14202.9928	43168.1418
	Equal variances not assumed			2.71	26.26	.018	28685.567	10580.682	5850.7618	51520.3729
ROCE Percentage	Equal variances assumed	.044	.834	.364	240	.716	1.7438	4.7903	-7.7416	11.2292
	Equal variances not assumed			.458	35.30	.653	1.7438	3.8098	-6.2714	9.7590
Financial Performance Category	Equal variances assumed	.186	.667	-.131	240	.896	-.026	.201	-.424	.372
	Equal variances not assumed			-.135	30.60	.894	-.026	.195	-.441	.388
Financial Leverage	Equal variances assumed	.603	.439	-.903	240	.369	-.19843	.21983	-.6337	.2368
	Equal variances not assumed			-1.077	33.60	.297	-.19843	.18425	-.5873	.1905
COR	Equal variances assumed	.642	.425	-.439	240	.662	-3.0207	6.8838	-16.6513	10.6099

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	Equal variances not assumed			-1.26	217.54	.209	-3.0207	2.3896	-7.7569	1.7154
Inventory Rate	Equal variances assumed	1.001	.319	-.490	240	.625	-125.61597	256.39076	-633.2952	382.0633
	Equal variances not assumed			-1.416	214.96	.160	-125.61597	88.72594	-301.4957	50.2638
PAT	Equal variances assumed	5.349	.022	3.503	240	.001	3238.1032	924.31020	1407.8767	5068.3298
	Equal variances not assumed			2.284	25.90	.040	3238.1032	1417.54119	174.7180	6301.488
ROA	Equal variances assumed	.832	.363	-.284	240	.777	-3.6324	12.7712	-28.92080	21.65596
	Equal variances not assumed			-.727	205.06	.469	-3.6324	4.99382	-13.53702	6.2721
ROE	Equal variances assumed	.316	.575	.765	240	.446	4.631417	6.055354	-7.358788	16.621623
	Equal variances not assumed			1.144	42.90	.265	4.6314	4.0496	-3.7794	13.0423

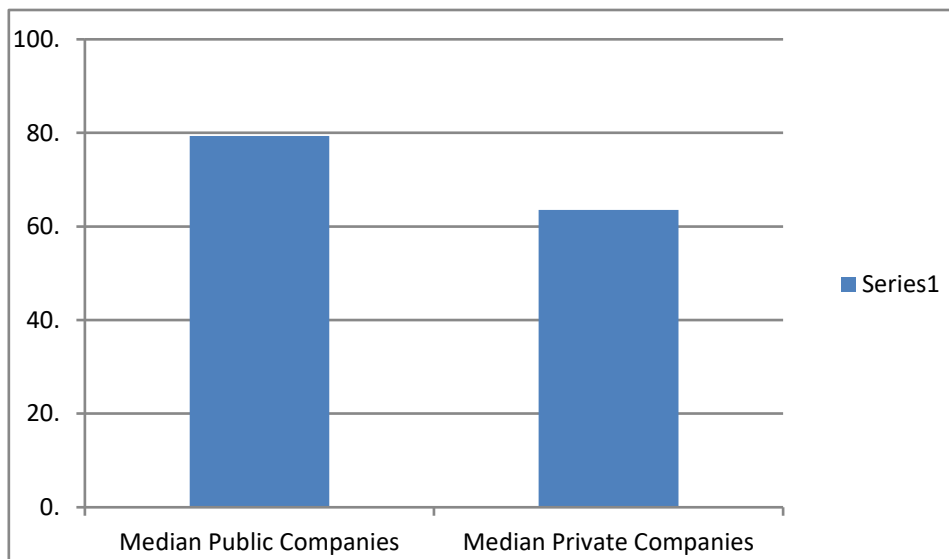


Chart 1 Median of Corporate Governance

Table 2 exhibits sample size, mean, standard deviation, and standard error for both the public sector and private sector firms. On an average the Return on Capital Employed Percentage (ROCP) of public sector firms is 1.744% more than private sector firms, similarly average of (PAT) of public sector firms is 3.23% more than private sector firms further the averages of (ROE) 0.464%, (TA) 2.868% and (IR) 16.795% are more than the private sector firms. However the odds between the means is ponderable amongst PAT, ROCE, TA, ROE and IR.

The procedure produces two tests of the difference between the two groups (Public sector companies and private sector companies). The Levene statistic tests testifies the assumption that the variances of the two groups are equally same kind.

Table 3 gesticulates the F statistic's significance value is 0.834 for ROCEP%, 0.022 for PAT, 0.363 for ROA ,0.575 for ROE, 0.005 for TA, 0.667 for financial performance category (FCP), 0.439 for LEV, 0.425 for COR and 0.319 for IR. Any value bigger than 0.10 reveals that the equal variances can be conjectured which is evident in the case of ROCEP, ROE, ROA, FCP, LEV, COR, IR groups but same cannot be assumed in the context of PAT and TA.

The t column shows described t statistic for every sample in the form of a ratio I.e. difference among sample means / standard error of the difference. In the Table df column shows degrees of freedom which is used in the independent samples t test. It is equal to the total number of cases in both samples minus 2. Another column in table with heading Sig. (2-tailed) reveals a probability from the t distribution with 240 degrees of freedom with the notion of equal variances. The value shown is the probability of getting an absolute value \geq to the obtained t statistic, provided the disparity among the sample means is absolutely random. The Mean Difference is calculated as the sample mean for group 2 (Private sector company) minus the sample mean for group 1 (Public sector company). The 95% Confidence Interval of the Difference provides an estimation of the range within which the actual mean difference lies in the 95% of all probable random samples of 242 companies under investigation. It is observed that the significance value of the test is lower than the standard 0.05 for the PAT and TA which further strengthens the point that the average difference of 3.23% of PAT between two groups and 2.868% among TA has some strong reasons. The t statistic stands rock solid grounds for a difference in PAT and TA between public companies and private companies. The confidence interval promulgates that in tautologized samplings the difference is not likely to be lower than 1407.87 (PAT) and 14202.99 (TA). In such situation the companies will attempt to keep back these returns and this gives us rational grounds for rejecting the null hypothesis. As per the observed median in the chart no 1 the median of corporate governance score for private sectors firms is 63.55 and for public sector firms' median is 79.35. It can be clearly stated that the corporate governance practices of public sector firms are better than the private sector firms in India.

5. CONCLUSION

On the basis of the results of the statistical analysis it is found that the corporate governance practices of private sector and the public sector companies are not the same. It is further observed that the corporate governance practices of public sector firms are better as compare to the private sector firms in India. Therefore it can be concluded that in India the public sector firms have much better adherence to the governance laws and their corporate governance policies and practices are far better when it comes to practical implementation on the ground level.

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Corporate Social Responsibility Reporting in Locally Owned Hotel Chains in Singapore

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Keywords:

CSR, reporting, websites, annual reports, hotels, Singapore.

Abstract.

This exploratory study looked at the Corporate Social Responsibility (CSR) programmes of 10 locally owned and operated Singapore hotel chains. By using a Content Analysis methodology, the 10 hotel chains' CSR efforts were analysed vis-à-vis to their annual reports and websites. This gave clear indication of whether the hotel chains were complying with the promises and standards that they had stated and promised. This report found that the CSR reported by the hotel chains were inclined toward Environmental efforts. This could probably be due to this Environmental practice being more tangible and visible. It was also noted that while the initiatives taken by the hotel chains were relatively numerous, many failed to report on whether these efforts amounted to an achievement. Moreover, CSR reporting on the hotel chains' websites were almost non-existent. Given this, recommendations have been included to assist Singapore hotel companies manage their reporting of CSR activities.

Kata Kunci:

CSR, pelaporan, website, laporan tahunan, hotel, Singapura.

Abstrak.

Studi eksplorasi ini meneliti program Corporate Social Responsibility (CSR) dari 10 jaringan hotel Singapura yang dimiliki dan dioperasikan secara lokal. Dengan menggunakan metodologi Analisis Konten, upaya penerapan CSR di 10 hotel jejaring dianalisis berdasarkan laporan tahunan dan website mereka. Studi ini menunjukkan indikasi yang jelas tentang apakah hotel jejaring memenuhi janji dan standar yang telah mereka nyatakan dan janjikan. Laporan ini menemukan bahwa CSR yang dilaporkan oleh hotel jejaring cenderung mengarah pada upaya perlindungan terhadap lingkungan. Ini mungkin karena praktik penjagaan lingkungan menjadi lebih jelas. Studi mendapati bahwa meskipun inisiatif yang diambil oleh hotel jejaring relatif banyak, banyak yang gagal melaporkan apakah upaya ini merupakan pencapaian. Selain itu, pelaporan CSR di situs web hotel jejaring hampir tidak ada. Mengingat hal ini, rekomendasi telah dimasukkan untuk membantu perusahaan perhotelan Singapura mengelola pelaporan kegiatan CSR mereka.

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1. Introduction

In our present day, there is greater awareness of Corporate Social Responsibilities (CSR) by the public, investors, customers and clients of private companies. People generally want companies that they deal with to have a greater sense of accountability to the needs of society, community and the environment. People are more inclined to work with companies that are more active and more in-tuned with their CSR efforts (Hsieh, 2012). Therefore, in order to appease the public, customers and stakeholders, many companies are driven to take a more proactive stance in their CSR efforts.

While there are many different understandings of what CSR means or is about (Holcomb, Upchurch & Okumus, 2007), it has been defined by Robbins and Coulter (2005) as the efforts that are taken by a company to go above and beyond what it is needed, i.e. in terms of its economic, financial and legal efforts to help society, community and the environment to its betterment. This can be in terms of donations, volunteerism, education and the reduction and/or recycling of resources. The World Business Council for Sustainable Development (World Business Council for Sustainable Development, 1999) has a similar understanding of CSR. It maintains that CSR is an organisation's commitment to long-term developments and improvements in the economy, environment, employees, families and communities around them. The European Commission's stand on CSR is also similar. It views CSR as the incorporation of the establishment's interest in the environment and its community in its daily routines and operations (Commission of the European Communities, 2001).

With people being more educated and socially aware, there is a greater demand from society to ensure that companies are accountable - socially and environmentally, for its policies and practices that can invariably damage the environment and its surrounding communities. As such, there is a great demand by society on the establishments to report them and to hold them accountable to their operational standards and promises (Holcomb *et al.*, 2007; Hsieh, 2012). In this way, the public and stakeholders are made aware of the companies' efforts and can influence the direction and decision-making of the companies. Discerning customers, investors and the government can also use the information shown to decide what to buy, where to invest and whom to support. This essentially impacts businesses and compels them to take on more and greater responsibilities to society, communities and the environment, instead of just earning a profit and being financially successful. While there are many differing views on the business such as Friedman (2007) who stated that the business establishments should only focus on the economic and legal aspects of the business and not be distracted by other non-business related issues, that are not directly related to its core offering. There is also a growing view that CSR needs to be incorporated into part of an organisation's business plan. Carroll (1979) mentioned that businesses are intrinsically linked to their communities and have a responsibility to see to the needs of them especially if the organisation is indirectly affecting them.

However, even though there is greater awareness of CSR for business establishments, there is scant research on CSR and CSR reporting in the hospitality and tourism industry, specifically in the hotels sector (Holcomb, Okumus & Bilgihan, 2010). While research in the western countries and societies are considered low, countries outside of Europe and North America especially in Asia is extremely limited (Hsieh, 2012; Tsai, Tsang & Cheng, 2012). This could probably be due to the high number of small, medium enterprises (SME) and local chains that need not comply to CSR regulations such as in Western countries. Moreover, according to Tsai, Tsang and Cheng (2012), there is limited research of hotel CSR especially in developing countries in Asia.

The study aims to address the research gap by look at the CSR reporting by the local hotel chains in Singapore. The study will explore how local hotel chains report their CSR activities in their annual reports and websites and investigate whether there is any dissonance. This study will

focus on locally owned and operated hotel chains in Singapore, ranging from the Meritus Group, Hotel Properties Limited to Far East Hospitality Trust, and others.

In order to ensure uniformity, these hotel chains need to fulfil the following requirements. Firstly, all the researched hotel chains must be in operation for a minimal of three years and have at least three hotels within their chain. Next, they are all owned by large and established public listed companies in Singapore. Due to the chain being linked to public listed companies allows them to draw from the funds of the parent company and from the financial market. Lastly, many of the hotel chains have been in operation for several years and have expanded their brand overseas and have gained international recognition.

This study on the hospitality industry in Singapore is importance and of great relevance because of the tourism and hospitality industry account for up to 4% of the Gross Domestic Product (GDP), making it one of the major contributors to the Singapore economy. It has contributed more than Singapore \$17.7 billion to the economy through direct sources (Singapore Tourism Board, 2019). Moreover, the hospitality and tourism industry, supported more than 169,500 jobs in Singapore and this is about 4.6% of the jobs in the city-state (Li, 2018).

While many hotel chains are starting to be more transparent in their disclosure of their practices, there is hardly any research made on CSR reporting by the local hotel chains in Singapore. As for nearby countries within the region of South East Asia, there has been some studies conducted in Malaysia. Wee and Ross-Smith (2018) conducted a research that investigated the CSR reporting Malaysian local hotels. There was another research that looked at sustainability in Malaysian hotels by Joseph, Lin, Nichol and Jussem (2014). Unlike this previous study, which was quantitative in nature, the current study is a qualitative in nature and is centred around the content analysis of the hotel chain's websites and annual reports on their CSR efforts.

This study has been organised along the following sections. The first part will introduce the objective of the study and the research gap. The subsequent parts will review the literature of CSR reporting in the hospitality and tourism industry. The research approach and research method will be highlighted in the Methodology section. The Discussion section will highlight the findings and issues raised and finally, the Concluding section will summarise the salient aspects and possible future research for this study.

2. Literature review

Hotels are known to be direct contributors to the economy. They help to increase the GDP of countries and indirectly drive tourism to specific regions within a country. Other benefits to the economy would be that of job creation, skills and knowledge creation. However, it is also known that hotels are a great consumer of resources and is directly linked to many forms of wastages, including food, water and electricity. Some of these wastes include linen, amenities, food, energy, sanitation chemicals and others (Kasim, 2007; de Grosbois, 2012). With an increase in the number of hospitality properties, higher wastages are postulated and will have a greater effect on the social and environmental level.

In terms of CSR, there is a greater awareness in an organisation's contribution to social, community and environmental causes. According to Font *et al.* (2012) and Hsieh (2012), there is a growing interest among stakeholders in the CSR affairs of their invested companies. Conscientious customers, stakeholders, partners and suppliers desire more information from the companies that they deal with so that they can align their business values with that of the organisation. While CSR reporting is optional in many countries, many organisations report CSR activities to obtain public approval and to generate publicity. Certain countries in Asia, such as Singapore and Malaysia have put in place CSR reporting as a requirement for listed companies (Abaeian, Yeoh & Khong, 2014).

In the hotel industry, many of the established brands are keen to report CSR activities as part of a public relations effort and for transparency reasons. However, a study by Holcomb *et al.* (2007) on the top ten hotels in the world as listed in the 'Hotels magazine' revealed mixed responses. Some hotels openly disclosed CSR efforts and had CSR accountable personnel in place to oversee their activities. Other hotels were less forthcoming in revealing their CSR efforts. With the study on the top 150 global hotels, de Grosbois (2012) found that most hospitality companies reported a commitment to support CSR activities and efforts, however, many did not reveal the exact activities, and execution efforts in these plans. Using the study from de Grosbois (2012) and with further examination, Font *et al.* (2012) applied the similar methodology to ten international hotel chains. They examined the CSR disclosure – performance gap of these hotels and found significant gaps between the variables. Font *et al.* (2012) noted that there was much disparity between what was committed and what was actually delivered by the hotels. Other studies have also found similar variations in actuality and reporting. Clarkson, Li, Richardson and Vasvari (2011) conducted a study on hotels in Australia and found that there were also considerable discrepancies between disclosure and the actual performance in terms of CSR reporting.

This disparity between the actual result and the reported CSR is also prevalent in larger hotel companies (Font *et al.*, 2012) to the point where it has now been noted by a particular vernacular, i.e. 'greenwashing'. This term of 'greenwashing' is generally referred to companies who only highlight the positive action and effects of their sustainable and eco-efforts, while hiding the negative aspects of their doings (Lyon & Maxwell, 2011). The companies only report positive aspects of their CSR, so that they can garner favourable public relations and put seen in a 'good light' (Holcomb, 2007).

In terms of hotel CSR reporting, there has been a shift of CSR from community and employee action to the environment. A study by Holcomb *et al.* (2007) mentioned that hotels generally favoured CSR on community and employees in the early 21st century. About 80% of all hotels which had CSR actions plan focused on community and 60% had programmes to help their employees. In recent years, there has been a greater emphasis on environmental CSR (Font *et al.*, 2012; de Grosbois, 2012; Cherapanukon & Focken, 2014; Hsieh, 2012). This can be attributed to a greater awareness on environmental trends and issues and green practices.

In terms of benefits, CSR has ensued many benefits for hospitality companies. The most compelling of the benefits would that be of cost-savings. Such savings are usually attributed to savings in the areas of utilities management, i.e. water, energy and heating (Levy & Park, 2011; Sprinkle & Maines, 2010). Another area that hospitality companies looked at was in the areas of employees and their guest. All these CSR efforts ultimately led to improving the public relations image of the hospitality company and greater guest satisfaction (Martinez, Perez & Del Bosque, 2014; Martinez & Del Bosque, 2013).

CSR activities also affects employees in terms of their loyalty (Brammer, Millington & Raton, 2007), their retention and affinity to join an organisation (Sprinkle & Maines, 2010) and their motivation to work (Kim & Scullion, 2013). These CSR activities has also been shown to increase investor relations (Petersen & Vredenburg, 2009) and competitive advantage (Kramer & Porter, 2006). On a whole, CSR helps to increase the positive well-being, image and financial success of an organisation (Sinha, Dev & Salas, 2002).

There are many ways by which hospitality companies convey their CSR efforts. There are traditional and technological means. Traditional methods of highlighting CSR activities would be through annual reports, press releases, newsletters, and other forms of print media. With internet being used more frequently and a choice medium of conveying information, more companies are keen to use this technological platform as a channel. The use of the internet is also seen as a CSR effort with the minimal use of resources. Hsieh (2012) and Jose and Lee (2007) highlights that the internet allows quick dissemination of information to their employees, customers and stakeholders in a cost-effective manner.

From a technological perspective, the use of websites has been the most popular means by which hospitality companies share CSR activities, efforts and measurements. Most hospitality companies imbed their CSR information as part of their corporate websites to give the public a holistic understanding of the mission of the company and their direct and indirect goals. A study was undertaken by Basil and Erlandson (2008) on Canadian corporations' website on their CSR efforts. They found that 67% of these companies had some form of CSR reporting in 2006, compared to 2004, where only 27% reported their CSR activities online. Another study by Gomez and Chalmeta (2011) which examined 50 corporate websites from the USA, revealed that 80% of these organisations reported their CSR efforts on their webpages.

In Singapore, there has been much interest in the CSR reporting and activities within the hospitality trade. Singapore developed the 'ASEAN Green Hotel Awards' which was initiated by ASEAN member countries (Chung & Parker, 2010), based on assessing environmental and energy conservation methods taken. However, despite the interest in CSR in hospitality companies in Singapore, the Brand Company (2012) in their study on CSR reporting in luxury chains in Singapore only listed one Singapore company in their top 10 Asian international hotel companies. While this report only reflects international luxury chains in Singapore, this lack of CSR reporting might be reflective of other categories of hotels in the city-state.

3. Methodology

This study looked at the CSR reporting of Singapore hotel chains. The objective is to investigate the content and nature of CSR reporting by local hotel companies. This study uses content analysis to identify and describe the patterns and congruency emerging from the data samples. The use of content analysis has been used as a research method as it is advantageous in gathering and analysing text-based content (Neuman, 2007).

There have been previous studies which used this methodology of content analysis to measure CSR reporting in hospitality organisations, i.e. Holcomb *et al.* (2007) study on CSR reporting on 10 international hotel chains; Font *et al.* (2012) study on CSR disclosure and performance gap; and Hsieh (2012) looked at sustainable practices and policies of over 50 hotel chains in Europe, the USA and in Asia. These studies have showed that the Content Analysis methodology is reliable and valid for this form of analysis.

Using content analysis, a set of sustainable related concepts must be identified. These concepts should have in turned been identified and have been used in the earlier literature reviews. In past studies, Levy and Park (2011), Holcomb *et al.* (2007) and de Grosbosis (2012) identified 5 categories of CSR activities that hotels actively participated in. These included Community, Environment, workplace (Employee Welfare), Marketplace and Mission. However, for this study, only 4 of the 5 activities will be reviewed, namely Community Affairs, Environmental Concerns, Employee Welfare and Marketplace Interest.

The data that will be examined is determined from the hotel and corporate websites, annual financial statements and annual report from the 10 Singapore owned and operated hotel chains. Only 2017 and 2018 financial and annual reports were examined. Data was taken from the websites in the month of November 2019. From the data set, the commitments, initiatives, plans and achievements of the 4 CSR categories of each hotel chain were noted, recorded and tallied.

It should be noted that the hotel chains sampled were all part of a larger parent companies. Table 1 displays the names of these companies and their parent establishments. Table 1 also list the number of hotels under each respective chain. The number of hotels is shown as it is important to depict the size of the company due to the relevance of this study. Hsieh (2012) has noted that

larger companies in terms of size and capital are more likely to acknowledge the benefits of CSR activities and are more likely to report them.

Another reason for choosing larger, established hospitality companies gives accessibility to obtaining data from their annual reports and from their corporate websites. While most companies are not obligated to disclose their corporate dealings of a financial year, other than for listed companies, many companies openly list their corporate finances to ensure transparency and accountability to their stakeholders. These reports are generally a credible source of data and false reporting can be noted as a criminal offence. Many companies also derive these data after they have been audited and accounted for, so that their account reports are a true and fair representation of their companies' business and financial well-being.

Therefore, this focus of this study is to examine how the local hotel chains in Singapore report their CSR activities. This study will use the content analysis to analyse the websites and annual reports of the Singapore hotel companies, specifically regarding the category of the CSR reporting. The result of this study will be analysed and presented in accordance to the categories which has been mentioned earlier, i.e. Community Affairs, Environmental Concerns, Employee Welfare and Marketplace Interest.

Table 1. List of sampled Singapore Hotel Companies

Hotel Name	Listed Parent Company	Location of Headquarters	Number of Properties
Meritus Hotels and Resorts	Overseas Union Enterprise	Singapore	3
Frasers Properties	Frasers Hospitality Trust	Singapore	71
Banyan Tree	Banyan Tree Holdings	Singapore	39
Far East Hospitality	Far East Hospitality Trust	Singapore	51
Concorde Hotels	Hotel Properties Limited	Singapore	4
Park Avenues Hotel	United Engineers	Singapore	4
Fragrance	Fragrance Group	Singapore	8
Amara Hotels	Amara Holdings	Singapore	5
Parkroyal-Pan Pacific Hotels	UOL Group Limited	Singapore	29
Millennium and Cophthorne	City Developments Limited	London, United Kingdom	129

4. Results

The results of the analysis of commitments, initiatives and achievement on the four categories of Community Affairs, Environmental Concerns, Employee Welfare and Marketplace Interest are depicted on Appendix A. The results are from the analysis of samples hotel companies' websites, annual financial and/or sustainability reports.

All the hotels listed provided a fair amount of information on CSR. Despite the information obtained, each company depicted CSR differently. Most of the companies had their CSR information on their annual report downloaded from their corporate website or on their parent companies' webpage. Some companies reflected these CSR activities on both former and latter webpages, although some were listed differently, and cross referencing was necessary.

Table 2. Analysis of CSR reporting in annual reports and websites

CSR Activities	Commitments	Initiatives	Achievements
Environmental Concerns			
Water Savings	5	5	5
Energy Management	5	5	5
Waste Recycling	5	5	3
Green Products	4	4	4
Nature Conservation	5	5	5
Employee Welfare			
Health & Safety	7	7	4
Fair & Equitable Wages	4	4	0
Employee Assistance Programme	2	2	1
Opportunities for Training & Development	7	7	4
Diversity & Equal Opportunity	7	7	3
Work Life Balance	2	2	2
Community Affairs			
Scholarship & Grants	1	1	0
Blood Donation	1	0	0
Community Giving	6	6	1
Gifts to Disadvantaged Groups	5	5	3
Marketplace Interest			
Quality Products	3	3	1
Supplier Diversity	3	3	2
Ethical Behaviour	4	4	0
Fair Trade & Negotiation	3	3	0

Most of the CSR efforts and activities were listed on the hotel's sales and marketing / corporate communications webpages. These webpages often depict the properties and establishments under their purview. The pages often showed images of their staff in the course of their work. The annual reports also focused in its entirety on the financial status and economic well-being of the hospitality parent companies. The CSR efforts were marginally depicted, both pictorially and informatively. Most of the CSR information was on the annual reports imbedded on the websites and not directly placed on their webpages per se.

As mentioned, the CSR information on the hotel websites were very scarce. Only 1 out of the 10 hotel studies had details of their CSR activities wholly embedded their corporate websites. Most of the other hotels had their CSR information listed on the parent holding companies' corporate websites and their annual report were imbedded on their parent companies' websites. In most of the CSR reported for all 10 companies, CSR activities were often not detailed and were ambiguous with no measurement of the activities. Moreover, the CSR activities described were generally related to the parent company, rather than the specific hotel chain or specific properties.

While most of the companies were legally bound to report their endeavours, financial or otherwise to the public, non-public listed companies were obligated to do so. Nonetheless, all 10 companies' information on CSR were obtained either through their (proprietary or parent companies) websites, or from print media. It was noted that the CSR information of each

company were often found towards the end of the qualitative content of the report (prior to the financial statements section). The CSR information were generally not detailed and vague.

On the same note, the CSR information on most parent companies are difficult to find. Financial and accounting information dominated the annual reports. Little information, i.e. less than 5% of the reports reflected the CSR activities, which amounted to 2 – 5 pages for each report. As mentioned earlier, the activities reported were general superficial and non-detailed and listed the actions taken without any form of accountability, measurements or standards (national or international). The results of the findings are highlighted in Appendix A. The below sections break the findings into their different categories, namely Community Affairs, Environmental Concerns, Employees Welfare, and Marketplace Interest.

4.1 Community Affairs

Many of the hotels are generally into community giving, especially to disadvantaged groups. These disadvantaged groups are represented by elderly groups to children welfare and illness societies. This form of CSR is generally one of the highest of CSR efforts with almost half of the hotel group sample helping out in this aspect. From the annual reports, many companies feature pictorial aspects with visits to elderly homes, disadvantaged groups, such as children with illness and disabilities. Donations and gift presentation have been clearly noted in the pictures. In terms of scholarship and grants, there is a clear indication that CSR to schools and educational institutions are generally low with only a single hotel group supporting this form of CSR. Unknowingly, blood donations are generally not a form of CSR practised for Singapore hotel groups.

4.2 Environmental Concerns

In terms of environmental CSRs, about half of the sampled hotels practised environmental CSR. The range of CSR covered all aspects of water saving, energy management, waste recycling, nature conservation and green products. Almost all the commitments and initiatives taken were back up with quantitative data of achievements in the annual reports. From the data collected, hotels take the most effort in their environmental CSR practices, probably it has the greatest tangible and visible effect on guest and on their operational cost.

4.3 Employee Welfare

Under Employee Welfare, the most practised CSR would be that of Health and Safety, Opportunities for Training and Development and Diversity and Equal Opportunity- each with similar rankings. The least practised and committed CSR efforts were that of employee assisted programmes and work-life balance. Unlike the Environment achievements which were consistently highlighted with measurable data, the results of employee-related CSR practices were not featured on the annual reports.

4.4 Marketplace Interest

Marketplace CSR practices were only highlighted in about a-third of the hotel group's annual report. The highest committed CSR effort was that of having ethical behaviour when dealing with their suppliers. The other efforts i.e. having quality products, having supplier diversity and fair trade and negotiation were equally matched in terms of being highlighted in the annual reports. It is noted that in terms of achievements, these CSR practices were not mentioned if they attained their desired target.

In terms of Achievements, the hotel chains that showed and met their targets, often related their target to some to some form of international standard and abided by proper certification systems. While there might be certain variations in the standards based on the different certifications such as ISO, SERQUAL, HACCP etc. for standards in assurances, all these provide corporate companies as a yardstick of measurement (Cherapanukorn & Focken, 2014). In terms of sustainability and CSR standards, many of the hotels adopt standards from Earth Check and Green Globe as a form of adherence and measurement. The hotel groups in the sample that used these international standards were Banyan Tree, Frasers Properties and Far East Hospitality.

5. Discussion

From the findings, it can be surmounted that CSR is an important aspect of the business of Singapore hotel chains. Many hotels chains perceive the implementation CSR as a means by which their guest see them as caring for the world. (Holcomb *et al.*, 2007; Chung & Parker, 2010; Levy & Park, 2011). It has also been noted that in terms of comparison of a study by Wee and Ross-Smith (2018), the hotels chains in Singapore had comparable CSR efforts and commitments to their Malaysian counterparts. This clearly reinforced that CSR is indeed important to the business well-being and public image of the Singapore hotels.

The factors within the Employee category which are rated the highest is that of Health and Safety, Opportunities for Training and Development and having a Diverse and Equal Opportunity. The reasons these factors having a higher rating could be because of the direct impact they have on the business returns for the hotel companies, as compared to other factors such as Employee Assistance programmes and having a balance-work life. Moreover, the factor of a Diverse and Equal opportunity is in-line with Singapore's national multi-racial and cosmopolitan population and equity policy where all people are given equal opportunities and racial mix in a hospitality company is highly encouraged for operational sustainability reasons.

The Environmental Concerns factors are seen to be rated highly in terms of commitments, initiatives and achievements. These factors are often of high emphasis for most hotels as it brings about positive economic gains to a hotel's bottom line (Font *et al.*, 2012). Moreover, these factors are often the most noted by hotel guest and they are easiest to quantify by means of measurement tools (Levy & Park, 2011). This can be noted from the researched annual reports where almost all commitments are validated and accounted for through actual achievements. Lastly, in terms of CSR for hotels, many guest equate CSR generally to the environmental action taken, rather than factors associated with the well-being of staff and to suppliers (Font *et al.*, 2012).

In terms Community Affairs, it is the lowest category of CSR. In terms of grants and scholarships, it has been noted that only a single commitment from the Singapore hotel chains. The reason for this non-committal could be due to a perceived biasness by the hotel chains towards specific educational institutions, resulting in low participation in this area. Moreover, most schools, while not considered as charity organisation or causes, within the Singapore fall under the purview of the Ministry of Education. These schools have already received funding through the Government and from social and racial associations such as the Chinese Developmental Assistance Council, the Singapore Indian Development Association and the Mendaki Association. However, in terms of community giving and gifts to the disadvantaged groups, the Singapore hotel chains are more inclined to provide assistance through their CSR endeavours. The reason for this could be due to the community and disadvantaged groups being registered as charity organisations and deemed for organisation donations. Likewise, CSR efforts linked to aiding disadvantaged group are often perceived to have greater mileage from a public relations perspective (Frankental, 2001).

As for Marketplace Interest, there is consistently low CSR activities in this category. The reason for this could be because at the Marketplace level, there is minimal publicity. There is generally greater public awareness when activities are carried out on a Business-to-Consumer than on a Business-to-Business level. Moreover, it is presumed that there is greater public relations mileage when CSR is conducted from an Environmental and Community level as compared to it being done on a marketplace level. In terms of Achievements, there is not many international industry yardstick or measurements for the Marketplace, as compared to Environment issues. Furthermore, activities such as Ethical Behaviour is arbitrary and subjective. Hence, the achievements quantified are generally low.

From the findings, it has been noted that despite the quantitative data obtained, the annual reports do not feature details of the CSR efforts, other than for several hotel chains, such as Banyan Tree, Frasers Hospitality Trust, Far East Hospitality Trust and Millennium and Copthorne. Many of the hotel chains are generally not very forthcoming in terms of the specifics of their activities, often giving generic and scant information. Many did not feature the implementations of the CSR programmes, initiative developed, and achievement made, resulting in difficulties in obtaining the relevant data. This is supported by studies conducted by de Grosbois (2012) and Font *et al.* (2012) that many hotel chains often do not detail their CSR efforts in terms of execution and performance. Singapore hotel were also similar to their Malaysian counterparts, where CSR effort mentioned in their annual reports were often more narrative rather than focused on objectives, targets and performances (Wee & Ross-Smith, 2018).

While the hotel chains in Singapore depict a fair amount of CSR practices within the companies, it should be noted that the CSR practices found in the annual reports of the hotel chains as well as the parent companies of these chains. An example of that would be City Development Limited (CDL). The CSR practices of the Millennium and Copthorne hotels, a subsidiary business unit under CDL, were obtained from CDL's annual reports. While diligent work has been put in to ensure that the CSR practices were specific to the hotel group, this could be the reason why the details of CSR were scant, i.e. being part of the entire holding company's annual report.

With a greater awareness of CSR and more initiatives taken by the global hotel chains, it would seem that more hotels would be keener to take on greater CSR activities. Moreover, with Singapore being a headquarters of many such global chains, it would have been presumed that local Singapore hotel chains would follow suit. However, the CSR efforts noted in the annual reports are generally similar to a study conducted on Malaysian hotels by Wee and Ross-Smith (2018). They concluded that the results (like this current study) is lacking in the expected CSR efforts.

The reasons for the lack of expected CSR efforts as reflected in the annual reports could stem from several reasons. Firstly, the costs attributed to CSR might be a substantial amount, impacting their overall operational cost. While hotels might see CSR as part of the business or as a cost, these costs can be managed and trimmed without an impact their profits. Moreover, for many hotel companies there is no definitive mandate from their owners, guest and stakeholders. To many hotel chains, CSR efforts are a 'want-to-have' rather than a 'need-to-have'. Another reason for the lack of interest in CSR activities is that of the lack of awareness of CSR practices and the benefits that they offer. According to Tsai *et al.* (2012), Hong Kong hotel staff were not aware of the benefits of CSR. This is further supported by Kasim (2009) who mentioned that small and medium sized hotels (SME hotels) in Malaysia were severely lacking in their awareness of CSR practice and the reciprocal benefits. The lack of understanding and awareness can often result in the lack of CSR initiatives and expedition (Scanlon, 1997).

While most of the chains provided some form of CSR efforts, it has been noted a single hotel chain failed to provide any information on their CSR efforts. This hotel group which did not

mention any CSR effort was that of Hotel Properties Ltd (HPL), which had several local and overseas properties including the Four Seasons Singapore, Concorde Hotel Singapore, Hilton Singapore and others. The possible reason for the lack of CSR could have stem from the fact that HPL represent an owner hotel company, rather than an operations management company. Hence the prerogative of the company is essentially to depict the profitability of the organisation and leave the operational aspects including CSR endeavour to the respective brands to showcase.

It has also been noted that this study has sort to obtain CSR practices from annual reports and from the online hotel chain proprietary websites. However, almost all information derived for this report were obtained from only the annual reports. The reason is due to the lack of CSR information and programmes on the hotel chains proprietary websites. Most hotel websites depicted their operational aspects of the hotels. Several of the hotels showed the financial successes of the hotel chain. Banyan Tree hotels was the only hotel chain in the study that cleared stated their CSR mission and programmes. Therefore, from this, we can see that CSR can be used to better inform the public of the hotel's pursuits and to better integrate holistic digital marketing.

From the study, it has been noted that most corporate information on the hotels can be found on the websites, other than their CSR efforts. This could be because CSR reporting on websites are still a relative phenomenon, and CSR does not help to contribute to the top line of finances, therefore by deeming it as unimportant by the hotel chains (Holcomb *et al.*, 2007). However, websites being used as a source of information and as a point of booking (Shin, Pang & Kim, 2015). Therefore, the Singapore hotel companies would need to leverage on their websites to a platform where the public can access more of their information. By doing so, they can use their websites to generate greater positivity and customer loyalty through CSR (Cyr, 2008). However, it should be noted that while CSR depicted in a non-professional manner on a poorly designed website with vague information might create customer distrust.

Vague and limited CSR information on hospitality corporate websites might not be desirable and might hurt the image of the organisation. It has been noted by Vassilikopoulou, Siomkos and Mylonakis (2005) that consumers are generally willing to support businesses that practise CSR and meet their expectations. On that note, they are also not hesitant to boycott businesses that are damaging the environment and the community. From the above, hotels should leverage on their internet corporate websites to feature more of their CSR practices and efforts. In current times, websites are often perceived by guest to be the first-stop hub for information. Therefore, with added attention on the hotel chains' commitment and implementation on CSR will not only create more awareness, brand loyalty and guest demand in terms of patronage.

6. Conclusion

The general theme of this study is on the CSR reporting by Singapore hotel chains in terms of their activities and efforts. For most of the hotels that were investigated, they generally focused on the commitments and implementations of their CSR efforts. However, in many of the annual reports, most of the companies did not digress into their achievement criteria and failed to mention if they met their targets. This limited reporting in CSR could be because the hotels do not use website holistically and strategically – aiming only at obtaining economic benefits for their companies (Schmidt, Cantalops, & Dos Santos, 2008). In this sense, the holistic development of hotels in Singapore seen to be relatively weak. Welford (2005) mentioned that there is a close link between CSR and economics. Hence this clearly reflects that the Singapore hotel chains are still 'economically' developing.

The limited reporting could possibly raise the issue of 'greenwashing', which means that CSR efforts and reporting are generally seen as the way of making a company look good in the eyes of the public. It has been noted by Hsieh (2012) and Holcomb *et al.* (2007) that many companies

look at CSR as a public relations tool to generate a positive image for the corporation or to recover from negative criticism. Although many a times, this helped in building the image of the corporation, it can cause companies to become blind-sighted to the goal and purpose of the CSR effort and in way trivialise the benefits of CSR. Therefore, non-profit organisations and ministerial boards in Singapore, such as the Singapore Environment Council, Zero Waste SG and Ministry of Environment respectively should continue to accredit and educate Singapore hotels about the benefits of the CSR movement, encourage better reporting and avoid 'greenwashing'.

On the matter of reporting, it has been noted that there is no requirement by the hotel chains to report their CSR efforts in their annual reports. Moreover, non-public listed companies are not obligated to publically feature their annual reports, yearly endeavours and CSR efforts. It was reported by Tsang (1998) that many hotels and food and beverage establishments only disclosed scattered information on the CSR efforts and hardly any 'bad news' were disclosed. This is because CSR reporting is not mandatory under the Singapore law and all information disclosed is on a volunteer basis. Moreover, it was mentioned by de Grosbois (2012) that most hospitality companies were generally hesitant to disclose their CSR effort and provide only sporadic information. The hotel chains on a whole did not disclose much on their corporate websites. Therefore, to promote more CSR reporting, the Singapore Environment council and other green movement groups could provide more guidelines to companies on website reporting. As mentioned earlier, there is no mandate for companies in Singapore to provide CSR activities openly, websites are the 'go-to place' for obtaining information on the companies. This is especially so for the millennial generation who are more computer savvy. The corporate websites are the public face of the company. Therefore, it would be advisable for the Singapore government to mandate corporate organisation to conform certain standards of CSR report to ensure consistency in reporting with the country.

In order to encourage more CSR efforts and reporting, more education, training and encourage is needed from both the management corporate headquarters, the government and from non-profit green organisations. Kasim (2009) has noted that there is a lack of knowledge and the importance of raising awareness and appreciation of the benefits of CSR especially in the SME hotels. The management corporate headquarters could incentivise CSR efforts implemented in their subsidiary hotels and even place CSR efforts as part of the hotels' key performance indicators. The companies can even work with the owners of the properties as part of their operating cost and revenues. The government, with the non-profit green organisations can organise workshops, lecturers and seminars for the local hotels on the benefits of a comprehensive CSR and CSR reporting regime in the annual reports and websites. It is only by having a transparent reporting of CSR system, coupled together with the commitments and targets achievement that transcend all levels of the hotel employee hierarchy, can a hotels monitor their CSR results and have a holistic appreciation of CSR practices and activities.

Finally, many studies on companies listed on the New York Stock Exchange indicates that the financial performance of companies that take sustainability and CSR importantly and proactively tend to surpass companies that don't (Kasim, 2009). On the similar note, these companies are equally well supported by investors. These findings go to show that at present times, CSR is of great importance in the corporate world. Companies who choose to ignore taking CSR seriously would no doubly face harsh consequences.

This study contributes to the overall literature on CSR and CSR reporting in the hospitality line. It gives a microcosm aspect of the said topic within the sphere of the Singapore hotel chain terms of their CSR actions taken and their reporting through the various mediums. This study also looks at the different CSR practised by the different hotel groups and which category is

deemed the most popular and the probable reasons why they are so. Finally, this study identifies companies which provide useful and informative CSR reporting. As for limitations, the study looks at only 10 Singapore based hotel groups through their websites and annual reports. While it might be conclusive to obtain the CSR efforts from these mediums, the results might be represented if interviews were conducted on the staff and management of the hotels. There could have been CSR efforts conducted that might have not be published on the researched mediums.

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Corporate Governance Practices, Transparency and Performance of Indian Companies

Jyotsna Ghildiyal Bijalwan and Pankaj Madan***

The purpose of this paper is to examine the impact of corporate governance on firm's financial performance in the Indian context. The study is based on the 121 companies listed on the Bombay Stock Exchange (BSE), India, for the period 2010-2011. It is based on a self-designed structured questionnaire. The study highlights the significance of transparency disclosure and good governance policies of the firm and the relative advantage thereof to the firm in the Indian context for the first time to the best of our knowledge. Distinct from previous empirical research, it develops its own index to measure the transparency and level of disclosure. Tamhane T2 post hoc test is also applied for the first time in the study related to corporate governance. The study finds a positive and significant relationship between the level of transparency and firm's financial performance. Similarly, corporate governance policies and practices of the firm are also found to be positively related to firm performance. The results also suggest that corporate governance policies and transparency and disclosure are positively and significantly correlated.

Introduction

Corporate governance can be viewed as a mechanism that ensures external investors receive proper returns on their investments. Effective corporate governance provides an assurance on the safety of the invested funds and the returns on investment (Shleifer and Vishny, 1997). The corporate governance framework should ensure that timely and accurate disclosure is made of all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company (OECD, 2004).

The study primarily focuses on investigating the relationship between corporate governance and the firm performance of 121 firms listed on Bombay Stock Exchange (BSE), India. The study is an attempt to find answers to two basic questions; Firstly, do firms with greater transparency and higher level of disclosure have better corporate governance? And do such firms perform well financially? Secondly, do the firms with better corporate governance policies and practices have good financial performance in the Indian context?

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Based on the previous studies and review of literature on corporate governance and firm performance, we have taken transparency, disclosure, shareholders' rights and firm's corporate governance policies and practices as the factors of corporate governance. Generally, most of the previous studies have utilized market-based performance measure, i.e., Tobin's Q or accounting-based measures wherein they have utilized Return on the Equity (ROE) or Return on Capital Employed (ROCE) or some studies have used both. We also use accounting-based measures wherein we use the financial ratios—ROCE and ROE. In addition to this, we also use utilized Profit After Tax (PAT) and Return on Assets (ROA) to strengthen the validity of our outcomes. The study is based on the 121 small cap, mid cap and large cap companies listed on the BSE, India, for the period 2010-2011.

Theoretical Framework and Hypotheses Development

Generally research on corporate governance and performance is based on the principal-agent theory in which principal or owners and agents or managers have opposing preferences regarding disclosure. Since Berle and Means (1932) first proposed the characteristics of the modern corporation, i.e., the ownership and control power separation, mostly corporate governance and performance is researched from internal control and supervisory mechanisms that constitute the specific forms of corporate governance. Therefore our study is also formulated on the grounds of the 'agency theory' of corporate governance, where the management or board acts as agent and owners, i.e., equity share holders, are principal. Some studies suggest a positive and significant relation between corporate governance and firm performance, whereas some researchers disagree on the point. There is no unanimous consent on the results of the studies (Patterson, 2000).

Transparency and disclosure, as significant components of corporate governance, are studied worldwide. Such studies are mainly from the developed countries like USA, Canada, and Russian and European countries. Developed countries have higher levels of adherence to the corporate governance norms as compared to the developing countries. Compared to the developed markets, the quality of accounting information in the emerging markets is lower (Ball *et al.*, 2003). Very few studies have focused on this issue in the Indian context. Therefore, we decided to focus on the corporate governance practices of the Indian firms. Ownership structure of the Indian firms is characterized with family ownership, block holdings and business groups. Poor law enforcement, corruption, weak legislative and regulatory framework and poor implementation of the property rights are the main causes for the concentrated ownership in India, which further results in agency problems. Weak legal protection of property rights in emerging markets discourages informed arbitrageurs to capitalize on firm-specific information (Morck *et al.*, 2000). Agency problems and information asymmetries between owners and managers can be overcome with the help of enhanced corporate transparency (Jensen and Meckling, 1976). Some other studies also point out that the firms' voluntary disclosures are associated with improved stock liquidity (e.g., Healy *et al.*, 1999; and Leuz and Verrecchia, 2000).

In the absence of transparency measurement index in India, we develop a self-generated index for measuring the level of transparency, disclosure and level of adherence related to

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corporate governance norms, in the light of Clause 49 of Indian Companies Act. Our ranking provides a first time, objective assessment of the level of transparency, disclosure and corporate governance policy of the firms listed on the BSE and categorizes them into very less transparent, adequately transparent, very transparent and totally transparent. Similarly in the case of corporate governance policies and practices, the firms are categorized into substandard CG practices, standard CG practices, good CG practices, and outstanding CG practices. We focus on the level of transparency and disclosure that a firm has in its accounting and financial matters related to shareholders and other investors. We further emphasize on investigating the corporate governance policies of the firm and impact thereof on the financial performance of the firm.

The present study extends previous research efforts and analyzes the role of transparency, level of disclosure and governance policies of the firms in the context of Indian firms for the first time.

Transparency, Disclosure, Shareholders' Rights and Corporate Performance

Increased pace of entrepreneurship and globalization has increased the value of reliable information in capital markets (Healy and Palepu, 2001). Verrecchia (2001) provides a comprehensive review of theoretical research on disclosure-related issues over the last two decades. Many surveys and empirical studies are evident to the fact that making the disclosures and adhering to all the mandatory requirements in line with the legislative and regulatory guidelines and voluntary disclosures help in reducing the agency cost or contracting cost. It helps in evaluating the actual market value of the firm's securities, which further helps in reducing the cost of the capital (Botosan, 1997). It further provides additional information over the mandatory reporting, which results in lowering the transaction costs of the investors (King *et al.*, 1990), and last but not the least, it also helps in reducing litigation costs. (Skinner, 1997).

Botosan (1997) states that "Although the annual report is only one means of corporate reporting, it should serve as a good proxy for the level of voluntary disclosure provided by a firm across all disclosure avenues. This is because annual report disclosure levels are positively correlated with the amount of disclosure provided via other media (Lang and Lundholm, 1993). The annual report is the focus of my disclosure index because the annual report is generally considered to be one of the most important sources of corporate information." The annual report to shareholders is at the top of every analyst's list because it is the major reporting document and every other financial report is in some respect subsidiary or supplementary to it (Knutson, 1990).

While the importance of transparency and disclosure is recognized in theory, Botosan (1997) argues that the empirical link between asset pricing and disclosure is weak, fueling an ongoing debate among practitioners regarding the benefits of enhanced disclosure. Healy and Palepu (2001) identify the difficulty in measuring the extent of voluntary disclosure and the lack of reliability of the few measures developed by academics as major limitations in the empirical analysis of the impact of transparency and disclosure on asset prices and hence on capital markets.

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Shelton and General (1999) in his study mentions that the governance and disclosures both facilitate better allocation of resources within the firms and between the firms. By ensuring the rational allocation of the resources, it makes both the firm as well as market efficient. He suggests that disclosures play a critical role in categorizing the firms as per their risk profiles. Levine *et al.* (2000) in their study conclude that the transparency in the financial disclosure led to the financial market efficiency which further contributes to better economic performance of the firm. Bushman and Smith (2001) also acknowledge the significance of the financial accounting information and propound that such data can be used for improving the efficiency of the corporate governance.

Further Ball (2001) also advocates that timely publication of the economic losses in the financial statements increases the effectiveness of the corporate governance. Gupta (2006), in his study on 30 companies listed on the BSE finds that the reporting practices of the company under observation vary to a large extent. He further mentions that some of the companies were not adhering to the mandatory requirements of Clause 49. According to Cohen *et al.* (2004), ensuring the quality of the financial reporting process is the main function of corporate governance.

A study by Hassan *et al.* (2008) aims at investigating the relationship between corporate governance, transparency and firm performance. The study focuses on examining the effect of good corporate governance practices on the corporate transparency and performance of the 142 companies listed on the Malaysian Stock Exchange. For the empirical analysis, Tobin's Q represents the dependent variable, while seven corporate governance characteristics, viz., board independence, board leadership or role duality, quality of directors, insider ownership, foreign ownership, debt financing and audit quality, are the independent variables. The result of the study reveals that corporate governance components have strong predicting power on the company's performance. The relationship between audit quality and performance of the firm was found to be negative. The findings further suggest that firm performance is insignificant and not related to the components of transparency, viz., level of disclosure and timely reporting. It further propounds that disclosure and timely reporting are not significant contributing factors in the relationship between corporate governance and firm's market performance. Despite considerable regulatory effort and theoretical and empirical research on fair disclosure, it is still a debatable question of: to disclose or not to disclose. For instance, the effect of disclosure on the cost of capital can be observed in two ways. Firstly, the greater the disclosure, the lower will be the cost of equity capital. Secondly, increased disclosure will enhance the share price volatility, which will further result in higher risk and cost of capital (Botosan, 1997).

After reviewing the subject from both empirical and theoretical perspectives extensively, we form the argument: Does the level of transparency and disclosure affect the corporate performance in the context of Indian firms? And in order to find the answer to this question, we frame the first hypothesis:

H₀₁: There is no significant impact of transparency and shareholders' rights on the firm's performance.

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Corporate Governance Policies, Practices and Corporate Performance

Many researchers have been investigating the relationship between corporate governance and firm performance by using the empirical data. There is no unanimous consent on the results of the studies. Some of the studies show a positive and significant relationship between corporate governance and firm performance, some reveal a negative and insignificant relationship, and some even show a mixed result for the link between corporate governance and firm performance (Carlin and Mayer, 2000).

Another study Kim and Lee (2003) showed that corporate governance had a strong impact on firm performance during the 1997-98 East Asian Financial Crisis. It further revealed that independent directors have traditionally been hailed as a way of improving and monitoring the management.

An empirical study on the Indian firms by Dwivedi and Jain (2005), with a sample size of 340 large listed Indian firms for the period of 1997-2001, found a positive and significant relationship between corporate governance and performance of Indian firms, using a simultaneous equation regression model, wherein they used Tobin's Q as the measure of firm performance, and board size and ownership as the components of corporate governance.

Gupta (2006) in his study traced the difference in the corporate governance practices of three automobile companies in India, namely, Hero Honda Ltd., Maruti Udyog Ltd., and Escorts Ltd. The companies were randomly selected on the basis of their size and goodwill in the market. The study focused on the compliance of the selected sample companies' corporate governance practices with Clause 49. The results revealed that Hero Honda with 90%, Maruti with 80% and Escorts with 70% were in line with the corporate governance norms as per Clause 49.

A study by Lee (2008) on Korean firms examines the relationship between corporate governance and firm's financial performance. In this study, the effect on Korean firms is empirically tested. The study is based on the agency theory of corporate governance. Ownership concentration and ownership identity are taken as two components of corporate governance, and Net Income to Total Assets (NIA) ratio and Ordinary Income to Total Assets (OIA) ratio are taken as performance variables. The study with the multivariable regression analysis reveals the significant linear lump-shaped relationship between ownership concentration and firm performance and insignificant relationship between ownership identity and firm performance. In a nutshell, the study shows a positive and significant relationship between corporate governance and firm's financial performance.

In another study based on Chinese firms, Zhen *et al.* (2010) tried to find the relationship between corporate governance and corporate performance of 106 high-tech small and medium-size enterprises in China. The study, through empirical analysis, finds that the relationship between ownership concentration and corporate performance follows a positive correlation. It further states that the relationship between shareholding ratio of the 2nd to 10th shareholders, number of board and shareholders meetings and executive remuneration shows a positive and significant relationship with corporate performance.

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There are some other studies which deny any relationship between corporate governance and firm performance, and many other studies show weak or insignificant relationship between corporate governance and firm's performance. A study by Daily and Dalton (1992) shows no relationship between corporate governance and firm's performance. Further, Bhagat and Black (2002) in their study found no correlation between board independence and long-term firm performance. Similarly, another study by Bauer *et al.* (2004) on European firms finds a negative relationship between corporate governance standards and firm's performance. For better learning and clear understanding, a brief classification of the previous research outcomes along with their authors is mentioned in Table 1.

Table 1: Brief Classification of Related Literature			
S. No.	Factors	Condition	Previous Studies/Authors
1.	Transparency, Shareholders' Rights and Firm Performance	a. Transparency and shareholders' rights have positive and significant effect on the firm's performance.	Shelton and General (1999); Levine <i>et al.</i> (2000); Bushman and Smith (2001); Ball (2001); Gupta <i>et al.</i> (2003); Aksu and Kosedag (2006); Hassan <i>et al.</i> (2008); Benjamin and Michael (2012); and Sabri <i>et al.</i> (2013).
		b. Transparency and shareholders' rights have no effect on the firm's performance.	Kevin <i>et al.</i> (2009); and Viral <i>et al.</i> (2012).
2.	Corporate governance codes and initiatives and the firm's performance	a. Corporate governance codes and initiatives have positive and significant effect on the firm's performance.	Kim and Lee (2003); Dwivedi and Jain (2005); Lee (2008); Zhen <i>et al.</i> (2010); Niels and Vasiliki (2011); and Wendy <i>et al.</i> (2012)
		b. Corporate governance codes and initiatives have no effect on the firm's performance.	Daily and Dalton (1992); Bhagat and Black (2002); and Bauer <i>et al.</i> (2004).

The previous studies on the topic give us ground for arguing that firms with better corporate governance policies and practices have good corporate performance. In order to examine our assumption we further hypothesize that:

H_{02} : *There is no significant impact of corporate governance policies and practices on the firm's performance.*

Methodology

Data

The sample is selected on basis of stratified random sampling, which involves two stages. At the first stage, companies listed on the stock exchange are identified on the basis of their capital base as small cap, mid cap, and large cap companies.

The second phase involves qualified corporate governance report and financial reports by way of modification, qualification or adverse opinion. Initially, the sample size was 200

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companies listed on the BSE; due to unavailability of appropriate data, the sample size shrunk to 121 companies, out of which 40 companies are from large cap, 40 are from mid cap and 41 companies are from the small cap category. The companies belong to different industrial sectors such as power, fuel, cement sugar, textile, telecommunication, petroleum, automobile, entertainment, mining, iron, steel, pharmaceutical, Fast Moving Consumer Goods (FMCG), etc., for the period 2010-2011. The data was drawn from Prowess database of Centre for Monitoring Indian Economy (CMIE).

Variable Selection

For the study purpose, corporate governance is considered as the independent variable which comprises factors of corporate governance such as transparency, disclosure, shareholders' rights and corporate governance policies and practices of the firm, whereas firm's performance is considered as the dependent variable. Other factors affecting the firm's performance are taken as control variables.

Independent Variables

Based on the various theoretical and empirical studies, a few independent variables were selected, the definition and description of which are given in Table 2. Description of the control variables is given in Table 3.

S. No.	Variables	Sub-Components	Explanation to Variables	Symbol
1.	Transparency, disclosure and shareholders' rights	a. Transparency and disclosure. b. Shareholders' rights.	a. Transparency and disclosure norms followed by the company. b. Rights to shareholders.	<i>TSR</i>
2.	Corporate governance codes and initiatives	Corporate governance codes and initiatives.	Corporate governance codes and initiatives taken by the company.	<i>CGP</i>

S. No.	Control Variables	Description	Symbol
1.	Size of the firm	Total assets	<i>TA</i>
2.	Leverage	Debt/Equity	<i>LEV</i>
3.	Liquidity	Current assets/Current Liabilities	<i>COR</i>

Dependent Variables

Review of the literature on corporate governance and firm performance suggests that firm performance can be measured in two ways; firstly, market-based performance, and secondly, accounting-based performance. Both the performance measures differ in two main aspects; first is time-based, in which the market value is forward looking and accounting value is backward looking, whereas market-based measure is what the management will accomplish, while accounting-based measure is an estimate of what management has accomplished (Demsetz and

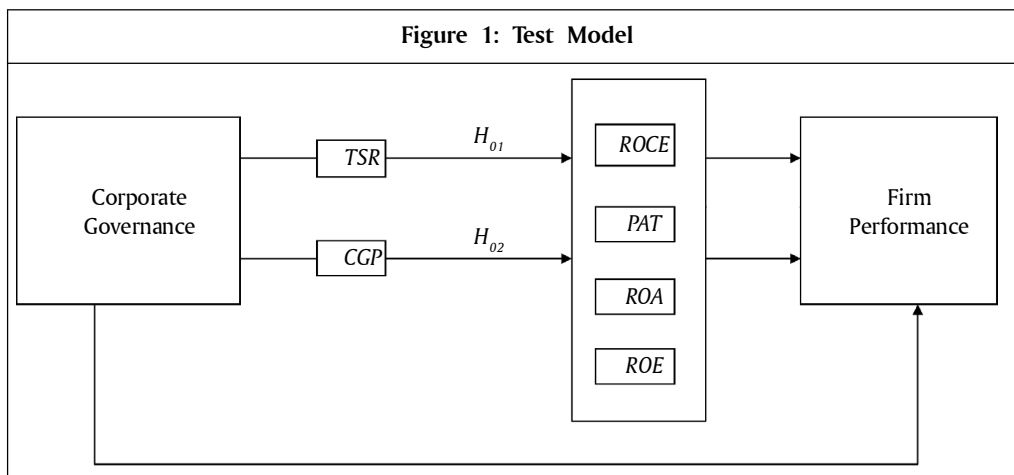
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Villalonga, 2001). Many researchers have utilized Tobin's Q as a market-based performance measure for firm performance.

Though the accounting value is constrained by the standards set by the accountant, accounting policies opted for by his firm and the accounting norms and standards prevailing in the country, still the accounting rates can be better as they are free from investor bias and speculations to a large extent. Secondly, the capital market in India is not as developed as that of Western and European countries and debt is not openly traded in the Indian markets, therefore we prefer the accounting-based method to measure the firm performance. Various financial ratios such as ROCE, ROE, Profit After Tax (PAT), and ROA are utilized in the study.

Model Construction

The model utilized to test the relationship between corporate governance and firm performance of small, mid and large cap firms in India is presented in Figure 1.



Measurement of Corporate Governance Scores (CGS)

The study is based on a structured questionnaire (see Appendix). The CGS reflect the scores obtained by an individual company on a particular corporate governance factor or component. The corporate scores are based on the information provided by the firms in their annual reports. The annual corporate governance reports were carefully and extensively reviewed for the study. The CGS was developed on the basis of Standards & Poor's (S&P) Governance, Management, Accountability Metrics and Analysis (GAMMA). GAMMA scores attempt to assess the effectiveness of individual company's governance practices as a system of interaction among a company's management, board, shareholders and other stakeholders aimed at building company value and ensuring fair distribution of its earnings.

Transparency, Disclosure, Shareholders' Rights and Firm Performance

Transparency and shareholders' rights in the study refer to the level of transparency and the degree of disclosure in the financial reports and the accounting practices showed by the firms. It also reveals the rights available to the shareholders of the firm. Further, in order to study

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the transparency and shareholders' rights of the different firms in India, it was divided into four categories: Totally transparent firms, firms with high transparency, firms with adequate transparency and firms with very less transparency.

- a. **Totally transparent firms:** The firms which show the highest level of transparency and disclosure and in which the shareholders enjoy the maximum rights were included in this category. The firms scoring between 95 to 100 points in the respective segment of the questionnaire were included in this category.
- b. **Firms with high transparency:** The firms which show good level of transparency and where the shareholders enjoy their rights a little more than mandatory provisions given in Clause 49 were covered in this category. The firms scoring between 91 to 94 points in the given segment of the questionnaire were included in this category.
- c. **Firms with adequate transparency:** This category includes the firms which just fulfill the mandatory requirements related to transparency, disclosure and shareholders' rights. The firms scoring between 70 to 90 points in the respective segment of the questionnaire were included in this category.
- d. **Firms with very less transparency:** The firms which fail to fulfill the mandatory provisions related to transparency, disclosure and shareholders' rights were included in this category. Further the firms scoring up to 69 points in the respective segment of the questionnaire were included in this category. Transparency, disclosure and shareholders' rights scores for categorization are mentioned in Table 4.

Category	Scores
Totally transparent firms	95-100
Firms with high transparency	91-94
Firms with adequate transparency	70-90
Firms with very less transparency	0-69

Corporate Governance Policies and Practices

Corporate governance policies and practices here refer to the corporate governance practices followed and initiatives taken by the firms. For the study purpose based on their scores in the questionnaire, the corporate governance policies and practices of the firms were classified into four categories, viz., outstanding, good, standard and substandard practices.

- a. **Outstanding corporate governance practices:** The firms which fulfill maximum of the provisions given under Clause 49 and Voluntary Regulation Act, 2009 were included in the best practicing firm's category. This category includes the firms which score between 95 to 100 points in the respective segment of the questionnaire.
- b. **Good corporate governance practices:** In this category the firms which fulfill a little more than mandatory provisions given in Clause 49 were covered. The firms scoring

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between 80 to 94 points in the given segment of the questionnaire were included in this category.

- c. Standard corporate governance practices: This category includes the firms which follow just mandatory requirements or provisions as stipulated by the legal and regulatory framework in India. The firms scoring between 71 to 79 points in the respective segment of the questionnaire were included in this category.
- d. Substandard corporate governance practices: The firms which fail to follow their minimum obligations were covered under this category. They are the firms which do not follow even the mandatory requirements as mentioned in the legal regulatory framework in India. The firms scoring 70 or below were included in this category. Corporate governance policies and practices scores for categorization are mentioned in Table 5.

Category	Scores
Outstanding corporate governance practices	95-100
Good corporate governance practices	80-94
Standard corporate governance practices	71-79
Substandard corporate governance practices	0-70

Results

Transparency and Shareholders' Rights

To find out the effect of transparency and shareholders' rights on the firm's financial performance hypothesis 1 was developed. For the study purpose, the transparency and shareholders' rights was further classified into (a) firms with very less transparency; (b) firms with adequate transparency; (c) firms with high transparency; and (d) and totally transparent firms. In order to check the degree of association and nature of relationship between the independent variable, transparency and shareholders' rights (TSR) and dependent variable, firm's performance and to test the significance level of the hypothesis 1, some statistical tools and techniques were applied; results and interpretation thereof are presented as under.

Table 6 displays the descriptive statistics for each group and for the entire dataset, with *N* indicating the size of each group. The standard deviation and standard error statistics confirm that as ROCE Percentage, PAT, ROA, and ROE increase, variation in performance decreases. One-way ANOVA compares these sample estimates to determine if the population means differ. The standard deviation indicates the amount of variability of the scores in each group. These values should be similar to each other for ANOVA to be appropriate. Equality can be inspected via the Levene test. The 95% confidence interval for the mean indicates the upper and lower bounds which contain the true value of the population mean 95% of the time. The Levene statistic in Table 7 rejects the null hypothesis that the group variances are equal in the case of ROCE, PAT, ROA and ROE. ANOVA is robust to this violation when the groups are of equal or near equal size. However, we decide to continue to use *F*-test for other parameters too.

Table 6: Descriptive Statistics – Transparency and Shareholders' Rights

	ROCE Percentage	N	Mean	SD	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
	Very Less Transparency	62	15.6515	10.73877	1.36382	12.9243	18.3786
	Adequate Transparency	15	22.6040	28.54437	7.37012	6.7967	38.4113
	Very Transparent	10	23.9320	23.79787	7.52555	6.9080	40.9560
	Totally Transparent	34	18.0841	14.74281	2.52837	12.9401	23.2281
	Total	121	17.8812	16.25871	1.47806	14.9548	20.8077
PAT	Very Less Transparency	62	4.5143E2	939.04016	1.19258E2	212.9573	689.9004
	Adequate Transparency	15	3.0875E3	5.643.53728	1.45716E3	-37.7888	6212.7848
	Very Transparent	10	1.9786E3	2,734.61950	8.64763E2	22.3931	3934.8509
	Totally Transparent	34	2.7982E3	4,153.44746	7.12310E2	1349.0081	4247.4207
	Total	121	1.5639E3	3,293.10417	2.99373E2	971.1180	2156.5939
ROA	Very Less Transparency	62	1.36123E1	50.823601	6.454604	.70551	26.51907
	Adequate Transparency	15	3.55581E1	59.042702	1.524476E1	2.86135	68.25486
	Very Transparent	10	1.18330E1	28.351748	8.965610	-8.44866	32.11457
	Totally Transparent	34	1.16459E1	12.148342	2.083424	7.40710	15.88462
	Total	121	1.56332E1	43.336642	3.939695	7.83292	23.43356

Table 6 (Cont.)

	N	Mean	SD	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
ROE	62	1.07337E1	17.395930	2.209285	6.31597	15.15145
Very Less Transparency	15	1.85867E1	24.631444	6.359811	4.94623	32.22711
Adequate Transparency	10	6.35400	42.193346	1.334271E1	-23.82930	36.53730
Very Transparent	34	1.24835E1	14.385437	2.467082	7.46421	17.50285
Totally Transparent	121	1.18369E1	20.591031	1.871912	8.13069	15.54320
Total						

As per data of corporate governance parameters in the research instrument, we are interested in finding out if financial parameters vary depending on the level of transparency or not and for that ANOVA test is applied. The total variation is partitioned into two components. Between groups represents the variation of the group means around the overall mean. Within groups represents variation of the individual scores around their respective group means. If desired, the between groups variation can be partitioned into trend components. According to Table 8, the significance value of the *F*-statistic in the ANOVA table is 0.284 for ROCE Percentage, 0.302 for ROA, 0.474 for ROE, and 0.001 for PAT. Small significance value of 0.001 (<0.05) indicates group differences. The difference in financial parameters across different levels of transparency is significant only for PAT. Thus, we reject the hypothesis H_{01} . Average financial parameters vary equally across different board compositions.

The test between-subjects effect helps us to determine the significance of a factor. However, they do not indicate how the levels of a factor differ. The post hoc tests show the differences in model-predicted means for each pair of factor levels. For a more detailed analysis, we use Tukey HSD post hoc test for pair-wise comparisons in one-way ANOVA whose results are shown in different tables, i.e., Tables 9 to 13.

Now that as we know the groups differ in some way, we need to learn more about the structure of the differences. The means plot helped us to 'see' this structure. In Figure 2, the firms with adequate transparency and very high transparency show higher mean ROCE than their counterparts. Further, Figure 5 shows that means of ROE of adequate transparency and total transparency firms are higher than very less transparent and very transparent firms. Again, Figure 4 shows that mean of ROA of adequate transparency firms are very high as compared to the means of very less transparent,

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	Levene Statistic	df1	df2	Sig.
ROCE Percentage	4.645	3	117	0.004
PAT	13.078	3	117	0.000
ROA	2.570	3	117	0.058
ROE	5.257	3	117	0.002

		Sum of Squares	df	Mean Square	F	Sig.
ROCE Percentage	Between Groups	1010.345	3	336.782	1.283	0.284
	Within Groups	30711.135	117	262.488		
	Total	31721.479	120			
PAT	Between Groups	1.651E8	3	5.502E7	5.666	0.001
	Within Groups	1.136E9	117	9711736.835		
	Total	1.301E9	120			
ROA	Between Groups	6893.222	3	2297.741	1.231	0.302
	Within Groups	218474.521	117	1867.304		
	Total	225367.743	120			
ROE	Between Groups	1073.684	3	357.895	0.841	0.474
	Within Groups	49805.185	117	425.685		
	Total	50878.869	120			

very transparent and totally transparent firms. It is further noticed that very transparent and totally transparent firms show approximately the same level of means of ROA.

Whereas means of PAT and level of transparency categorization show that the firms with very less transparency have the lowest mean of PAT, while the firms with adequate transparency and total transparency show higher means of PAT (Figure 3).

On the basis of the results of Levene statistic, one-way ANOVA, *F*-test, and Tukey HSD post hoc test, the null hypothesis H_{01} is rejected, and it can be concluded that the firms with adequate and higher level of transparency perform better.

Table 9: Tukey HSD Test – Multiple Comparisons

Dependent Variable	(I) TSR Category	(J) TSR Category	Mean Difference (I–J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ROCE Percentage	Very Less Transparency	Adequate Transparency	-6.95255	4.66186	0.446	-19.1029	5.1978
		Very Transparent	-8.28055	5.52110	0.441	-22.6704	6.1093
		Totally Transparent	-2.43267	3.45745	0.895	-11.4439	6.5786
	Adequate Transparency	Very Less Transparency	6.95255	4.66186	0.446	-5.1978	19.1029
		Very Transparent	-1.32800	6.61423	0.997	-18.5669	15.9109
		Totally Transparent	4.51988	5.02190	0.805	-8.5689	17.6087
	Very Transparent	Very Less Transparency	8.28055	5.52110	0.441	-6.1093	22.6704
		Adequate Transparency	1.32800	6.61423	0.997	-15.9109	18.5669
		Totally Transparent	5.84788	5.82830	0.748	-9.3426	21.0384
	Totally Transparent	Very Less Transparency	2.43267	3.45745	0.895	-6.5786	11.4439
		Adequate Transparency	-4.51988	5.02190	0.805	-17.6087	8.5689
		Very Transparent	-5.84788	5.82830	0.748	-21.0384	9.3426
PAT	Very Less Transparency	Adequate Transparency	-2636.06913 [*]	8.96711E2	0.020	-4,973.2019	-298.9363
		Very Transparent	-1527.19313	1.06199E3	0.478	-4,295.0900	1240.7038
		Totally Transparent	-2346.78554[*]	6.65042E2	0.003	-4,080.1098	-613.4613
	Adequate Transparency	Very Less Transparency	2636.06913 [*]	8.96711E2	0.020	298.9363	4973.2019
		Very Transparent	1108.87600	1.27225E3	0.820	-2207.0427	4424.7947
		Totally Transparent	289.28359	9.65965E2	0.991	-2,228.3496	2,806.9168

Table 9 (Cont.)

Dependent Variable	(I) TSR Category	(J) TSR Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ROA	Very Transparent	Very Less Transparent	1,527.19313	1.06199E3	0.478	-1,240.7038	4,295.0900
		Adequate Transparency	-1,108.87600	1.27225E3	0.820	-4,424.7947	2,207.0427
		Totally Transparent	-819.59241	1.12108E3	0.884	-3,741.4994	2,102.3146
	Totally Transparent	Very Less Transparent	2,346.78554*	6.65042E2	0.003	613.4613	4,080.1098
		Adequate Transparency	-289.28359	9.65965E2	0.991	-2,806.9168	2228.3496
		Very Transparent	819.59241	1.12108E3	0.884	-2,102.3146	3,741.4994
	Very Less Transparent	Adequate Transparency	-21.945817	1.243401E1	0.295	-54.35308	10.46145
		Very Transparent	1.779333	1.472577E1	0.999	-36.60102	40.15968
		Totally Transparent	1.966429	9.221632	0.997	-22.06828	26.00114
	Adequate Transparency	Very Less Transparent	21.945817	1.243401E1	0.295	-10.46145	54.35308
		Very Transparent	23.725150	1.764135E1	0.536	-22.25421	69.70451
		Totally Transparent	23.912246	1.339431E1	0.286	-10.99788	58.82238
Very Transparent	Very Less Transparent	-1.779333	1.472577E1	0.999	-40.15968	36.60102	
	Adequate Transparency	-23.725150	1.764135E1	0.536	-69.70451	22.25421	
	Totally Transparent	.187096	1.554513E1	1.000	-40.32880	40.70299	

Table 9 (Cont.)

Dependent Variable	(I) TSR Category	(J) TSR Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ROE	Totally Transparent	Very Less Transparent	-1.966429	9.221632	0.997	-26.00114	22.06828
		Adequate Transparent	-23.912246	1.339431E1	.286	-58.82238	10.99788
		Very Transparent	-.187096	1.554513E1	1.000	-40.70299	40.32880
	Very Less Transparent	Adequate Transparent	-7.852957	5.936743	0.550	-23.32613	7.62021
		Very Transparent	4.379710	7.030962	0.925	-13.94537	22.70479
		Totally Transparent	-1.749820	4.402959	0.979	-13.22543	9.72579
	Adequate Transparency	Very Less Transparent	7.852957	5.936743	0.550	-7.62021	23.32613
		Very Transparent	12.232667	8.423037	0.470	-9.72063	34.18596
		Totally Transparent	6.103137	6.395247	0.775	-10.56505	22.77132
	Very Transparent	Very Less Transparent	-4.379710	7.030962	0.925	-22.70479	13.94537
		Adequate Transparent	-12.232667	8.423037	0.470	-34.18596	9.72063
		Totally Transparent	-6.129529	7.422176	0.842	-25.47424	13.21518
Totally Transparent	Very Less Transparent	1.749820	4.402959	0.979	-9.72579	13.22543	
	Adequate Transparent	-6.103137	6.395247	0.775	-22.77132	10.56505	
	Very Transparent	6.129529	7.422176	0.842	-13.21518	25.47424	

Note: * The mean difference is significant at 0.05 level.

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Table 10: Tukey HSD Test – ROCE Percentage		
TSR Category	N	Subset for Alpha = 0.05
		1
Very Less Transparency	62	15.6515
Totally Transparent	34	18.0841
Adequate Transparency	15	22.6040
Very Transparent	10	23.9320
Sig.		0.400
Note: Means for groups in homogeneous subsets are displayed.		

Table 11: Tukey HSD Test – PAT		
TSR Category	N	Subset for Alpha = 0.05
		1
Very Less Transparency	62	451.4289
Very Transparent	10	1,978.6220
Totally Transparent	34	2,798.2144
Adequate Transparency	15	3,087.4980
Sig.		0.051
Note: Means for groups in homogeneous subsets are displayed.		

Table 12: Tukey HSD Test – ROA		
TSR Category	N	Subset for Alpha = 0.05
		1
Totally Transparent	34	11.64586
Very Transparent	10	11.83295
Very Less Transparency	62	13.61229
Adequate Transparency	15	35.55810
Sig.		0.329
Note: Means for groups in homogeneous subsets are displayed.		

Table 13: Tukey HSD Test – ROE		
TSR Category	N	Subset for Alpha = 0.05
		1
Very Transparent	10	6.35400
Very Less Transparency	62	10.73371
Totally Transparent	34	12.48353
Adequate Transparency	15	18.58667
Sig.		0.269
Note: Means for groups in homogeneous subsets are displayed.		

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Figure 2: Means Plot – ROCE Percentage (Transparency)

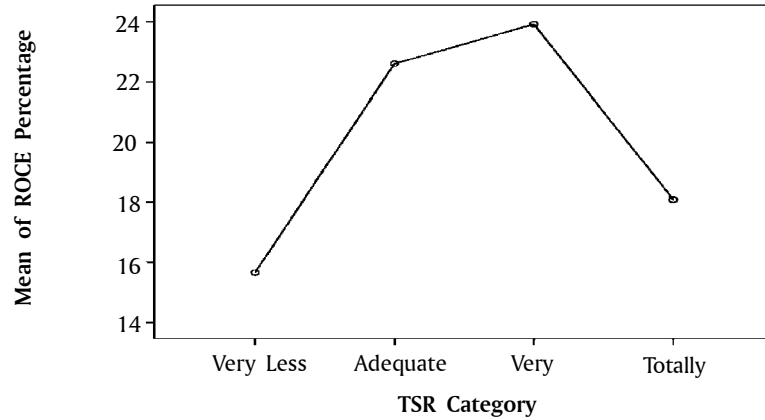


Figure 3: Means Plot – PAT (Transparency)

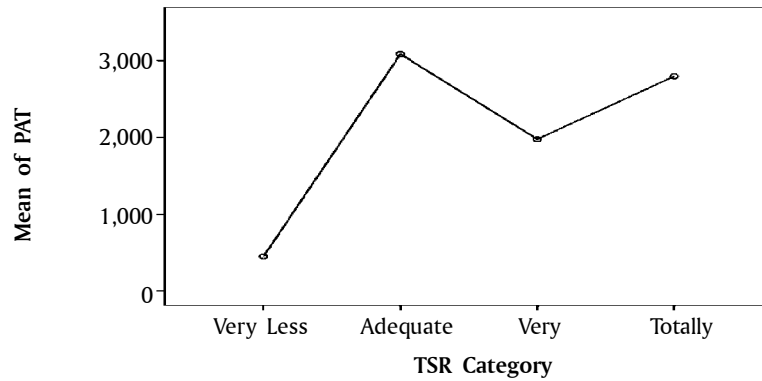
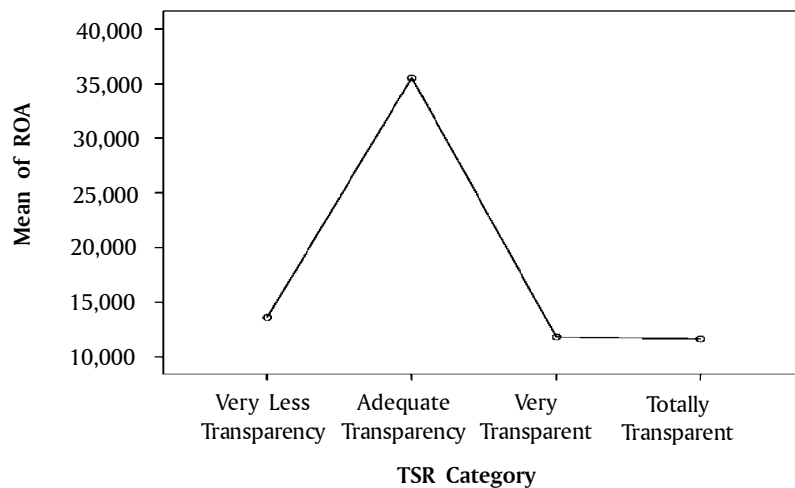
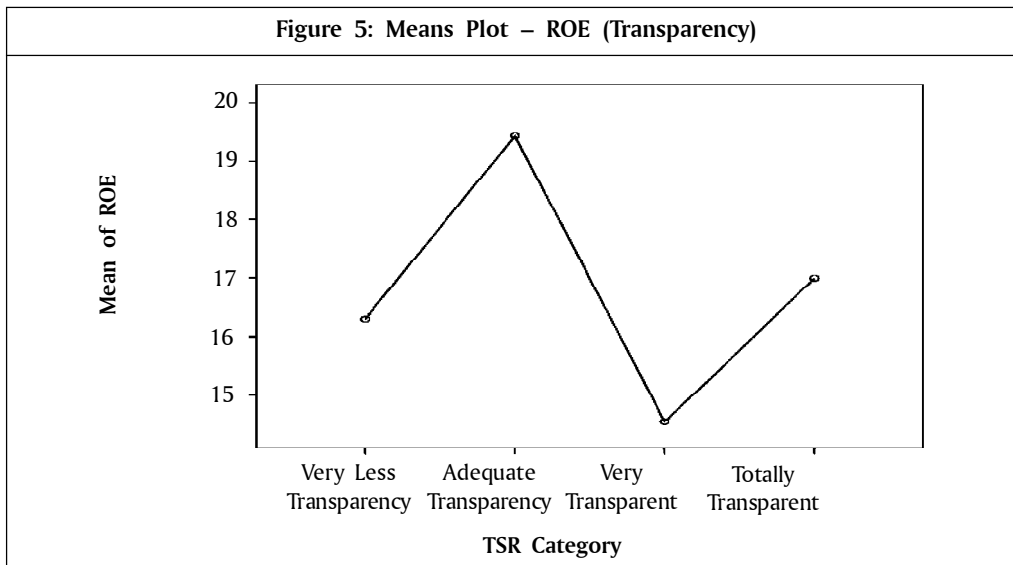


Figure 4: Means Plot – ROA (Transparency)



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Corporate Governance Policies and Practices

To investigate the effect of the corporate governance codes and initiatives (CGP) on the financial performance of the firm, hypothesis 2 was developed. For the study purpose, the corporate governance practices of Indian firms were categorized into: (a) Substandard corporate governance practices; (b) Standard corporate governance practices; (c) Good corporate governance practices; and (d) Outstanding corporate governance practices. Further in order to test the level of significance of hypothesis and to find the degree of dependence between the two variables, a few statistical tools and tests were applied, and the results thereof are discussed as under.

Table 14 presents the descriptive statistics for each group and for the entire dataset, with N indicating the size of each group. The standard deviation and standard error statistics confirm that as ROCE Percentage, PAT, ROA, and ROE increase, variation in performance decreases. One-way ANOVA compares these sample estimates to determine if the population means differ. The standard deviation indicates the amount of variability of the scores in each group. These values should be similar to each other for ANOVA to be appropriate. Equality can be inspected via the Levene test. The 95% confidence interval for the mean indicates the upper and lower bounds which contain the true value of the population mean 95% of the time. The Levene statistic in Table 15 rejects the null hypothesis. ANOVA is robust to this violation when the groups are of equal or near equal size. However, we decide to continue to use F -test for other parameters too.

As per data of corporate governance parameters in the research instrument, we are interested in finding out if financial parameters vary depending on the level of corporate governance policies and practices or not, and for that ANOVA test is applied. The total variation is partitioned into two components—Between Groups and Within Groups. According to Table 16, the significance value of the F -statistic in the ANOVA table is 0.893 for ROCE

Table 14: Descriptive Statistics – Corporate Governance Policies and Practices

	N	Mean	SD	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
ROCE Percentage	Substd. CG Practices	16.8956	13.45796	1.63202	13.6381	20.1531	-1.09	75.38
	Std. CG Practices	18.4683	11.92794	2.81144	12.5367	24.4000	1.74	49.83
	Good CG Practices	19.7893	28.64420	7.39590	3.9267	35.6520	-0.60	112.62
	Outstanding CG Practices	19.2730	17.03786	3.80978	11.2990	27.2470	0.66	59.31
	Total	121	17.8812	16.25871	1.47806	14.9548	20.8077	-1.09
PAT	Substd. CG Practices	8.1259E2	2611.71101	3.16716E2	180.4235	1,444.7609	-3052.05	2,0040.00
	Std. CG Practices	2.1686E3	3127.04913	7.37053E2	613.5778	3,723.6677	13.87	12,896.91
	Good CG Practices	1.0994E3	1416.92876	3.65849E2	314.7263	1,884.0643	-757.99	4,696.10
	Outstanding CG Practices	3.9222E3	5081.23040	1.13620E3	1,544.1190	6,300.2970	12.38	18924.00
	Total	121	1.5639E3	3293.10417	2.99373E2	971.1180	2,156.5939	-3,052.05
ROA	Substd. CG Practices	1.64861E1	55.229021	6.697503	3.11782	29.85436	-91.762	390.464
	Std. CG Practices	1.75757E1	23.858698	5.623549	5.71104	29.44034	.256	107.611
	Good CG Practices	1.36195E1	22.231762	5.740216	1.30798	25.93106	-.952	87.549
	Outstanding CG Practices	1.24956E1	14.563283	3.256449	5.67982	19.31147	.162	59.862
	Total	121	1.56332E1	43.336642	3.939695	7.83292	23.43356	-91.762

Table 14 (Cont.)

	N	Mean	SD	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
ROE	68	1.06772E1	22.143788	2.685329	5.31727	16.03714	-95.300	64.400
	18	1.34894E1	7.747900	1.826198	9.63650	17.34238	0.800	30.900
	15	1.29940E1	27.536238	7.109826	-2.25506	28.24306	-45.500	87.200
	20	1.34250E1	18.032911	4.032282	4.98534	21.86466	-39.700	49.500
Total	121	1.18369E1	20.591031	1.871912	8.13069	15.54320	-95.300	87.200

Percentage, 0.978 for ROA, 0.921 for ROE and 0.002 for PAT. The significance value of financial performance parameters, except PAT, indicates no group differences. Thus, we reject hypothesis H_{02} . The difference in financial parameters across different levels of corporate governance practice categories is significant for PAT, as the significance value of this parameter is less than 0.005.

The post hoc tests show the differences in model-predicted means for each pair of factor levels. For a more detailed analysis, we use Tamhane T2 post hoc test, whose results are mentioned in Tables 17 to 21. The means plot presented in Figures 6 to 9, helps us to 'see' the structure of the differences. It shows graphical representation of the relationship between different categories of corporate governance practices of the firms and the financial performance parameters of the firm. The corporate governance practices of the firms are categorized into substandard, standard, good and outstanding corporate governance practices, whereas the means of different financial ratios such as ROCE, ROA, PAT and ROE are used as the components of the performance of the firms.

Figure 6 showing the relationship between corporate governance practice categories of the firm and mean of ROCE reveals that the firms with substandard corporate governance practices have the lowest mean of ROCE, whereas the firms with good corporate governance practices show the highest mean of ROCE, followed by the firms with outstanding corporate governance practices.

Figure 7 showing the relationship between means of PAT and corporate governance categories of the firms present a zig-zag shaped curve. It reveals that the firms with outstanding corporate governance practices have the highest mean of PAT, whereas the firms with substandard corporate governance practices show the lowest mean of PAT.

But Figure 8 showing the relationship between mean of ROA and corporate governance practice

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Table 15: Test of Homogeneity of Variances – Corporate Governance Policies and Practices				
	Levene Statistic	<i>df1</i>	<i>df2</i>	Sig.
ROCE Percentage	2.954	3	117	0.035
PAT	8.721	3	117	0.000
ROA	0.445	3	117	0.721
ROE	1.033	3	117	0.381

Table 16: ANOVA – Corporate Governance Policies and Practices						
		Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
ROCE Percentage	Between Groups	165.619	3	55.206	0.205	0.893
	Within Groups	31,555.860	117	269.708		
	Total	31,721.479	120			
PAT	Between Groups	1.594E8	3	5.314E7	5.445	0.002
	Within Groups	1.142E9	117	9759910.130		
	Total	1.301E9	120			
ROA	Between Groups	375.093	3	125.031	0.065	0.978
	Within Groups	224,992.650	117	1923.014		
	Total	225,367.743	120			
ROE	Between Groups	211.133	3	70.378	0.163	0.921
	Within Groups	50,667.736	117	433.058		
	Total	50,878.869	120			

categories of the firms presents a different result. Here the firms with outstanding corporate governance category show the lowest mean of the ROA, while the firms with standard corporate governance practices show the highest mean of ROA, followed by the firms with substandard corporate governance practices.

Further, the graph related to mean of ROE and corporate governance practice category (Figure 9) shows that the firms with outstanding corporate governance practices show the highest mean of ROE, whereas the firms with the substandard corporate governance practices show the lowest mean of ROE.

Table 17: Tamhane T2 Test – Multiple Comparisons

Dependent Variable	(I) Corporate Governance Category	(J) Corporate Governance Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ROCE Percentage	Substd. CG Practices	Std. CG Practices	-1.57275	4.35317	0.984	-12.9186	9.7731
		Good CG Practices	-2.89375	4.68475	0.926	-15.1038	9.3163
		Outstanding CG Practices	-2.37741	4.17752	0.941	-13.2655	8.5106
	Std. CG Practices	Substd. CG Practices	1.57275	4.35317	0.984	-9.7731	12.9186
		Good CG Practices	-1.32100	5.74146	0.996	-16.2852	13.6432
		Outstanding CG Practices	-.80467	5.33565	0.999	-14.7112	13.1019
	Good CG Practices	Substd. CG Practices	2.89375	4.68475	0.926	-9.3163	15.1038
		Std. CG Practices	1.32100	5.74146	0.996	-13.6432	16.2852
		Outstanding CG Practices	0.51633	5.60945	1.000	-14.1038	15.1365
	Outstanding CG Practices	Substd. CG Practices	2.37741	4.17752	0.941	-8.5106	13.2655
		Std. CG Practices	0.80467	5.33565	0.999	-13.1019	14.7112
		Good CG Practices	-5.1633	5.60945	1.000	-15.1365	14.1038
PAT	Substd. CG Practices	Std. CG Practices	-1.356.03057	8.28097E2	0.362	-3,514.3339	802.2727
		Good CG Practices	-286.80313	8.91173E2	0.988	-2,609.5021	2,035.8958
		Outstanding CG Practices	-3109.61579*	7.94685E2	0.001	-5,180.8339	-1,038.3976
	Std. CG Practices	Substd. CG Practices	1,356.03057	8.28097E2	0.362	-802.2727	3,514.3339
		Good CG Practices	1,069.22744	1.09219E3	0.762	-1,777.3896	3,915.8445
		Outstanding CG Practices	-1,753.58522	1.01499E3	0.314	-4,399.0045	891.8340

Table 17 (Cont.)

Dependent Variable	(I) Corporate Governance Category	(J) Corporate Governance Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ROA	Good CG Practices	Substd. CG Practices	286.80313	8.91173E2	0.988	-2,035.8958	2,609.5021
		Std. CG Practices	-1,069.22744	1.09219E3	0.762	-3,915.8445	1,777.3896
	Outstanding CG Practices	Outstanding CG Practices	-2,822.81267	1.06708E3	0.045	-5,603.9815	-41.6438
		Substd. CG Practices	3,109.61579*	7.94685E2	0.001	1,038.3976	5,180.8339
	Substd. CG Practices	Std. CG Practices	1,753.58522	1.01499E3	0.314	-891.8340	4,399.0045
		Good CG Practices	2,822.81267*	1.06708E3	0.045	41.6438	5,603.9815
	Substd. CG Practices	Std. CG Practices	-1.089604	1.162384E1	1.000	-31.38529	29.20608
		Good CG Practices	2.866570	1.250922E1	0.996	-29.73671	35.46985
	Std. CG Practices	Outstanding CG Practices	3.990447	1.115483E1	0.984	-25.08284	33.06374
		Substd. CG Practices	1.089604	1.162384E1	1.000	-29.20608	31.38529
	Good CG Practices	Good CG Practices	3.956174	1.533085E1	0.994	-36.00124	43.91359
		Outstanding CG Practices	5.080052	1.424727E1	0.984	-32.05319	42.21329
Good CG Practices	Substd. CG Practices	-2.866570	1.250922E1	0.996	-35.46985	29.73671	
	Std. CG Practices	-3.956174	1.533085E1	0.994	-43.91359	36.00124	
Outstanding CG Practices	Outstanding CG Practices	1.123878	1.497837E1	1.000	-37.91485	40.16261	

Table 17 (Cont.)

Dependent Variable	(I) Corporate Governance Category	(J) Corporate Governance Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ROE	Outstanding CG Practices	Substd. CG Practices	-3.990447	1.115483E1	0.984	-33.06374	25.08284
		Std. CG Practices	-5.080052	1.424727E1	0.984	-42.21329	32.05319
		Good CG Practices	-1.123878	1.497837E1	1.000	-40.16261	37.91485
	Substd. CG Practices	Std. CG Practices	-2.812239	5.516090	0.957	-17.18904	11.56457
		Good CG Practices	-2.316794	5.936244	0.980	-17.78866	13.15508
		Outstanding CG Practices	-2.747794	5.293522	0.954	-16.54451	11.04892
	Std. CG Practices	Substd. CG Practices	2.812239	5.516090	0.957	-11.56457	17.18904
		Good CG Practices	0.495444	7.275250	1.000	-18.46633	19.45722
		Outstanding CG Practices	0.064444	6.761038	1.000	-17.55712	17.68601
	Good CG Practices	Substd. CG Practices	2.316794	5.936244	0.980	-13.15508	17.78866
		Std. CG Practices	-0.495444	7.275250	1.000	-19.45722	18.46633
		Outstanding CG Practices	-0.431000	7.107980	1.000	-18.95681	18.09481
Outstanding CG Practices	Substd. CG Practices	2.747794	5.293522	0.954	-11.04892	16.54451	
	Std. CG Practices	-0.064444	6.761038	1.000	-17.68601	17.55712	
	Good CG Practices	0.431000	7.107980	1.000	-18.09481	18.95681	

Note: * The mean difference is significant at 0.05 level.

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Table 18: Tamhane T2 Test – ROCE Percentage		
Corporate Governance Category	N	Subset for Alpha = 0.05
		1
Substd. CG Practices	68	16.8956
Std. CG Practices	18	18.4683
Outstanding CG Practices	20	19.2730
Good CG Practices	15	19.7893
Sig.		0.939
Note: Means for groups in homogeneous subsets are displayed.		

Table 19: Tamhane T2 Test – PAT			
Corporate Governance Category	N	Subset for Alpha = 0.05	
		1	2
Substd. CG Practices	68	812.5922	
Good CG Practices	15	1.0994E3	
Std. CG Practices	18	2.1686E3	2.1686E3
Outstanding CG Practices	20		3.9222E3
Sig.		0.490	0.262
Note: Means for groups in homogeneous subsets are displayed; 1 – Between Groups; and 2 – Within Groups.			

Table 20: Tamhane T2 Test – ROA		
Corporate Governance Category	N	Subset for Alpha = 0.05
		1
Outstanding CG Practices	20	12.49564
Good CG Practices	15	13.61952
Substd. CG Practices	68	16.48609
Std. CG Practices	18	17.57569
Sig.		0.981
Note: Means for groups in homogeneous subsets are displayed.		

Table 21: Tamhane T2 Test – ROE		
Corporate Governance Category	N	Subset for Alpha = 0.05
		1
Substd. CG Practices	68	10.67721
Good CG Practices	15	12.99400
Outstanding CG Practices	20	13.42500
Std. CG Practices	18	13.48944
Sig.		0.971
Note: Means for groups in homogeneous subsets are displayed.		

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Figure 6: Means Plot – ROCE Percentage (CG Practices)

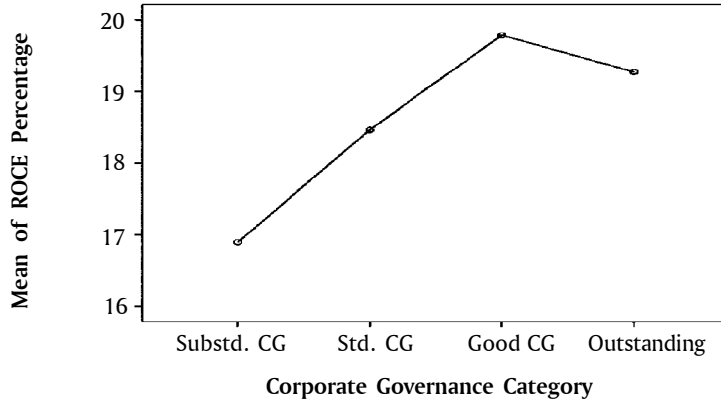


Figure 7: Means Plot – PAT (CG Practices)

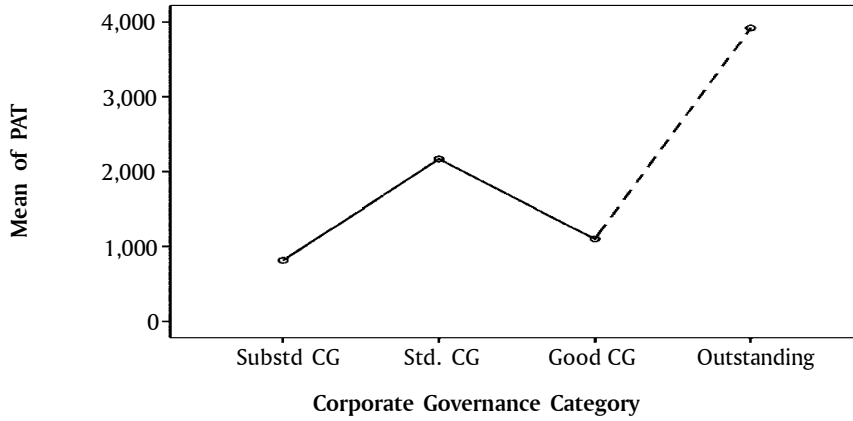
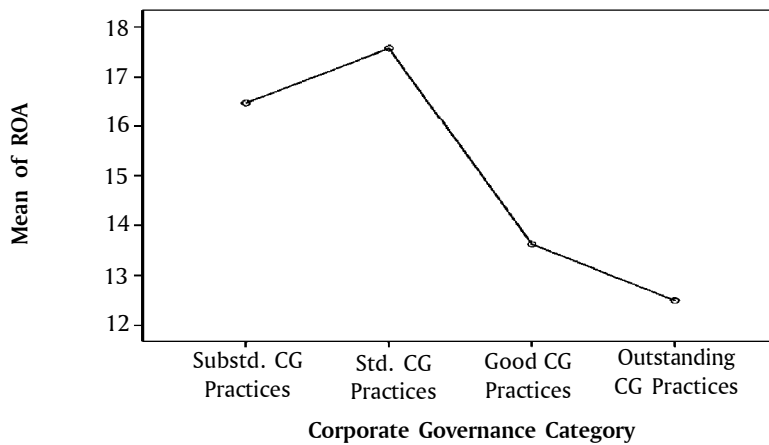
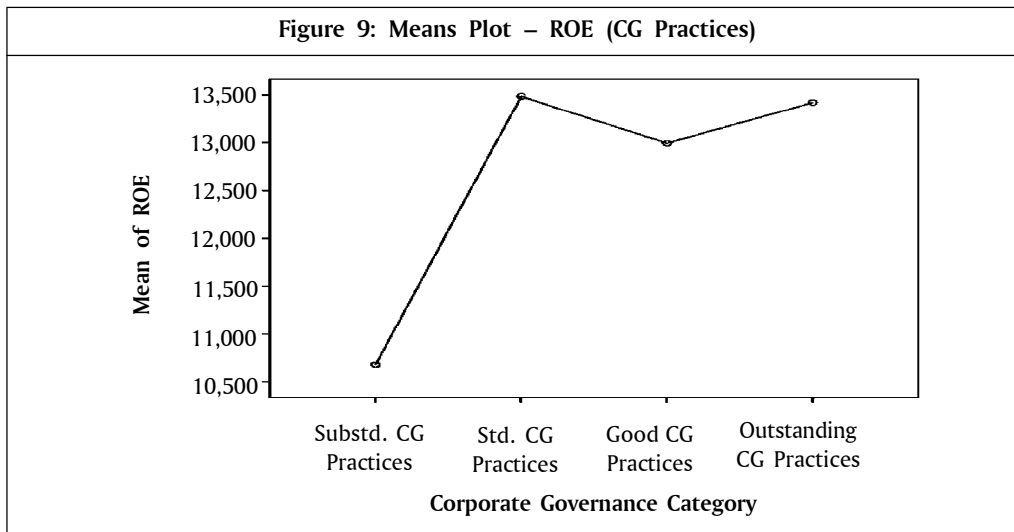


Figure 8: Means Plot – ROA (CG Practices)



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All the graphs related to the means of different parameters of firm performance and the corporate governance categories reveal that the firms with substandard corporate governance practices show the lowest mean of ROCE, PAT and ROE as compared to its other counterparts. Only ROA is a parameter where the firms with substandard corporate governance practices show the high mean. Most of the financial parameters show higher means for the firms with good corporate governance practices and outstanding corporate governance practices.

In a nutshell, on the basis of statistical observation and analysis, the hypothesis can be rejected. And it can be further concluded that the firms with outstanding and good corporate governance practices perform better as there is a positive and significant relationship between corporate governance practices and firm performance.

Conclusion

Primarily, the study results indicate that relationship of significant nature exists between transparency and shareholders' rights and firm performance. Hence, in simple words, it can be concluded that these factors are correlated and do have an impact on each other as well and the strength of the relationship is strong. It can be further said that transparency and shareholders' rights affect the firm's performance. Shelton and General (1999); Levine *et al.* (2000); Bushman and Smith (2001); Ball (2001); Gupta *et al.* (2003); Hassan *et al.* (2008) and many other researchers in their study related to transparency, disclosure and firm performance have found positive relationship between the variables.

Secondly, the observations of the study show that the firms which show more transparency in their accounting and financial matters and disclose all the material facts and information to shareholders have better financial performance as compared to the firms with poor transparency.

Thirdly, the firms in which the minority shareholders are not overlooked gain the confidence of the existing investors/shareholders, and they prefer to retain the company shares, so in the long run the market value of the firm increases.

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Fourthly, the firms with transparency in their operations successfully win the faith of the shareholders and it becomes easy from them to raise the funds through capital market. In the long run, such firms enjoy the benefits of low cost of capital. It was also noticed that the large cap firms were more transparent in their accounting practices and disclosure of policies as compared to the small cap firms.

Fifthly, on the other hand, investigating the relationship between corporate governance and firm performance and analyzing the correlation among the independent variables as per the proposed model, the study found that a relationship of significant nature exists between corporate governance practices and firm performance. Hence, it can be said that these factors are correlated and do have an impact on each other as well but the strength of relationship is very strong. It can be further concluded that the corporate governance practices affect the firm's performance. The results are also supported by the findings of earlier studies, e.g., Kim and Lee (2003), Dwivedi and Jain (2005), Lee (2008), and Zhen *et al.* (2010).

Sixthly, Indian economy is going through phases of changes post liberalization. These changes in the operating environment have compelled the governing bodies to bring a change in the legal and regulatory framework for safeguarding the investors' money. Observations of the study reveal that the large cap and mid cap firms with their good corporate governance practices have shown better financial results, but the scenario in the case of small cap firms is different. In some of the cases, the firms with poor corporate governance practices are also performing well. During the study, it was also observed that the large cap firms and the public sector firms had higher level of adherence to the voluntary regulations as compared to private sector small and mid cap firms in India.

The study results also suggest that the corporate governance policies and transparency and disclosure are positively correlated. It means, we can say that the firms with good corporate governance policies and practices have greater transparency and disclosure as compared to the firms with poor corporate governance practices.

In a nutshell, it can be said that the mindset of the Indian entrepreneurs towards corporate governance is changing due to tough competition at international level, and the level of awareness among the investors also has increased. India is gradually moving towards a more structured corporate governance framework. □

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Appendix (Cont.)

13. For improving the efficiency and effectiveness, does the company provide any training to the board members?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
14. Is there any mechanism for evaluating the performance of the non-executive board members?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
15. Does the company disclose the significant related-party transaction having potential conflicts?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
16. Does the company comply with all the capital market matter-related issues?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
17. Does the company follow standard accounting policies and practices?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
18. Are the directors informed about risk management issues?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
19. Does the company publish risk management report?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
20. Do the shareholders have the right to appoint new director/reappoint a retired director?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
21. Do the shareholders get information on quarterly results?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
22. Are the shareholders informed about share transfer procedures?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
23. Is there any director's responsibility statement?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>
24. Do the shareholders get information on the half-yearly financial performance of the company?	a) Yes <input type="checkbox"/>	b) No <input type="checkbox"/>

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Appendix (Cont.)

25. Does the company disclose its policies related to EHS, HRD, CSR and IR?

a) Yes

b) No

26. Does the company annually publish its Corporate Governance Report?

a) Yes

b) No

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Corporate Governance - Developments and Stumbling Blocks in India

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Abstract- Corporate governance in India can be evident from the Koutaliya's Arthshastra, which maintain that for good governance all administrators including king were considered as servants of the subjects. Good governance and stability goes hand in hand.

The primary objective of this paper is to study the corporate governance policies, practices and system in India. Goodness of corporate governance is checked on the basis of five basic parameters i.e. transparency, ownership structure, board procedure, investor rights and governance strategies.

During the study it was observed that, in India the legislative and regulatory framework for the corporate governance is sound but the implementation part is poor. There is a huge gap between what is de-jure and de-facto. The state is still lagging behind when it comes to particularly private sector small and medium size industries. Major part of industrial set up is just their production units. The government has also set up various committees, passed various regulations for the development of the industries in the country. There is a further need to strengthen the existing governance policies.

Index Terms- Corporate governance, Regulatory frame work, Transparency, Ownership Structure, Board Procedures

I. INTRODUCTION

The root of the word corporate governance is from 'gubernate' which means to steer. Corporate governance would mean to steer an organization in the desired direction. Corporate governance is a system by which organization are directed and controlled, it is a process by which company objectives are established, achieved and monitored. So, it is concerned with relationship and responsibilities between the boards, management and stake holders within a legal and regulatory frame work. Corporate governance in India can be evident from the koutaliya's arthshastra, which maintain that for good governance all administrators including king were considered as servants of the subjects. Good governance and stability goes hand in hand.

The primary objective of this paper is to study the corporate governance policies, practices and system in India. Goodness of corporate governance can be checked on the basis of five basic parameters i.e. transparency, ownership structure, board procedure, investor rights and governance strategies. The paper further provides an insight to the concept of corporate governance, gives a brief historical development of corporate

governance in India, studies the role of corporate governance in National Development, focuses on the problem areas of corporate governance and suggests the solution to the corporate governance problems of India.

II. CONCEPT OF CORPORATE GOVERNANCE

Many researchers have defined the corporate governance in their different ways as Monks and Minow have defined corporate governance as "Relationships among various participants in determining the direction and performance of a corporation". [1]

The primary participants in a corporation are the tripod of shareholders; management-led by the CEO and the Board of Directors. There are other participants as well such as the employees, customers, suppliers, creditors and the community. Keeping in view the interests of various stakeholders in a company, corporate governance is concerned with effective management of relationships. It requires the formulation of the value framework, the ethical framework and the moral framework which will guide the decision-making process.

According to James D. Wolfensohn, President of World Bank, "Corporate Governance is about promoting corporate fairness, transparency and accountability".

According to Tricker "Corporate Governance is concerned with the way corporate entities are governed, as distinct from the way business within those companies are managed. Corporate Governance addresses the issues facing Board of Directors, such as the interaction with top management and relationships with the owners and others interested in the affairs of the company".

OECD has defined corporate governance as "A system by which business corporations are directed and controlled". Corporate Governance structure specifies the distribution of rights and responsibilities among different participants in the company such as board, management, shareholders and other stakeholders, and spells out the rules and procedures for corporate decision making. By doing this, it provides the structure through which the company's objectives are set along with the means of attaining these objectives as well as for monitoring performance. Confederation of Indian Industry (CII) – Desirable Corporate Governance Code defined Corporate Governance as follows:

"Corporate Governance deals with laws, procedures, practices and implicit rules that determine a company's ability to take informed managerial decisions vis-a-vis its claimants-in particular, its shareholders, creditors, customers, the State and employees. There is a global consensus about the objective of

‘good’ corporate governance: maximizing long-term shareholder value.”

III. EVIDENCE OF CORPORATE GOVERNANCE FROM THE INDIAN HISTORY

Kautilya’s Arthashastra maintains that for good governance, all administrators, including the king were considered servants of the people. Good governance and stability were completely linked. There is stability if leaders are responsive, accountable and removable. These tenets hold good even today. Kautilya elaborates on the fourfold duty of a king as

- raksha,
- vridhi,
- palana,
- yogakshema.

The substitution of the state with the corporation, the king with the CEO or the board corporation, and the subjects with the shareholders, bring out the quintessence of corporate governance, because central to the concept of corporate governance is the belief that public should be ahead of private good and that the corporation’s resources cannot be used for personal benefit.

- (i) Raksha - literally means protection, in the corporate scenario it can be equated with the risk management aspect.
- (ii) Vriddhi - literally means growth in the present day context can be equated to stakeholder value enhancement.
- (iii) Palana - literally means maintenance/ compliance, in the present day context it can be equated to compliance to the law in letter and spirit.
- (iv) Yogakshema - literally means well being and in Kautilya’s Arthashastra it is used in context of a social security system. In the present day context it can be equated to corporate social responsibility.

Arthashastra talks self-discipline for a king and the six enemies which a king should overcome—lust, anger, greed, conceit, arrogance and foolhardiness. In the present day context, this addresses the ethics aspects of businesses and the personal ethics of the corporate leaders.

IV. REVIEW OF THE LITERATURE

Zattoni et al., (2009) in their study on the group affiliated firms found that the Corporate governance reforms in India has resulted into the diminishing role of the business groups.[2] Li and Filer (2007) and Li and Nair (2007) in their study found that the Corporate governance environment in India is set in rule based democratic system.[3]

In the India the pre-liberalization era is remarked by the various studies focusing on the Corporate governance problems, but post-liberalization period had witnessed an advent of the new economic reforms and new governance philosophy. In this post-liberalization era corporate governance related issues in India

gained momentum. Chhibber and Mazumdar (1999)[4], Sarkar and Sarkar (1999 and 2000) and Patibandla (2006) etc have done remarkable study on the corporate governance issues of the India. Gupta (2006) in his study traced the difference in the corporate governance practices of three automobile companies in India named Hero-Honda Ltd, Maruti Udyog Ltd. and Escorts Ltd. The companies were randomly selected on the basis of their size and goodwill in the market. The study was focused on observing the compliance of the selected sample companies’ corporate governance practices with the Clause-49. The results of the study revealed that the Hero-Honda with 90%, Maruti with 80% and Escorts with 70% were in line with the Corporate governance norms as per Clause-49.[5]

The old classical socialistic Indian ideology has reflected in the closed economy of the India during the Pre-Liberalization era, where the government played a dominant role. Huang and Khanna, (2003).[6]

Khanna and Palepu (2000) further propounded that only the large size business houses which were owned by the families performed better as compare to the unaffiliated firms, where as the small and medium size firms which were owned by the families performed worse as compare to the non-affiliated firms.[7]

Further in 1999, the Chhibber and Mazumdar in their study based on the finding the relationship between the foreign shareholding and firms performance in the pre and post liberalization era found that in the post liberalization period the foreign ownership had a significant impact over the firms profitability.[8]

In another study conducted by Mazumdar in 1999, he compared the financial performance of the state owned, private owned and mixed state-private ownership firms. He found that the privately owned firms perform better as compare to the state owned firms followed by the mixed state-private ownership firms. The study further reveals that the state owned firms performed the worst.[9]

Similar were the conclusions drawn by some other researchers in their empirical study in the India (Ramaswamy, 2001; Shleifer and Vishny 1997; Shleifer, 1998).

Other studies of the similar time and type have reinforced these findings. (Chhibber and Mazumdar, 1999; Douma et al., 2003; Ramaswamy et al., 2002).

Kumar (1994) has examined the differences between the domestic and foreign firms in India. He observed that the foreign subsidiaries operating in India were more profitable as compare to the domestic companies. He further observed that foreign firms spent less on the research and development and more on the marketing and sales promotion campaigns as compare to the domestic firms.[10]

V. COMMENTS SIGNIFICANCE OF GOOD CORPORATE GOVERNANCE

Although instituting corporate governance is clearly beneficial for firms and countries, the rapid pace of globalization has made the need urgent. Doing so requires that firms and national governments make some fundamental changes. Companies must change the way they operate, while national governments must establish and maintain the appropriate institutional framework..

Under such conditions business becomes nothing but casino capitalism where investments are simply bets: bets that people will keep their word, bets that the firms are telling the truth, bets that employees will be paid, and bets that debts will be honored. What corporate governance is all about in larger terms is how a structure can be set up that allows for a considerable amount of freedom within the rule of law. Some of the key changes involve adopting international standards of transparency, clarity, and accuracy in financial statements so that investors and creditors can easily compare potential investments.

Good corporate governance reduces the risk, stimulates performance, Improves access to capital market, Enhances the marketability of goods and services, improves leadership efficacy, and demonstrates transparency and social accountability.

Corporate governance and the national development- The corporate governance has a very important role to play in the national development. Its significance was ignored for many decades. The East-Asian financial crises of 1997-98 drew attention to it and the problems of “crony capitalism” in the growing economies.

Corporate Governance and Productivity growth- Paul Krugman predicted in 1994, by comparing East and south East Asia to soviet model that ‘it is not impossible for any country to achieve and sustain high rates of output and income growth for a long period of time even for decades by massive mobilization of factors of production. It can be achieved through various kinds of forced savings, significant and sustained investments in the education of the country’s population high rates of rural –urban migration, by more involvement of female population into modern manufacturing ,agri-business and service sectors and so on.

Corporate Governance and Cost of capital- Good corporate governance ensures the regular supply of funds to the investors, as the traditional resources are not enough to meet the requirements. The good governance also lowers the costs of financial resources.

VI. CORPORATE GOVERNANCE FAILURE

The dishonest practices of the corporate s resulted into the sudden collapse of the several giant corporate houses around the world such as in 2001 Enron, in 2002 WorldCom (USA) , in 2003 Ahold(Netherlands), in 2003 Parmalat (Italy),Xerox and many more. The virtual collapse of the Russian economy in 1998 resulted in large measure from the weakness of governance mechanisms. The so called managers are said to have robbed share holders, creditors, consumers, the government, workers and all possible stake holders. The consequent distrust predictably resulted in the virtual collapse of external capital to firms, reveals that the corporate bad governance can shake the foundations of a society. Likewise, the Asian financial crisis also demonstrated that even strong economies lacking transparent control, responsible corporate boards and share holder rights can collapse due to dilution of investors’ confidence.

India was also not exception to the scenario Harshd Mehta Scam (1992), Ketan Parekh Scam, Stock Market Scam (1996), UTI Scam (2000), Fake Stamp Racket by Abdul Karim Telgi (2004), Satyam Fiasco and many more are in the list.

REASONS FOR CORPORATE GOVERNANCE FAILURE

In terms of corporate governance issues, all suffered from questionable ethics, behavior at the top management, aggressive earnings management, weak internal control, risk management failure, poor accounting and reporting policies and loopholes in the legislative and regulatory frame work in the country. However, the lack of long-term vision is something of a rarity in many companies which further results into such scandals and frauds.

VII. CORPORATE GOVERNANCE DEVELOPMENTS IN INDIA

The initiatives taken by the Government in 1991, aimed at economic liberalization, globalization and privatization of the domestic economy, led India to initiate reform process in order to suitably respond to the developments taking place world over. On account of the interest generated by Cadbury Committee Report, the confederation of Indian Industry (CII), the Associated Chambers of Commerce and industry (ASSOCHAM) and, the Securities and Exchange Board of India (SEBI) constituted Committees to recommend initiatives in Corporate Governance.

CII’s Desirable Corporate Governance Code

Confederation of Indian Industry (CII) took a special initiative on Corporate Governance, the first institution initiative in Indian Industry. The objective was to develop and promote a code for Corporate Governance to be adopted and followed by the Indian companies, whether in the Private Sector, the Public Sector, Banks or Financial Institutions, all of which are corporate entities. The final draft of the said Code was widely circulated in 1997. In April 1998, the Code was released. It was called Desirable Corporate Governance Code.

Kumar Mangalam Birla Committee

Following CII’s initiative, the Securities and Exchange Board of India (SEBI) set up a committee under the chairmanship of Kumar Mangalam Birla to promote and raise standards of corporate governance. This Report was the formal and comprehensive attempt to evolve a Code of governance in Indian companies, as well as the state of capital markets at that time.

The recommendations of the Kumar Mangalam Birla Committee, led to inclusion of clause 49 in the Listing Agreement in the year 2000. These recommendations aimed at improving the standards of Corporate Governance, are divided into mandatory and non-mandatory recommendations. The said recommendations have been made applicable to all listed companies with the paid-up capital of Rs.3 crores and above or net worth of Rs.25 crores or more at any time in the history of the company. The ultimate responsibility for putting the recommendations into practice lies directly with the Board of Directors and the management of the company.

Naresh Chandra Committee

The Enron debacle of 2001 involving the hand-in-glove relationship between the auditor and the corporate client, the scams involving the fall of the corporate giants in the U.S. like the WorldCom, Qwest, Global Crossing, Xerox and the consequent enactment of the stringent Sarbanes Oxley Act in the U.S were some important factors which led the Indian Government to wake up and in the year 2002, Naresh Chandra Committee was appointed to examine and recommend inter alia amendments to the law involving the auditor-client relationships and the role of independent directors.

N.R.Narayana Murthy Committee

In the year 2002, SEBI analyzed the statistics of compliance with the clause 49 by listed companies and felt that there was a need to look beyond the mere systems and procedures if corporate governance was to be made effective in protecting the interest of investors. SEBI therefore constituted a Committee under the Chairmanship of Shri N.R.Narayana Murthy, for reviewing implementation of the corporate governance code by listed companies and issue of revised clause 49 based on its recommendations.

Dr. J j irani Expert Committee on Company Law

In 2004, the Government constituted a committee under the Chairmanship of Dr.J.J.Irani, Director, Tata Sons, with the task of advising the Government on the proposed revisions to the Companies Act, 1956 with the objective to have a simplified compact law that would be able to address the changes taking place in the national and international scenario, enable adoption of internationally accepted best practices as well as provide adequate flexibility for timely evolution of new arrangements in response to the requirements of ever-changing business models.

VIII. OBSTACLES IN IMPROVING CORPORATE GOVERNANCE IN INDIA

Shareholding patterns in the countries like United Kingdom and United States of America is scattered in the nature. It is in such a way that no single individual investor can hold above a specific mentioned limit of stocks of a particular company. But the conditions in the rest of world are not the same. Developing countries like India are still suffering from the problems of concentrated ownership, agency problems and expropriation problems. Some of the main reasons behind poorly defined corporate governance in India are.

- a) Resistance to change.
- b) Distributional Carters.
- c) Principal-Agency Problems.
- d) Strategic Oligopolistic Rivalry.
- e) Poorly defined Corporate Governance Institutions
- f) Poor political Governance

SCOPE FOR THE IMPROVEMENT IN CORPORATE GOVERNANCE FRAMEWORK OF INDIA

The whole world is facing the problem of global financial meltdown. Western and European countries are the worst hit by this economic T-sunami. The Indian economy is not that severely affected but this has slowed down the growth rate of the economy. In order to have a sustainable growth and development of the economy, India needs a quick and effective change in its corporate governance framework. Followings are some of the suggestions for improving the corporate governance system of the country.

1) Need for good governance for foreign investments.

The recent trends show a significant flow of Portfolio investment to developing nations, mainly by the financial institutions and the big pension funds ect. It further necessitates the need for improvements in the corporate governance in India.

2) Development of basic financial infrastructure:

A proper attention must be given to strengthen the banking sector and countries financial institutions. Institutions for corporate governance must be fair, transparent and effective in the country.

3) Chairman and CEO: It is considered good practice to separate the roles of the Chairman of the Board and that of the CEO. The Chairman is head of the Board and the CEO heads the management. If the same individual occupies both the positions, there is too much concentration of power, and the possibility of the board supervising the management gets diluted.

4) Internal control system and Audit Committee: Boards work through sub-committees and the audit committee is one of the most important. It not only oversees the work of the auditors but is also expected to independently inquire into the workings of the organization and bring lapse to the attention of the full board. There is a strong need for developing a sound internal control system in India.

5) Independence and conflicts of interest: Good governance requires that outside directors maintain their independence and do not benefit from their board membership other than remuneration. Otherwise, it can create conflicts of interest, by having a majority of outside directors on its Board.

6) Flow of information: A board needs to be provided with important information in a timely manner to enable it to perform its roles. A governance guideline of General Motors, for instance, specifically allows directors to contact individuals in the management if they feel the need to know more about operations than what they are being told.

7) Too many directorships: Being a director of a company takes time and effort. Although a board might meet only four or five times a year, the director needs to have the time to read and reflect over all the material provided and make informed decisions. Good governance, therefore, suggests that an

individual sitting on too many boards looks upon it only as a sinecure for he or she will not have the time to do a good job.

8) Good governance parameters: In order to have good corporate governance in the organization the firm must ensure:

- Transparency in the organization
- Sound board structure
- Defined board procedure
- Investor right protection
- & Good governance strategy.

IX. CONCLUSION

In India the legislative and regulatory framework for the corporate governance are sound but the implementation part is poor. There is a huge gap between what is de-jure and de-facto. The state is still lagging behind when it comes to particularly private sector small and medium size industries. Major part of industrial set up is just their production units. The government has also set up various committees, passed various regulations for the development of the industries in the country. There is a further need to strengthen the existing governance policies.

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Board Composition, Ownership Structure and Firm Performance

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Abstract

The study primarily focuses on investigating the relationship between corporate governance and the firm performance. Board composition and Ownership structure are primarily taken as the factors of corporate governance, where as financial performance of the firm is measured with the financial ratios viz. Return on Capital employed, Return on the equity, Profit after tax and Return on assets. For the detail study purpose we have divided the board composition into two components a) Board size b) board composition. The study is based on the 121 small cap, mid cap and large cap companies listed on the Bombay Stock Exchange (BSE) India, for the period of 2010 -2011. Our empirical analysis of the data is suggestive of the result of that a relationship of positive and significant nature exists between board size & board composition and firm's financial performance in India. We also found that there is no relationship exists between ownership structure and firm performance.

Key words: board size, board composition, ownership structure, corporate governance, financial performance, India.

Introduction

Corporate governance can be viewed as a mechanism that ensures external investors receive proper returns on their investments. Effective corporate governance provides an assurance on the safety of the invested funds and the returns on investment (Shleifer and Vishny, 1997). The study primarily focuses on investigating the relationship between corporate governance and the firm performance. Many researchers have been investigating the relationship between corporate governance and firm performance by using the empirical data. There is no unanimous consent on the results of the studies (Patterson, 2000). Similarly another study shows that the corporate governance has a strong impact on the firm performance during the 1997-98 East Asian financial crises. The study further propounds that independent directors have traditionally been hailed as a way of improving, monitoring management (Kim and Lee, 2003).

In an empirical study based on the Indian firms by Dwivedi and Jain (2005) with the sample size of 340 large listed Indian firms for the period of 1997 -2001. They found a positive and significant relationship between corporate governance and performance of Indian firms, by using a simultaneous equation regression model, whereby they used Tobin Q as the measure of firm performance and board size and ownership as components of corporate governance. Gupta (2006) in his study traced the difference in the corporate governance practices of three automobile companies in India named Hero-Honda Ltd, Maruti Udyog Ltd. and Escorts Ltd. The companies were randomly selected on the basis of their size and goodwill in the market. The study was focused on observing the compliance of the selected sample companies' corporate governance practices with the Clause-49. The results of the study revealed that the Hero-Honda with 90%, Maruti with 80% and Escorts with 70% were in line with the Corporate governance norms as per Clause-49. A study by Lee (2008) based on Korean firms tries to study the relationship between corporate governance and firm's financial performance. In this study, the effect on Korean firms is empirically tested. The study is based on the agency theory of corporate governance. Ownership concentration and Ownership identity are taken as two components of the corporate governance and net income to total assets ratio (NIA) and ordinary income to total assets



ratio (OIA) are taken as performance variables. The study with the multivariable regression analysis reveals the significant linear lump-shaped relationship between ownership concentration and firm performance and insignificant relationship between ownership identity and firm performance. In nutshell the study shows a positive and significant relationship between corporate governance and firm's financial performance. In another study based on Chinese firms tried to find the relationship between the corporate governance and corporate performance of 106 High –tech small and medium size enterprises in China. The study through empirical analysis finds the relationship between ownership concentration and corporate performance follows a positive correlation. It further states that the relationship between shareholding ratio of the 2nd to 10 shareholders, number of board and share holders meetings and executive remuneration shows a positive and significant relationship with corporate performance (Zhenyi, Li and Ying, 2010).

There are some other studies which deny any relationship between corporate governance and firm performance. And many other studies show weak or insignificant relationship between corporate governance and the firm's performance. For an e.g. study in Miami University, USA shows no relationship between corporate governance and firm's performance (Daily and Dalton, 1992). There is no correlation between board independence and long term firm performance (Bhagat & Black, 1998). Similarly in another study by Bauer et al. (2004) on European firms found a negative relationship between corporate governance standards and firm's performance.

Some of the studies show a positive and significant relationship between corporate governance and firm performance, some studies reveal a negative and insignificant relationship or some studies even show a mixed result of the link between corporate governance and the firm performance. The results may vary due to different institutional environment across the countries (Carlin & Mayer, 2000). There is no unanimous consent on the results of the studies. Some of the studies show a positive and significant relationship between corporate governance and firm performance, some studies reveal a negative and insignificant relationship or some studies even show a mixed result of the link between corporate governance and the firm performance.

Board composition (BC) and Ownership structure(OS) are primarily taken as the factors of corporate governance, where as financial performance of the firm is measured with the financial ratios i.e. Return on Capital employed (ROCE), Return on the equity (ROE), Profit after tax(PAT), Return on assets (ROA). For the detail study purpose the Board composition (BC) is further divided into two components a) Board size b) board composition. The study is based on the 121 small cap , mid cap and large cap companies listed on the Bombay Stock Exchange (BSE) India, for the period of 2010 -2011. The data are collected through Prowess database, maintained by CMIE (Center for monitoring Indian economy).

Hypothesis development

Board composition (BC) and firm's performance

Generally research on corporate governance and performance are based on principal-agent theory. Since the Berle and Means (1932) first proposed the characteristics of the modern corporation is the ownership and control power separation , mostly corporate governance and performance is researched from internal control and supervisory mechanisms that constitute by the specific forms of corporate governance the shareholders ' meeting, the board of directors and the management of the company, the results of our research focuses on the board size ,board composition and its effect on the firm performance. It further investigates the relationship between ownership structure and firm performance. Our study is also formulated on the grounds of the agency theory of corporate governance, where the management or board acts as agent and owners i.e. equity share holders are principal.

Board size (BZ)

Board size refers to the total number of the directors on the board for a particular financial year. There are no specific guidelines on the number of directors a company can have and there is no ideal board



size as well. During our study it was observed that generally the public limited companies have a larger board size as compare to private limited companies in India. The board size cannot be specified at the country level also, as the countries differ in their legal, social, economic, and corporate environment. One size cannot be fit for all. The board size has a positive association with the firm's performance. Larger board size led to better decision making which further results into better performance of the firm (Dalton et al., 1998).

In another study in the University of Lagos, Nigeria, based on 30 firms listed on Nigerian stock exchange tries to study the impact of board structure on the firm's financial performance in Nigeria. It further investigates the composition of the board of directors in the firm. By using Ordinary Least Square (OLS) regression the results show the positive relationship between the board size and firm performance (U. M. Uadiale, 2007). Larmou and Vafeas (2009) in their study focused on finding a relationship between board size and firm performance of the small firms with a history of poor operating performance. Multi-variable regression model was applied to test an empirical relationship between explained and explanatory variables. The results suggest that the larger board size is positively related to the shareholders value.

Board composition (BC)

Board composition is one of the most important components of corporate governance. It plays very crucial role in determining the governance strategy of any firm. Boards are composed of executive, non-executive and independent directors. Executive directors share a direct potential interest with the firm they are insiders. Non-executive directors and independent directors are outsiders. Independent directors do not have any direct or indirect interest or any relationship aligned with the firm. Board composition refers to the size of the boards i.e. the total number of the directors on the board for a particular financial year, their ratio and classification into executive, non-executive and independent directors. It also includes the independence of the board. Board composition reveals the level freedom or independence in the decision making process. In an empirical study by (Kim and Lee, 2003) it is showed that the corporate governance has a strong impact on the firm performance during the 1997-98 East Asian financial crisis. It further revealed that independent directors have traditionally been hailed as a way of improving, monitoring management. But further Bhagat and Black (2002) in their study presented the empirical evidence that challenges the previous study. The evidence shows that it is indifferent to have more independent directors on the board because the firms with more independent directors on their board do not perform better than other firms. On the basis of review of literature on the board size and board composition we formed argument that the board size and the board composition both are insignificant to the firms performance and this paved the way for development of hypothesis H01 and H02.

H01: The board size has insignificant impact on the firm's performance.

H02: The Board composition has insignificant effect on the firm's performance.

Table no 1. Independent Variables

Sr. no.	Factors	Indicators	Description	Symbolic
1	Board composition (BCN)	a) Board size b)Board Independence	a) Total no. of BOD sitting on board b) Ratios of DIRs to ID and ED to NED ect	a)BZ b) BI
2.	Ownership Structure (OS)	Ownership Structure	Percentages of shares held by various stake holders in the company	OS

Ownership structure (OS)



The ownership structure can be defined as the distribution of equity with regard to votes and capital but also by the identity of the equity owners. These structures are of major importance in corporate governance because they determine the incentives of managers and thereby the economic efficiency of the corporations they manage". - Jensen and Meckling

In a study based on 137 listed firms of Tehran Stock Exchange for the period of 2001-2006 by Fazlzadeh et.al.(2011) aimed at studying the role of ownership structure on firm performance. The study applied panel data regression analysis method. The results reveal that the ownership concentration did not have any significant effect on the firm's performance. The study further reveals that the industry factor moderates the effectiveness of the relationship between ownership structure and firm performance. Some of the researcher also found the positive and significant relationship between ownership structure and the firm performance, such as there is a relationship between the ownership structure and the operating performance of the firm (Jensen and Warner, 1988). The agency problem could be solved with the help of the ownership structure and the ownership concentration can influence the firm's performance (Shleifer and Vishny, 1997). Review of the literature on the ownership structure and firm performance gave us the basis for the argument that ownership structure is not related to firm performance and ownership structure has no effect on the corporate performance. There for to prove our point H03 was developed for the study.

H03: The ownership structure has insignificant impact on the firm's performance.

Research design and methodology

Data selection

The sample is selected on Stratified Random Sampling basis, which involved two stages in sample selection.

At the *first phase*, companies listed on the stock exchange are identified on the basis of their capital base i.e. as small cap, mid cap and large cap companies.

Second phase involved qualified corporate governance report and financial reports by way of modification, qualification or adverse opinion.

Initially the sample size was 200 companies listed on the Bombay Stock Exchange (BSE), India; due to unavailability of appropriate data the sample size shrink to 121 companies. Out of which forty companies are from large cap category, forty are from mid cap category and forty one companies are from the small cap category. The companies belong to different industrial sectors such as power, fuel, cement sugar, textile, telecommunication ,petroleum, automobile, entertainment, mining , iron , steel, pharmaceutical, fast moving consumer goods (FMCG) ect., for the period of 2010 -2011. The data is collected through Prowess database, maintained by CMIE (Center for Monitoring Indian Economy).

Variable selection and model construction

For the study purpose corporate governance is the independent variable which comprises of the factors of corporate governance as board composition and ownership structure, whereas firm's performance is dependent variable. There are many other factors which affect the firm's performance they are taken as control variables.

Independent variables

Based on the various conceptual and empirical studies in India and around the world few independent variables were selected, definition and description of which is given in the table no.1.

Dependent variables

Review of the literature on the corporate governance and the firm performance suggests that the firm performance can be mainly measured in two ways first market based performance and secondly accounting based performance. Market based performance measures and Accounting based performance measures differ in two main aspects. First is time based in which the market value is forward looking and accounting value is backward looking, whereas market based measure is what management will accomplish, where as accounting based measure is an estimates of what management has accomplished (Demsetz & Villalonga ,2001). Many researchers have utilized Tobin Q as a market based performance measure for the firm performance. Though the accounting value constrained by the standards set by the accountant, accounting policies opted by his firm and the accounting norms and



standards prevailing in the country, still the accounting rates can be better as they are free from the investors bias and speculations to a large extent. Secondly the capital market in India is not as developed as of Western and European countries; therefore we preferred the accounting based method to measure the firm performance. Various financial ratios such as Return on Capital employed (ROCE), Return on the equity (ROE), Profit after tax (PAT), Return on assets (ROA) are utilized for the study.

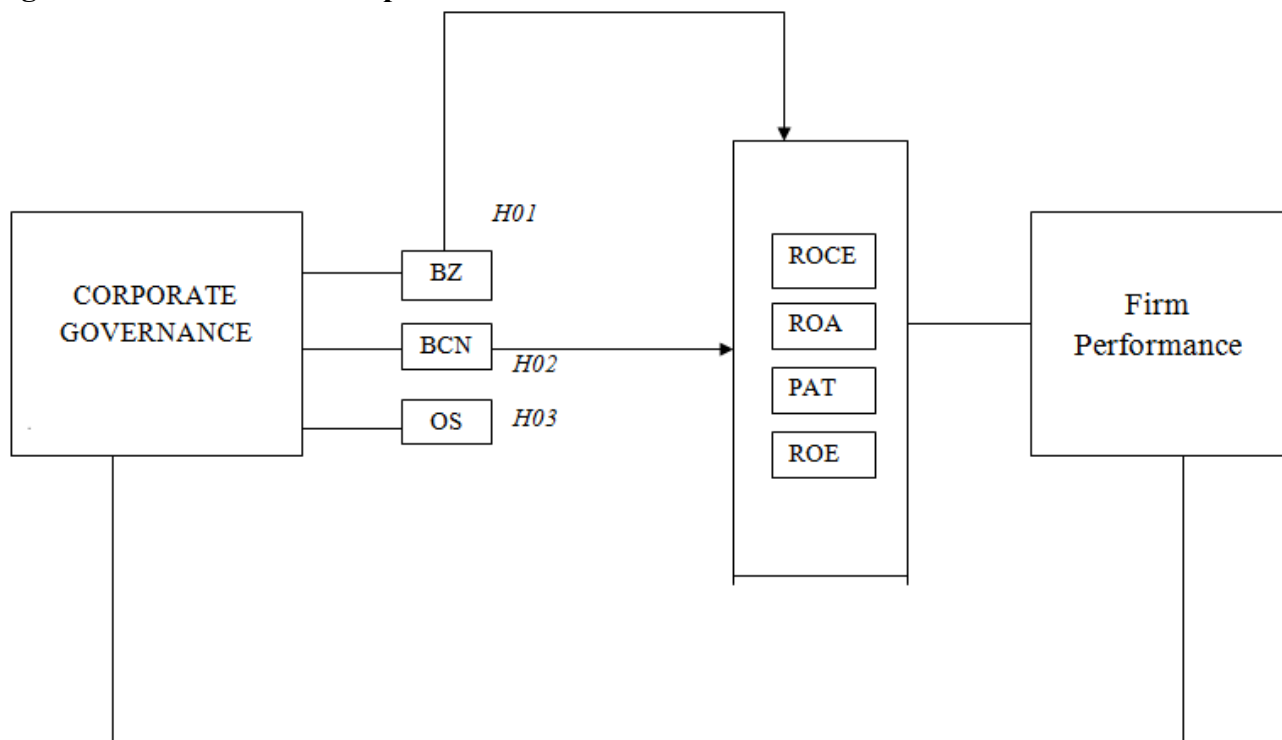
Control variables

Control variables are described in the Table no 2.

Table 2
Control Variable Description

Sr.no	Control Variables	Description	Symbolic
1	Size of the firm	Total assets	TA
2.	Leverage	Debt/Equity	LEV
3.	Liquidity	Current assets /Current Liabilities	COR
4.	Inventory Ratio		IR

Figure no 1: Test Model Corporate Governance and Firm Performance



Measurement of Corporate Governance Scores (CGS) and development of questionnaire

The study is based on the structured questionnaire. The questionnaire consists of 51 questions related to the corporate governance factors. The Corporate Governance Scores (CGS) reflects the scores obtained by an individual company on a particular corporate governance factor or component. The corporate scores (CGS) are based on the information provided by the firms in their annual reports. The annual corporate governance report was carefully and extensively reviewed for the study. The corporate governance score (CGS) was developed on the bases of Standards & Poor's (S&P) – Governance, Management, Accountability Metrics and Analysis (GAMMA). GAMMA scores attempts to assess the effectiveness of individual company governance practices as a system of interaction among a company's management, board, shareholders and other stakeholders aimed at building company value and ensuring fair distribution of its earnings.



Board size and firm performance

Board size (BZ) here refers to the size of the board. It refers to the total number of board of directors sitting on the board. In order to find out the impact of board size on the firm's financial performance the board size of the companies were divided into two categories a) companies with the smaller board size i.e. having less than 10 directors sitting on the board and b) companies with the smaller board size i.e. having more than 10 directors sitting on the board for the given particular financial year.

Board composition and firm performance

Further to find out the impact of board composition on the firm's financial performance the board composition was categorized into four categories. It facilitated the evaluation of the nature of the relation, degree of dependence and the impact of the Independent variable i. e. board composition on the dependent variable i. e. firm's performance.

Small board size with non compliance (SBSNC). The first category has firms which have small board size but are not compliant with the provisions in the Clause 49 and Voluntary Regulation, Act 2009. (SBSNC). This category includes the firms who score up to 30 points in the board composition category.

Small board size with compliance (SBSCL). Second categories has the firms with the small board size but are in full compliance with the regulatory provisions in the legislative framework of corporate governance in India (SBSCL). This category covers the firms who score between 31 points to 79 points in the board composition category of the questionnaire.

Large board size with non compliance (LBSNC). Third category firms have larger board size but are showing the non compliance with the regulatory and legislative provisions (LBSNC). This category consists of the firms scoring between 80 points to 89 points in the board composition category of the questionnaire.

Large board size with compliance (LBSCL). Fourth category covers the firms with large board size and they are compliant to the corporate governance norms, regulations and provisions in India (LBSCL). The firms who score above the 89 i.e. between 90 points to 100 points do come under this category.

Ownership structure and firm performance

Ownership structure gives a fair idea about the percentages of share held by the promoters, public, directors, private companies, institutional investors, government bodies and the foreign institutional investors in a firm. It also reveals the ownership pattern of the firm. In order to know the ownership pattern of the firms the ownership structure (OS) was categorized into three different patterns which includes, which are explained as follows.

Concentrated ownership. The firm which has more than 50% and above shares held by an individual share holder or a particular family or group was termed as firm with concentrated ownership. The firms scoring 38 points in the ownership structure category of the questionnaire come under this category.

Diversified ownership. The firm in which none of the stakeholders owns more than 25% share was termed as diversified ownership structure. In the questionnaire the firms scoring 33 points are termed as diversified ownership structure.

Block holdings ownership. The firms with more than one individual holding above 25% or where more than one stakeholder holds between 25% to 50% shares in the firm, such firm was termed as block holding ownership pattern. The firms scoring 43, 48 and 53 points in the questionnaire were put into the block holding category.

Results and Interpretation

The group statistics of Table no.3 displays the sample size, mean, standard deviation, and standard error for both group of companies (one with board size less than 10 and another with board size larger than 10). On average the Return on Capital Employed Percentage (ROCP) of companies having larger board size is 3.53% more than the companies having smaller board size. The other financial parameters like Profit after tax (PAT), Return on Asset (ROA) and Return on Equity (ROE) showed differences in averages of 2.31%, 0.4% and 6.07%, however the difference between the means is considerable among PAT, ROA and ROE.



The procedure produces two tests of the difference between the two groups. One test assumes that the variances of the two groups are equal. The Levene statistic tests this assumption. In Table no. 4, the significance value of the F statistic is 0.579 (for ROCEP%), 0.000(for PAT), 0.045 (for ROA) & 0.123(for ROE), the values greater than 0.10 shows that equal variances can be assumed for those groups i.e. ROCEP, ROE and for PAT, ROA equal variances cannot be assumed and parameters having value greater than 0.10, you can assume that the groups have equal variances and ignore the second test.

The t column displays the observed t statistic for each sample, calculated as the ratio of the difference between sample means divided by the standard error of the difference. The df column displays degrees of freedom. For the independent samples t test, this equals the total number of cases in both samples minus 2. The column labeled Sig. (2-tailed) displays a probability from the t distribution with 119 degrees of freedom where equal variances are assumed. The value listed is the probability of obtaining an absolute value greater than or equal to the observed t statistic, if the difference between the sample means is purely random. The Mean Difference is obtained by subtracting the sample mean for group 2 (where board size is more than 10) from the sample mean for group 1(where board size is less than 10). The 95% Confidence Interval of the Difference provides an estimate of the boundaries between which the true mean difference lies in 95% of all possible random samples of 121 companies. Since the significance value of the test is less than 0.05 in case of PAT and ROE, we can conclude that the average difference of 2.31% PAT between two groups and 6.07% among ROE is not due to chance alone. The companies now have to reconsider their decisions about board size. The t statistic provides strong evidence of a difference in PAT and ROE between companies having board size more and less than 10. The confidence interval suggests that in repeated samplings, the difference is unlikely to be much lower than 3108 (PAT) and 15.05% ROE. The companies will look into ways to retain these returns.

Figure no. 2

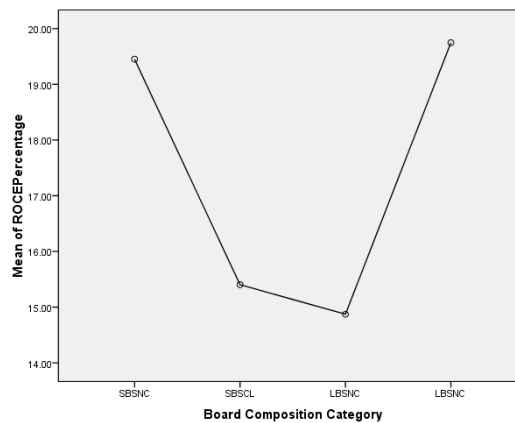


Figure no. 3

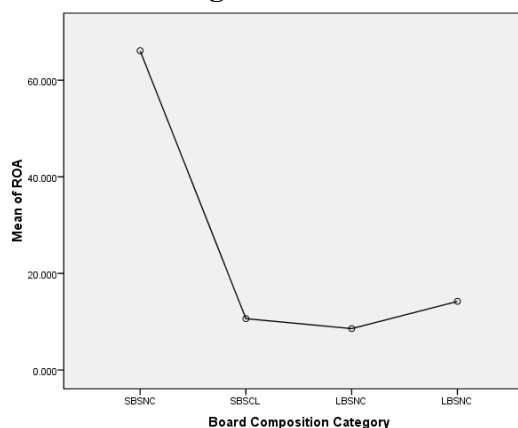




Figure no. 4

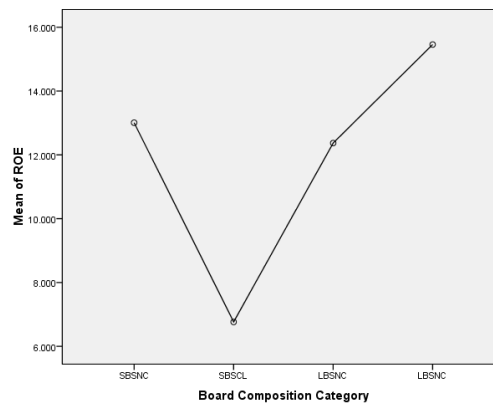
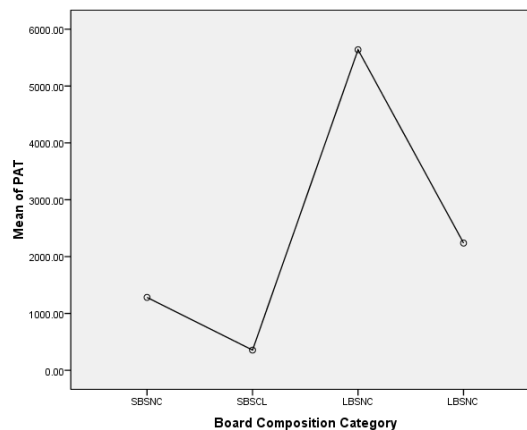


Figure no. 5



The Table no. 5 displays descriptive statistics for each group and for the entire data set with N indicating the size of each group and the standard deviation and standard error statistics confirm that as ROCEP, PAT, ROA, ROE increase, variation in performance decreases. One-Way ANOVA compares these sample estimates to determine if the population means differ. The standard deviation indicates the amount of variability of the scores in each group. These values should be similar to each other for ANOVA to be appropriate. Equality can be inspected via the Levene test. The 95% confidence interval for the mean indicates the upper and lower bounds which contain the true value of the population mean 95% of the time. The Levene statistic of Table no. 6 rejects the null hypothesis that the group variances are equal in case of ROA & PAT. ANOVA is robust to this violation when the groups are of equal or near equal size; however, we decided to continue to use F-test for other parameters too. As per data of corporate governance parameters in the research instrument, we are interested in finding out if financial parameters varied depending on different Board Compositions or not and for that ANOVA test is applied, the total variation is partitioned into two components. Between Groups represents variation of the group means around the overall mean. Within Groups represents variation of the individual scores around their respective group means. If desired, the between groups variation can be partitioned into trend components. According to Table no. 7 the significance value of the F test in the ANOVA table is 0.553 (ROCEP), 0.015(ROA), 0.185(ROE) and 0.001(PAT). Small significance value of 0.015(<.05) and 0.001 (<0.05) indicate group differences. Thus, we must reject the hypothesis that average financial parameters varied equally across different board compositions. The difference in financial parameters across different board compositions is significant for ROA and PAT only as the significance values of these parameters is less than 0.005.

The test of between-subjects effects helps us to determine the significance of a factor. However, they do not indicate how the levels of a factor differ. The post hoc tests show the differences in model-predicted means for each pair of factor levels. For more detailed analysis we used Tukey HSD Post



hoc test for pair wise comparisons in One-Way ANOVA whose results are shown in Tale no 8. The groups differ in some way. The means plot helped us to "see" and learn more about the structure of the differences in these structures. SBSNC and LBSNC showed higher mean ROCEP than their counterparts. Mean ROE of SBSNC, LBSNC & BSNC are far higher than SBSCL. Mean ROA of SBSNC is significantly higher than its other board composition categories while PAT is significantly higher of LBSNC than others. As it can be observed in figure no.2, 3, 4 and figure no.5.

Figure no. 7

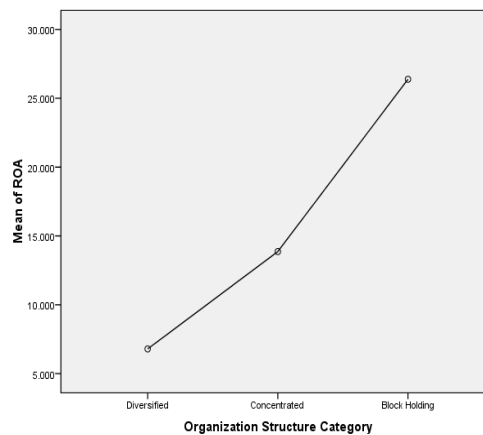


Figure no. 8

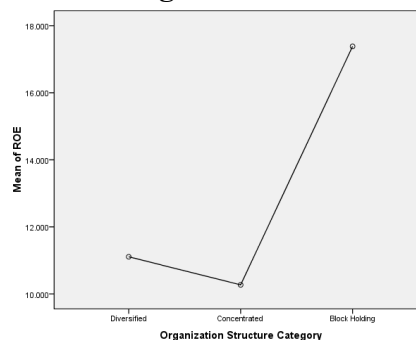
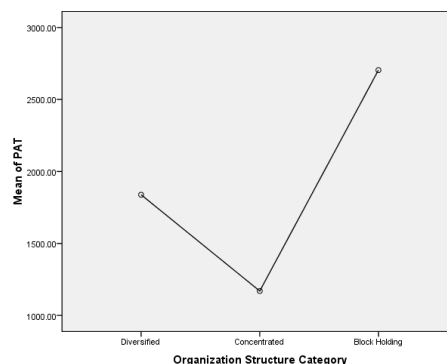


Figure no. 9



In this Table no. 13 displays descriptive statistics for each group and for the entire data set with N indicating the size of each group and the standard deviation and standard error statistics confirm that as ROCEP, PAT, ROA, ROE increase, variation in performance decreases. One-Way ANOVA compares these sample estimates to determine if the population means differ. The standard deviation indicates the amount of variability of the scores in each group. These values should be similar to each other for ANOVA to be appropriate. Equality can be inspected via the Levene test. The 95% confidence interval



for the mean indicates the upper and lower bounds which contain the true value of the population mean 95% of the time. The Levene statistic of Table no.14 accepts the null hypothesis that the group variances are not equal in case of ROCE, ROA, ROE and PAT. ANOVA is robust to this violation when the groups are of equal or near equal size; however, we decided to continue to use F-test for other parameters too.

As we are interested in finding out if financial parameters varied depending on different organization structures or not and for that ANOVA test is applied, the total variation is partitioned into two components. Between Groups represents variation of the group means around the overall mean. Within Groups represents variation of the individual scores around their respective group means. If desired, the between groups variation can be partitioned into trend components. According to Table no. 15 the significance value of the F test in the ANOVA table is 0.324(ROCEP), 0.326(ROA), 0.318(ROE) and 0.118(PAT). All the significant values are (>0.05) indicate no group differences. Thus, it is a must to accept the hypothesis that average financial parameters varied equally across different board compositions. The difference in financial parameters across different organization structures is insignificant for ROCE, ROA, ROE and PAT only as the significance values of these parameters is more than 0.005.

The tests of between-subjects effects help us to determine the significance of a factor. However, they do not indicate how the levels of a factor differ. The post hoc tests show the differences in model-predicted means for each pair of factor levels. For more detailed analysis we used Tukey HSD Post hoc test for pair wise comparisons in One-Way ANOVA whose results are shown in Table no. 16. Now thus as we know the groups differ in some way, in order to learn more about the structure of the differences. The means plot facilitates to "see" this structure. The ownership structure is categorized into diversified ownership structure, concentrated ownership structure and block holdings structure. The graphs further reveals that the firms with the block holding have highest mean of ROCE, ROA, ROE and PAT as compare to their other counterparts.

The graph related to the ownership structure categorization and ROCE shows that the firms with the block holding organization structure have the highest mean of ROCE, followed by the firms with the concentrated ownership structure. And the firms with the diversified ownership structure show the lowest level of mean of ROCE. Figure no.6. Further the graph related to the organization structure categorization and ROA shows that the firms with the block shareholding structure have the highest level of mean of ROA whereas the firm with the diversified organization structure has the lowest mean of ROA. Figure no.7. The graph related to the organization structure categorization and ROE shows that again the firms with block holding organization structure category have the highest mean of ROE, whereas the firms with the concentrated ownership have the lowest mean of ROE. Figure no. 8. Similarly the graph related to the organization structure categorization and PAT shows that the firms with the block holding organization structure have highest mean of PAT followed by the firms having diversified organization structure, and the firms with the diversified ownership structure show the lowest mean of PAT. Figure no. 9.

Thus it can be concluded that the firms with the block holding category of organization structure have highest mean of all the financial parameters i.e. ROCE, ROA, ROE and PAT. Therefore the null hypothesis can be accepted.

Conclusion

The post liberalization period of the Indian economy has witnessed several structural and regulatory reforms. The journey of Indian economy from a caterpillar to a beautiful butterfly has given inputs to the more complex organizational structure, operational framework failure, frauds and unethical business practices. In order to safeguard the interest of the investors there are many provisions in the legal and regulatory framework of India, in spite of that last two decades witnessed the series of the financial scams.

On establishing and analyzing the correlation among the independent variables as per the proposed model, it was found that relationship of significant nature exist between board size and firm performance. Hence, in simple words it can be concluded that *firstly* these factors are correlated and do have an impact on each other as well but the strength of relationship is not very strong. *Secondly* it can



be said that the board size affects the firm's performance. In India larger boards are less effective than smaller boards, except in the case of PSUs (Dey & Chouhan, 2007). *Thirdly* one size does not fit to all, standard board size vary from country to country and also depends on the nature of industry. In India smaller board are more successful particularly in private sector because of ease in decision making and less conflicts.

These findings that there is a relationship between board size and firm performance are in congruence with the past studies carried out by (Dalton et al., 1998; Hermalin and Weisbach, 2003; U. M. Uadiale, 2007; Balasubramanian, 2008 and Larmou & Vafeas, 2009) which have identified the effects of board size on the firm's performance, and found them to be correlated.

Fourthly the study results found that relationship of significant nature exist between board composition and firm performance. Hence, in simple words we can say that these factors are correlated and do have an impact on each other as well but the strength of relationship is not very strong. It can be further said that the board composition affects the firm's performance. *Fifthly* in India larger boards are less effective than smaller boards, except in the case of PSUs. Smaller board with non compliance and larger boards with compliance to standard corporate governance practices show higher levels of ROCE, ROA, and ROE the only change is in the case of PAT where the larger boards with the compliance and non compliance both are showing the higher degree of PAT. It can be possible because the firms with firms with the larger capital will show higher profits.

The results can be backed by the previous research outcomes, many researchers have found the positive and significant relationship between board composition and firms performance such as (Kim and Lee, 2003; Tvevor W. Chamberlain, 2007; Ameer et.al., 2009) and many other researchers propounds the same. The number of independent directors on the board plays a very important role. The ratio of executive to non executive directors ensures the fair decision making. *Sixthly* both the number and proportion of outside directors are positively and significantly correlated to the firm performance. In the India majority of private sector firms are owned by the individuals, or families. The promoters are the dominant shareholders and ownership is spread amongst the family members and group of friends. Therefore it becomes very significant to have more number of independent directors on the board so that the interest of minority shareholders can be protected.

Seventhly in the case of ownership structure and firm performance, it was found that relationship of insignificant nature exist between the dependent and independent variables. Hence, it can be said that these two variables are not correlated. It can be further said that the ownership structure does not affects the firm's performance.

In the nutshell we can say that there is a difference between the corporate governance system in UK, USA and INDIA. The corporate governance of the countries like UK and USA is based on the Anglo American model in which the ownership and management are separate, whereas in the India majority of the cases management and ownership is same. In India in case of majority of firms specially belonging to private sector ownership belongs to an individual or family or group of closely related corporate. In the case of state owned enterprises the ownership is with the government in both the cases the ownership pattern is either concentrated or is in bloc holding by government, corporate, and group of institutions. Capital market in India is not developed enough to encourage the diversified ownership structure. Therefore the study results suggest no relationship between the ownership structure and firm performance in India. The results can be backed by the previous research outcomes ,for instance in a study based on 137 listed firms of Tehran Stock Exchange for the period of 2001-2006 , (Alireza Fazlzadeh; Ali Tahbaz Hendi and Kazem Mahboubi, 2011) found that the ownership concentration did not have any significant effect on the firm's performance. There are many other studies in the western countries who find the positive relationship between the ownership structure and firm performance. The reason for that outcome could be the difference in the political governance, legal and regulatory framework and the governance system. As mentioned before in the countries like UK and USA the ownership and management are separate from each other, where as in India in majority of the cases the ownership and the management is the same and the firms where both are separate suffers from the holding and agency problem.



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Annexure

Tables

Table No 3 - Group Statistics

	Board Size	N	Mean	Std. Deviation	Std. Error Mean
ROCE Percentage	Less than 10	54	15.9287	18.05561	2.45706
	More than 10	67	19.4549	14.60148	1.78386
PAT	Less than 10	54	4.7574E2	1140.06534	155.14324
	More than 10	67	2.4408E3	4113.89345	502.59208
ROA	Less than 10	54	1.78188E1	62.327403	8.481685
	More than 10	67	1.38717E1	16.972589	2.073532
ROE	Less than 10	54	7.57333	25.774133	3.507415
	More than 10	67	1.52733E1	14.511155	1.772820

Table no 4 - Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ROCE Percentage	Equal variances assumed	.310	.579	-1.188	119	.237	-3.52622	2.96826	-9.40367	2.35122
	Equal variances not assumed			-1.161	101.052	.248	-3.52622	3.03632	-9.54944	2.49699
PAT	Equal variances assumed	22.013	.000	-3.404	119	.001	-1965.10058	577.30462	-3108.22139	-821.97977
	Equal variances not assumed			-3.736	78.292	.000	-1965.10058	525.99261	-3012.20992	-917.99124
ROA	Equal variances assumed	4.086	.045	.496	119	.620	3.947047	7.950263	-11.795268	19.689362
	Equal variances not assumed			.452	59.354	.653	3.947047	8.731467	-13.522396	21.416491
ROE	Equal variances assumed	2.415	.123	-2.073	119	.040	-7.699950	3.714946	-15.055915	-.343986
	Equal variances not assumed			-1.959	79.379	.054	-7.699950	3.929994	-15.521826	.121925



Table no.5 - Descriptive

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
ROCE Percentage	SBSNC	7	19.4514	12.20959	4.61479	8.1594	30.7434	2.57	41.33
	SBSCL	47	15.4040	18.81490	2.74443	9.8798	20.9283	-1.09	112.62
	LBSNC	4	14.8725	12.95788	6.47894	-5.7464	35.4914	3.49	26.71
	LBSNC	63	19.7459	14.74426	1.85760	16.0326	23.4592	.23	75.38
	Total	121	17.8812	16.25871	1.47806	14.9548	20.8077	-1.09	112.62
ROA	SBSNC	7	6.60965E1	143.189447	5.412052E1	-66.33160	198.52470	2.106	390.464
	SBSCL	47	1.06285E1	37.336588	5.446101	-33394	21.59093	-91.762	213.904
	LBSNC	4	8.57128	9.137788	4.568894	-5.96898	23.11154	.284	16.515
	LBSNC	63	1.42083E1	17.340297	2.184672	9.84119	18.57538	.067	107.611
	Total	121	1.56332E1	43.336642	3.939695	7.83292	23.43356	-91.762	390.464
ROE	SBSNC	7	1.30071E1	10.678417	4.036062	3.13125	22.88303	.530	33.200
	SBSCL	47	6.76404	27.301288	3.982302	-1.25192	14.78000	-95.300	87.200
	LBSNC	4	1.23700E1	9.592198	4.796099	-2.89333	27.63333	.780	20.500
	LBSNC	63	1.54576E1	14.802992	1.865002	11.72953	19.18570	-39.700	64.400
	Total	121	1.18369E1	20.591031	1.871912	8.13069	15.54320	-95.300	87.200
PAT	SBSNC	7	1.2823E3	1668.30978	6.30562E2	-260.5878	2825.2706	1.27	4904.74
	SBSCL	47	3.5561E2	1010.32335	1.47371E2	58.9686	652.2527	-3052.05	4904.74
	LBSNC	4	5.6386E3	9011.64567	4.50582E3	-8700.9492	19978.1292	1.13	18924.00
	LBSNC	63	2.2378E3	3658.53683	4.60932E2	1316.4209	3159.2020	.60	20040.00
	Total	121	1.5639E3	3293.10417	2.99373E2	971.1180	2156.5939	-3052.05	20040.00

Table no.6 - Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
ROCE Percentage	.214	3	117	.887
ROA	13.244	3	117	.000
ROE	1.207	3	117	.311
PAT	13.348	3	117	.000

Table no.7 - ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
ROCE Percentage	Between Groups	560.926	3	186.975	.702	.553
	Within Groups	31160.553	117	266.330		
	Total	31721.479	120			
ROA	Between Groups	19330.457	3	6443.486	3.659	.015
	Within Groups	206037.285	117	1761.002		
	Total	225367.743	120			
ROE	Between Groups	2046.121	3	682.040	1.634	.185
	Within Groups	48832.749	117	417.374		
	Total	50878.869	120			
PAT	Between Groups	1.642E8	3	5.473E7	5.631	.001
	Within Groups	1.137E9	117	9719203.026		
	Total	1.301E9	120			



Table no.8 - Multiple Comparisons

Tukey HSD Post hoc test							
Dependent Variable	(I) Board Composition Category	(J) Board Composition Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ROCE Percentage	SBSNC	SBSCL	4.04739	6.61163	.928	-13.1848	21.2795
		LBSNC	4.57893	10.22885	.970	-22.0809	31.2388
		LBSNC	-.29444	6.50189	1.000	-17.2406	16.6517
	SBSCL	SBSNC	-4.04739	6.61163	.928	-21.2795	13.1848
		LBSNC	.53154	8.49994	1.000	-21.6222	22.6853
		LBSNC	-4.34183	3.14548	.514	-12.5400	3.8564
	LBSNC	SBSNC	-4.57893	10.22885	.970	-31.2388	22.0809
		SBSCL	-.53154	8.49994	1.000	-22.6853	21.6222
		LBSNC	-4.87337	8.41486	.938	-26.8054	17.0586
LBSNC	SBSNC	.29444	6.50189	1.000	-16.6517	17.2406	
	SBSCL	4.34183	3.14548	.514	-3.8564	12.5400	
	LBSNC	4.87337	8.41486	.938	-17.0586	26.8054	
ROA	SBSNC	SBSCL	55.468057*	1.700117E1	.008	11.15722	99.77889
		LBSNC	57.525265	2.630252E1	.133	-11.02803	126.07856
		LBSNC	51.888263*	1.671898E1	.013	8.31293	95.46360
	SBSCL	SBSNC	-55.468057*	1.700117E1	.008	-99.77889	-11.15722
		LBSNC	2.057208	2.185678E1	1.000	-54.90898	59.02340
		LBSNC	-3.579794	8.088298	.971	-24.66065	17.50106
	LBSNC	SBSNC	-57.525265	2.630252E1	.133	-126.07856	11.02803
		SBSCL	-2.057208	2.185678E1	1.000	-59.02340	54.90898
		LBSNC	-5.637002	2.163800E1	.994	-62.03298	50.75898
	LBSNC	SBSNC	-51.888263*	1.671898E1	.013	-95.46360	-8.31293
		SBSCL	3.579794	8.088298	.971	-17.50106	24.66065
		LBSNC	5.637002	2.163800E1	.994	-50.75898	62.03298
ROE	SBSNC	SBSCL	6.243100	8.276783	.875	-15.32901	27.81521
		LBSNC	.637143	1.280501E1	1.000	-32.73707	34.01136
		LBSNC	-2.450476	8.139400	.990	-23.66452	18.76357
	SBSCL	SBSNC	-6.243100	8.276783	.875	-27.81521	15.32901
		LBSNC	-5.605957	1.064067E1	.952	-33.33915	22.12724
		LBSNC	-8.693576	3.937674	.127	-18.95649	1.56934
	LBSNC	SBSNC	-.637143	1.280501E1	1.000	-34.01136	32.73707
		SBSCL	5.605957	1.064067E1	.952	-22.12724	33.33915
		LBSNC	-3.087619	1.053416E1	.991	-30.54321	24.36797
	LBSNC	SBSNC	2.450476	8.139400	.990	-18.76357	23.66452
		SBSCL	8.693576	3.937674	.127	-1.56934	18.95649
		LBSNC	3.087619	1.053416E1	.991	-24.36797	30.54321
PAT	SBSNC	SBSCL	926.73079	1.26303E3	.883	-2365.1592	4218.6208
		LBSNC	-4356.24857	1.95404E3	.121	-9449.1316	736.6345
		LBSNC	-955.47000	1.24207E3	.868	-4192.7190	2281.7790
	SBSCL	SBSNC	-926.73079	1.26303E3	.883	-4218.6208	2365.1592
		LBSNC	-5282.97936*	1.62376E3	.008	-9515.0464	-1050.9123
		LBSNC	-1882.20079*	6.00887E2	.012	-3448.3153	-316.0863
	LBSNC	SBSNC	4356.24857	1.95404E3	.121	-736.6345	9449.1316
		SBSCL	5282.97936*	1.62376E3	.008	1050.9123	9515.0464
		LBSNC	3400.77857	1.60751E3	.154	-788.9271	7590.4842
	LBSNC	SBSNC	955.47000	1.24207E3	.868	-2281.7790	4192.7190
		SBSCL	1882.20079*	6.00887E2	.012	316.0863	3448.3153
		LBSNC	-3400.77857	1.60751E3	.154	-7590.4842	788.9271

*. The mean difference is significant at the 0.05 level.



Table no.14 - Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
ROCEPercentage	1.638	2	118	.199
ROA	2.402	2	118	.095
ROE	.863	2	118	.425
PAT	2.582	2	118	.080

Table no.15 - ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
ROCEPercentage	Between Groups	600.040	2	300.020	1.138	.324
	Within Groups	31121.440	118	263.741		
	Total	31721.479	120			
ROA	Between Groups	4238.990	2	2119.495	1.131	.326
	Within Groups	221128.753	118	1873.972		
	Total	225367.743	120			
ROE	Between Groups	977.676	2	488.838	1.156	.318
	Within Groups	49901.193	118	422.891		
	Total	50878.869	120			
PAT	Between Groups	4.629E7	2	2.314E7	2.176	.118
	Within Groups	1.255E9	118	1.064E7		
	Total	1.301E9	120			

Table No.16 - Multiple Comparisons

Tukey HSD Post hoc test

Dependent Variable	(I) Organization Structure Category	(J) Organization Structure Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ROCEPercentage	Diversified	Concentrated	-6.66098	4.69627	.335	-17.8083	4.4863
		Block Holding	-7.56100	5.42110	.347	-20.4288	5.3068
	Concentrated	Diversified	6.66098	4.69627	.335	-4.4863	17.8083
		Block Holding	-.90002	3.71026	.968	-9.7069	7.9068
	Block Holding	Diversified	7.56100	5.42110	.347	-5.3068	20.4288
		Concentrated	.90002	3.71026	.968	-7.9068	9.7069
ROA	Diversified	Concentrated	-7.070392	1.251833E1	.839	-36.78455	22.64377
		Block Holding	-19.588336	1.445040E1	.368	-53.88857	14.71190
	Concentrated	Diversified	7.070392	1.251833E1	.839	-22.64377	36.78455
		Block Holding	-12.517943	9.890006	.417	-35.99338	10.95750
	Block Holding	Diversified	19.588336	1.445040E1	.368	-14.71190	53.88857
		Concentrated	12.517943	9.890006	.417	-10.95750	35.99338
ROE	Diversified	Concentrated	.837369	5.946743	.989	-13.27813	14.95287
		Block Holding	-6.275343	6.864561	.632	-22.56943	10.01874
	Concentrated	Diversified	-.837369	5.946743	.989	-14.95287	13.27813
		Block Holding	-7.112712	4.698177	.288	-18.26455	4.03913
	Block Holding	Diversified	6.275343	6.864561	.632	-10.01874	22.56943
		Concentrated	7.112712	4.698177	.288	-4.03913	18.26455
PAT	Diversified	Concentrated	668.63707	9.43094E2	.759	-1569.9402	2907.2144
		Block Holding	-865.61900	1.08865E3	.707	-3449.6975	1718.4595
	Concentrated	Diversified	-668.63707	9.43094E2	.759	-2907.2144	1569.9402
		Block Holding	-1534.25607	7.45084E2	.103	-3302.8266	234.3144
	Block Holding	Diversified	865.61900	1.08865E3	.707	-1718.4595	3449.6975
		Concentrated	1534.25607	7.45084E2	.103	-234.3144	3302.8266

APPENDIX VII

FORM OF SELF-ASSESSMENT OF FULFILMENT OF ELIGIBILITY REQUIREMENTS FOR OPENING OF TRAINING MAJORS

Name of the major: Economics

Code: 7310101

Level: Bachelor

No.	Statutory eligibility requirements	Conformance requirements or evidences shown in the application	Passed/failed
1	<p>1. Major:</p> <p>1.1. Proposed major matching human resource demands (based on survey results);</p> <p>1.2. Have been defined in the guideline/plan for development of the training institution;</p> <p>1.3. Proposed major must be included in the Classification of Education, Level IV - Undergraduate Education, currently in force</p> <p>1.4. Resolution of the Committee/Board of Management on opening of proposed majors;</p> <p>1.5. New majors (give a demonstration of practicality and training experience in certain countries);</p> <p>Define whether majors have been open for enrolment of students in foreign countries; are currently piloted in Vietnam or the training institution is the first place that pilots these majors;</p> <p>Reference training programs are designed by 2 foreign accredited universities;</p> <p>There must be at least 02 opinions on necessity of opening of majors which have been received from 02 entities or organizations having demands for human</p>	<p>Highly appropriate</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p>	

	<p>resources graduating from such training programs.</p> <p>1.6. Undergraduate-level/master's-level majors, whether the same as or similar to the master's-level majors (if the same majors are not available), serve as the entrance requirement for master's training programs offered according to the formal education system by the training institution and have been completed by graduated students.</p>		
<p>2</p>	<p>2. Staff of lecturers:</p> <p>a) Have a staff of at least five (5) tenured lecturers who hold the title of professor, associate professor, Doctor of Philosophy and doctorate degree in majors the same as or similar to the proposed majors and are not in the list of tenured lecturers that serves as the eligibility requirement for opening of same-level sub-majors belonging to other majors; out of this staff, charge at least 01 professor or associate professor in the major the same as the proposed major with leading and taking necessary actions to carry out training programs as well as accountability for the training quality to his/her host training institution and the public;</p> <p>b) Lecturers in charge of lecturing activities must be fully qualified; other lecturers must hold at least master's degrees. Tenured lecturers must undertake at least 70% of the knowledge volume; both domestic and foreign guest lecturers who have entered into fixed-term lecturing agreements with the training institution shall take charge of the remaining knowledge volume. Tenured and guest lecturers are required to hold degrees relevant to contents of courses that they are assigned to teach;</p> <p>c) Each lecturer acting as the head for opening of majors and each lecturer giving lectures on basic theoretical and specialized knowledge must fulfill requirements concerning scientific researches in accordance with Point d, Clause 2 Article 2 and Point d, Clause 2 Article 3;</p>	<p>Yes</p>	

	<p>d) 30% of the remaining knowledge volume may be undertaken by guest lecturers who have signed lecturing agreements with the training institution;</p> <p>dd) With respect to non-public training institutions, there must be at least 40% of lecturers in the working ages;</p> <p>e) In case of opening of majors in the Classification of Education with 7-digit codes which are combined with multiple sub-majors in the Classification of Education with 8-digit codes, the staff of lecturers must comply with regulations laid down in Clause 2 Article 2 and Article 3.</p> <p>g) In case of opening of health-related majors, each minor or specialized subject must be undertaken by 01 lecturer as stipulated by Point b above; in order to give lectures on any healthcare-related course, lecturers and instructors of practice classes must obtain practicing certificates in healthcare and medical services, have been working directly for healthcare establishments that meet required conformity standards for healthcare establishments offering internship in the field of healthcare service in accordance with applicable laws and regulations;</p>		
3	<p>3. Basic facilities and amenities:</p> <p>a) Have the adequate number of classrooms and libraries providing access to diversified sources of information and materials which have been updated within a period of 5 years till the application for approval of opening of majors is filed, or electronic libraries which are granted copyright on access to the database relating to the proposed majors and meet lecturing, study and research requirements;</p> <p>b) Have the adequate number of laboratory rooms, practice or internship facilities, experimental production plants with necessary equipment to suit requirements as to teaching, learning and scientific research activities in the proposed majors and ensure</p>	<p>Yes</p> <p>Yes</p>	

	<p>that all items included in the list of required equipment and instrument must be fully provided with the aim of assisting in training in the stipulated majors or major groups (where appropriate);</p> <p>c) Build computer rooms having internet connections to enable students to access information on demand;</p> <p>d) Administer its website which is updated on a regular manner and made available to the public in accordance with Article 2 and 3 hereof.</p> <p>dd) Possess a science and technology journal (in case of opening of doctoral-level majors).</p>	<p>Yes</p> <p>Yes</p> <p>No</p>	
<p>4</p>	<p>4. Training program and certain other requirements for offer of the training program</p> <p>a) Clearly define whether the training program is research-oriented or practically-oriented;</p> <p>b) Prepare a curriculum framework for the proposed major which is established in accordance with laws and regulations, aligned with the National Qualifications Framework currently in force, and approved by the head of the training institution in accordance with applicable laws and regulations;</p> <p>c) Have publicly disseminated graduation requirements at different qualification levels with the minimum requirement that master's-degree and doctoral students upon graduation must reach the 7th level and 8th level of the National Qualifications Framework of Vietnam, respectively;</p> <p>d) Form partnership with international universities in training and science and technology activities (except for the majors that require information security in accordance with applicable laws);</p> <p>dd) Collaborate with enterprises and employers involved in the field of the</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Meet requirement</p>	

	<p>proposed major when the training program for such major is practically-oriented;</p> <p>e) Have already submitted a request for inspection of education quality or have been recognized as conformable to education quality standards according to applicable regulations and inspection plan of the Ministry of Education and Training;</p> <p>g) Organize an in-charge entity having professional competency in administering master's-level training activities; have already adopted regulations on master's-level training offered by the training institution;</p> <p>h) Do not violate applicable laws and regulations on conformity requirements for opening of training majors, student admission, organization and administration of training activities in currently available majors, and regulations regarding higher education within the period of 3 years till the application for approval of opening of the proposed majors is filed.</p>	<p>Meet requirement</p>	
<p>5</p>	<p>* Assess the training program and conformance requirements:</p> <ul style="list-style-type: none"> - Decision on establishment of the Assessment Committee that specifies members' majors, qualifications, titles and host entities. - Meeting minutes of the Assessment Committee and conclusions. - The institution's explanation for issues requested by the Assessment Committee (if any). <p>* In case of use of the training programs designed by other universities/foreign countries, give names of specific countries and define whether they are accredited and the training institution is granted copyright on use of these programs.</p> <p>* Memorandum of approval of the proposal issued by the Science and Training Committee of the training institution.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>	

6	Conditions for carrying out the training program: Other human and funding resources	Meet requirement	
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HEAD OF THE TRAINING INSTITUTION

(signature and stamp)

A handwritten signature in blue ink, appearing to read 'Raymond Gordon', with a large, stylized flourish below the name.

PROF. DR. RAYMOND DANIEL GORDON

VICE CHANCELLOR & PRESIDENT

APPENDIX VIII

TRAINING PROGRAMME APPRAISAL MINUTES

Time: 3:00 PM - 5:00 PM

Date: Thursday, 13 April, 2023

Location: BUV Ecopark Campus & via Microsoft Teams (online)

Today, at the abovementioned time, date and location, the External Programme Appraising Committee (the Committee) had met to appraise the training programme at bachelor's level in the **Business Administration** discipline (code: **7340101**) and **Economics** discipline (code: **7310101**) offered by the British University Vietnam (BUV). The Programme Drafting Committee for this programme included:

Order	Full name	Title
1	Professor. Dr Raymon Gordon - Vice Chancellor and President	Chair
2	Jyotsna Ghildiyal Bijalwan - Dr. - Business Management - Head Academic Quality	Member
3	Dr Prabu Mohan	Member
4	Dr Mike Perkins -Head of Centre for Research and Innovation	Expert Representative
5	Mr. Nguyen Hai Minh - Partner in charge of Tax & Business Advisory Services, Mazars Vietnam	Employer Representative

Details of the meeting are as follows:

I. Members of the External Programme Appraising Committee

Order	Full name	Committee Position
1	Assoc. Professor Dr Jason MacVaugh - Dean (Higher Education)	Chair
2	Linh Dao - Quality Assurance Officer	Member - Secretary
3	Dr. Syed Zaidi - Senior Lecturer School of Justice, Security and Sustainability, Staffordshire University	Reviewer 1
4	Dr. Sionade Robinson - Vice-President (Enterprise, Engagement & Employability), University of London	Reviewer 2

5	Ms. Dang Thi Mai Trang - Country Head, ICAEW Malaysia Limited Representative in Hanoi	Employer Representative
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II. Content

1. A representative of the Programme Drafting Committee from the British University Vietnam briefed the development of the Detailed Scheme and Programme Content at the bachelor's level in the Business Administration discipline and Economics discipline.

2. Feedback from the Committee

2.1. Feedback from Reviewer 1: Dr. Syed Zaidi

- Regarding the general objectives and specific objectives of the training programme
 - o The general objectives and specific objectives are well-defined and make logical sense, given the training requirements of the disciplines by the Vietnam MOET.
- Regarding the expected learning outcomes
 - o Learning outcomes have covered knowledge, skills and autonomy as regulated. The outcomes align with the contemporary demands in the industry.
- Regarding the structure of the training programme
 - o The programme has an overall good structure. It was clearly developed with reference to that of other universities in Vietnam and in leading universities in the world. Additionally, the enhancement of traditional learning hours like in the Vietnamese system is positive and would work well for Vietnamese students.
- Regarding the academic load:
 - o The academic load seems suitable for the level and is reasonably distributed across the years. It is comparable to that in the UK system (i.e., CATS).
- Regarding the training programme content:
 - o Very selective modules with expected learning outcomes that match the programme objectives.
 - o The areas covered are contemporary, relevant, and updated given national and international socioeconomic development and demands.

2.2. Feedback from Reviewer 2: Dr. Sionade Robinson

- Regarding the general objectives and specific objectives of the training programme
 - o The objectives seem specific, well-defined and identified based on insights into real-world requirements and demands.
- Regarding the expected learning outcomes

- The identified learning outcomes are appropriate to the level and necessary to help students achieve the programme objectives.
- The outcomes are student-centred, realistic and deliverable within the scope of the programme.
- Regarding the structure of the training programme
 - Generally good structure. The modules are relevant and suitable to the overall objectives of the programme.
 - A reasonable ratio of the common skills and knowledge (51 credits including the Vietnamese modules) to the specialised skills and knowledge (80 credits).
 - Appreciate the practicality of the programme as there are plenty of opportunities for internship and hands-on learning opportunities.
- Regarding the academic load:
 - The academic load seems appropriate to the level and objectives of the programme.
- Regarding the training programme content:
 - The learning activities and forms of assessment are consistent with the expected learning outcomes and are suitable for the level of training.
 - The authors should clarify how the balance between individual and teamwork assessment can be achieved.
- Summary: Satisfactory with no major amendments required.

2.3. Feedback from Industry Representative: Ms. Dang Thi Mai Trang

- Regarding the general objectives and specific objectives of the training programme
 - The objectives are specific and match the desired qualities and qualifications that many employers expect from graduates.
- Regarding the learning outcomes
 - Clear learning outcomes that are consistent with the programme objectives. Suitable at the bachelor's level.
- Regarding the structure of the training programme
 - Viable programme structure. Foundation and specialised training credit load should be adequate for graduates to enter the professional stage.
- Regarding the academic load:
 - Difficult to know the specifics of load arrangement from an industry perspective, however the amount of specialised knowledge outlined at each level seems appropriate.
- Regarding the training programme content:

- o The programme content is highly practical and up to date; all modules are relevant and should prepare students to become competent in the world of work.

Summary: Satisfactory without any amendments required.

2.4. Feedback from Committee Member: Ms Dao Dieu Linh

- Regarding the general objectives and specific objectives of the training programme
 - o Clear, practical and deliverable objectives.
- Regarding the learning outcomes
 - o Concise and well-defined; compatible to the current demands in the industry.
- Regarding the structure of the training programme
 - o Logical structure with a good range of modules covering a wide range of relevant and desirable skills and knowledge in the industry. Ample opportunities for practical learning.
- Regarding the academic load:
 - o Suitable to the intended level
- Regarding the training programme content:
 - o Match with the overall objectives of the programme. Seem to respond well to the market demands.

Summary: Well-developed and satisfactory. No amendments required.

2.5. Feedback from Committee Chair: Jason MacVaugh

- Regarding the general objectives and specific objectives of the training programme
Pleased to agree with the committee that the programme meets the expected objectives.
- Regarding the learning outcomes
Glad to note that the committee was able agree the clarity of our learning outcomes.
- Regarding the structure of the training programme
Happy to know that the structures we have designed into the programme were accepted by the committee
- Regarding the academic load:
Agree that the proposed load will suit the training needs of students here in Vietnam

- Regarding the training programme content:
Proud that the content developed in the drafting committee is recognised as meeting the needs of industry, and also meets the international standard for such programmes
- 3. The representative from BUV accepted the feedback and answered questions raised by the Committee.
- 4. The Committee discussed and the training programme was balloted.
The Ballot Counting Board included:

- Deputy University Registrar, <i>Mr. Tran Duc Trung</i>	Chair
- Senior Academic Compliance Officer, <i>Ms. Hoang Linh Chi</i>	Secretary
- Academic Compliance Officer, <i>Ms. Dang Thuy Tien</i>	Member
- 5. The Chair of the Ballot Counting Board announced the results:
No. of approval ballot: 05 No. of disapproval ballot: 0

6. Conclusion

The training programme at the bachelor’s level in the **Business Administration** discipline (code: **7340101**) and **Economics** discipline (code: **7310101**) offered by BUV met all requirements for content and form.

The official inspection by the Committee found that BUV fulfilled all conditions on the lecturing staff, facilities, technology, and educational resources to open the Business Administration discipline and Economics discipline.

Suggestions for improvement:

Document the working process (already in place in practice) to ensure the balance between individual and group assessments; types of assessments, and their distribution across levels of study.

The meeting closed at 5:00 PM, Thursday April 13 2023.

Secretary of Committee



Linh Dao

Chair of Committee



Assoc. Professor Dr Jason MacVaugh

APPRAISAL OF A TRAINING PROGRAMME AT THE BACHELOR'S LEVEL

Appraiser's full name: Dang Thi Mai Trang

Position in the Programme Appraisal Committee: Employer Representative

Name of the training institution offering the training programme: British University Vietnam

Discipline 1: **Business Administration** Code: **7340101**

Discipline 2: **Economics** Code: **7310101**

Training Level: Bachelor's level



No.	Category	Comment	Conclusion (Satisfactory / Dissatisfactory)
1	Rationale for developing the programme	Provided ample evidence to rationalise the necessity to open the discipline.	Satisfactory
2	Programme objectives	The objectives are specific and match the desired qualities and qualifications that many employers expect from graduates.	Satisfactory

3	<p>Programme structure:</p> <ul style="list-style-type: none"> - Suitability of the modules; the arrangement of the blocks of knowledge) - Learning hours of each module - ... 	<p>Viable programme structure. Foundation and specialized training credit load can provide adequate for graduates to enter the professional stage.</p>	<p>Satisfactory</p>
4	<p>Academic load</p>	<p>Suitable academic load to the level; reasonable distribution of common skills and knowledge and specialised knowledge.</p>	<p>Satisfactory</p>
5	<p>Programme content (modern, suitable to the objectives, level of training, and the country's socioeconomic development; supporting transition to other levels of training and global integration)</p>	<p>The programme content is highly practical and up to date; all modules are relevant and should prepare students to become competent in the world of work.</p>	<p>Satisfactory</p>
6	<p>Module descriptors (objectives, content, teaching methods, assessment methods, texts & references)</p>	<p>Clear learning outcomes that are consistent with the programme objectives. Suitable at the bachelor's level. Up-to-date training methods.</p>	<p>Satisfactory</p>

LIMITE
 VĂN PHÒNG
 ĐẠI DIỆN
 TẠI THÀNH
 HÀ NỘI

Other comments

A satisfactory, up-to-date and viable programme. No amendments required.

Overall conclusion about the training programme

Please choose one of the following

- Satisfactory and no amendments required**
- Conditionally satisfactory - amendment(s) required
- Unsatisfactory

If any amendments needed, please provide more detail below

None.

Hanoi, 12 April 2023

(Place, Date)

Member of the Programme Appraisal Committee

(Signature and Full name)



Đặng Thị Mai Trang
TRƯỞNG ĐD. ICAEW VIỆT NAM

APPRAISAL OF A TRAINING PROGRAMME AT THE BACHELOR'S LEVEL

Appraiser's full name: Dao Dieu Linh

Position in the Programme Appraisal Committee: Committee member

Name of the training institution offering the training programme: British University Vietnam

Discipline 1: **Business Administration** Code: **7340101**

Discipline 2: **Economics** Code: **7310101**

Training Level: Bachelor's level

No.	Category	Comment	Conclusion (Satisfactory / Dissatisfactory)
1	Rationale for developing the programme	The programme was developed based on the developing and urgent needs in the market at regional and national levels.	Satisfactory

2	Programme objectives	Clear, practical and deliverable objectives.	Satisfactory
3	Programme structure: - Suitability of the modules; the arrangement of the blocks of knowledge) - Learning hours of each module - ...	Logical structure with a good range of modules covering a wide range of relevant and desirable skills and knowledge in the industry. Ample opportunities for practical learning.	Satisfactory
4	Academic load	Suitable to the intended level	Satisfactory
5	Programme content (modern, suitable to the objectives, level of training, and the country's socioeconomic development; supporting transition to other levels of training and global integration)	Match with the overall objectives of the programme. Seem to respond well to the market demands.	Satisfactory

6	Module descriptors (objectives, content, teaching methods, assessment methods, texts & references)	Informative, well presented with updated resources and student-centered and modern techniques.	Satisfactory
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Other comments

None.

Overall conclusion about the training programme

Please choose one of the following

- Satisfactory and no amendments required**
- Conditionally satisfactory - amendment(s) required
- Unsatisfactory

If any amendments needed, please provide more detail below


None.

Hung Yen, 12 April 2023

(Place, Date)

Member of the Programme Appraisal Committee

(Signature and Full name)



Đào Hải Yến

APPRAISAL OF A TRAINING PROGRAMME AT THE BACHELOR'S LEVEL

Appraiser's full name: Dr. Sionade Robinson

Position in the Programme Appraisal Committee: Reviewer

Name of the training institution offering the training programme: British University Vietnam

Discipline 1: **Business Administration** Code: **7340101**

Discipline 2: **Economics** Code: **7310101**

Training Level: Bachelor's level

No.	Category	Comment	Conclusion (Satisfactory / Dissatisfactory)
1	Rationale for developing the programme	Very detailed, well supported with examples and analysis of the market research.	Satisfactory
2	Programme objectives	The objectives seem specific, well-defined and identified based on the insights of the real-world requirements and demands.	Satisfactory

3	<p>Programme structure:</p> <ul style="list-style-type: none"> - Suitability of the modules; the arrangement of the blocks of knowledge) - Learning hours of each module - ... 	<p>Generally good structure. The modules are relevant and suitable to the overall objectives of the programme. A reasonable ratio of the common skills and knowledge (51 credits including the Vietnamese modules) to the specialised skills and knowledge (80 credits). Appreciate the practicality of the programme as there are plenty of opportunities for internship and hands-on learning opportunities.</p>	Satisfactory
4	Academic load	<p>The academic load seems appropriate to the level and objectives of the programme.</p>	Satisfactory
5	<p>Programme content (modern, suitable to the objectives, level of training, and the country's socioeconomic development; supporting transition to other levels of training and global integration)</p>	<p>The learning activities and forms of assessment are consistent with the expected learning outcomes and are suitable for the level of training. The content is up-to-date and suitable to the industry demands regionally and internationally. The identified learning outcomes are appropriate to the level and necessary to help students achieve the programme objectives. The outcomes are student-centred, realistic and deliverable within the scope of the programme. The authors should clarify how the balance between individual and teamwork assessment can be achieved.</p>	Satisfactory

6	Module descriptors (objectives, content, teaching methods, assessment methods, texts & references)	The MDs are built on a good practice we've seen in our partnership in the past 10 years (i.e., teaching practices including lectures and seminars). Positive in the use of Canvas in supporting learning.	Satisfactory
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Other comments

Overall, the programme is satisfactory, and no major amendments are required.

Overall conclusion about the training programme

Please choose one of the following

- Satisfactory and no amendments required**
- Conditionally satisfactory - amendment(s) required
- Unsatisfactory

If any amendments needed, please provide more detail below

The authors should clarify how the balance between individual and teamwork assessment is achieved.

Dr Sionade Robinson, FRGS
Vice President Enterprise,
Engagement, Employability
The President's Office
City, University of London
London EC1V 0HB

London, 12 April 2023

(Place, Date)

Member of the Programme Appraisal Committee

(Signature and Full name)

*Sionade
Sionade Robinson*

APPRAISAL OF A TRAINING PROGRAMME

AT THE BACHELOR'S LEVEL

Appraiser's full name: Dr. Syed Zaidi

Position in the Programme Appraisal Committee: Reviewer

Name of the training institution offering the training programme: British University Vietnam

Discipline 1: **Business Administration** Code: **7340101**

Discipline 2: **Economics** Code: **7310101**

Training Level: Bachelor's level

No.	Category	Comment	Conclusion (Satisfactory / Dissatisfactory)
1	Rationale for developing the programme	Well explained with plenty of evidence about the current demands in the industry in Vietnam and in the world.	Satisfactory

2	Programme objectives	The general objectives and specific objectives are well-defined and make logical sense, given the training requirements of the disciplines by the Vietnam MOET.	Satisfactory
3	<p>Programme structure:</p> <ul style="list-style-type: none"> - Suitability of the modules; the arrangement of the blocks of knowledge) - Learning hours of each module - ... 	The programme has an overall good structure. It was clearly developed with reference to that of other universities in Vietnam and in leading universities in the world. Additionally, the enhancement of traditional learning hours like in the Vietnamese system is positive and would work well for Vietnamese students.	Satisfactory
4	Academic load	The academic load seems suitable for the level and is reasonably distributed across the years. It is comparable to that in the UK system (i.e., CATS).	Satisfactory
5	Programme content (modern, suitable to the objectives, level of training, and the country's socioeconomic development; supporting transition to other levels of training and global integration)	Learning outcomes have covered knowledge, skills and autonomy as regulated. The outcomes align with the contemporary demands in the industry.	Satisfactory

6	Module descriptors (objectives, content, teaching methods, assessment methods, texts & references)	The MDs are built on a good practice we've seen in our partnership in the past 10 years (i.e., teaching practices including lectures and seminars). Positive in the use of Canvas in supporting learning.	Satisfactory
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Other comments

Everything seems good and no standing questions.

Overall conclusion about the training programme

Please choose one of the following

- Satisfactory and no amendments required**
- Conditionally satisfactory - amendment(s) required
- Unsatisfactory

If any amendments needed, please provide more detail below

None.

Stoke-on-Trent, 12 April 2023

(Place, Date)

Member of the Programme Appraisal Committee

(Signature and Full name)



Dr. Syed MT Zaib

APPRAISAL OF A TRAINING PROGRAMME AT THE BACHELOR'S LEVEL

Appraiser's full name: Jason MacVaugh

Position in the Programme Appraisal Committee: Committee chair

Name of the training institution offering the training programme: British University Vietnam

Discipline 1: **Business Administration** Code: **7340101**

Discipline 2: **Economics** Code: **7310101**

Training Level: Bachelor's level

No.	Category	Comment	Conclusion (Satisfactory / Dissatisfactory)
1	Rationale for developing the programme	As established by the programme drafting committee, there is a strong rationale for this programme.	Satisfactory

2	Programme objectives	As established by the programme drafting committee, the programme has clear objectives.	Satisfactory
3	Programme structure: - Suitability of the modules; the arrangement of the blocks of knowledge) - Learning hours of each module - ...	As established by the programme drafting committee, the programme structure is suitable for this discipline.	Satisfactory
4	Academic load	As established by the programme drafting committee, the academic load is correct for this sort of training.	Satisfactory
5	Programme content (modern, suitable to the objectives, level of training, and the country's socioeconomic development; supporting transition to other levels of training and global integration)	As established by the programme drafting committee, the content is up to date and designed to meet the needs of Vietnamese students in the current socioeconomic trajectory.	Satisfactory

6	Module descriptors (objectives, content, teaching methods, assessment methods, texts & references)	As established by the programme drafting committee, the module descriptors are suitable for programme delivery.	Satisfactory
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Other comments

Overall conclusion about the training programme

Please choose one of the following

- Satisfactory and no amendments required**
- Conditionally satisfactory - amendment(s) required
- Unsatisfactory

If any amendments needed, please provide more detail below

Hung Yen, 12 April 2023

(Place, Date)

Member of the Programme Appraisal Committee

(Signature and Full name)



APPRAISAL OF THE TRAINING PROGRAMME
AT THE BACHELOR'S LEVEL AT THE BRITISH UNIVERSITY VIETNAM
DISCIPLINES: BUSINESS ADMINISTRATION (CODE: 7340101) &
ECONOMICS (CODE: 7310101)

For Reviewers

Reviewer's full name: Dr. Sionade Robinson

Place of work: City, University of London

Contact address: A102, College Building, City, University of London, Northampton Square, London, UK.

Phone number: +44 (0)20 7040 3366

Email: sionade.robinson.2@city.ac.uk

I. General objectives, specific objectives of the training programme

(Comments on the objectives for knowledge, skills, and autonomy and responsibilities)

The objectives seem specific, well-defined and identified based on the insights into real-world requirements and demands.

II. Expected Learning outcomes

(Comments on the expected learning outcomes of the programme at the bachelor's level)

The identified learning outcomes are appropriate to the level and necessary to help students achieve the programme objectives. The outcomes are student-centred, realistic and deliverable within the scope of the programme.

III. Programme structure

(Comments on the suitability of the modules in the programme, the arrangement of the blocks of knowledge, learning hours of each module, the ratio of the common skills and knowledge to the specialised skills and knowledge, the ratio of theory to practice)

Generally good structure. The modules are relevant and suitable to the overall objectives of the programme. A reasonable ratio of the common skills and knowledge (51 credits including the Vietnamese modules) to the specialised skills and knowledge (80 credits). Appreciate the practicality of the programme as there are plenty of opportunities for internship and hands-on learning opportunities.

IV. Academic load

(Is the academic load reasonable?)

The academic load seems appropriate to the level and objectives of the programme.

V. Programme content

(Comments if the programme content is developed based on the expected learning outcomes of the programme, is suitable for the level of training and the country's socioeconomic development, is modern, and can support the transition to other levels of training and global integration)

The learning activities and forms of assessment are consistent with the expected learning outcomes and are suitable for the level of training. The authors should clarify how the balance between individual and teamwork assessment is achieved.

VI. Conclusion

Please choose one of the following

- Satisfactory and no amendments required**
- Conditionally satisfactory - amendment(s) required
- Unsatisfactory

If any amendments needed, please provide more detail below

None.

Dr Sionade Robinson, FRGS
Vice President Enterprise, Engagement, Employability
The President's Office
City, University of London
London EC1V 0HB

London, 12 April 2023

(Place, Date)

Reviewer

(Signature and Full name)

Sionade
Sionade Robinson

**APPRAISAL OF THE TRAINING PROGRAMME
AT THE BACHELOR'S LEVEL AT THE BRITISH UNIVERSITY
VIETNAM**

**DISCIPLINES: BUSINESS ADMINISTRATION (CODE:
7340101) & ECONOMICS (CODE: 7310101)**

For Reviewers

Reviewer's full name: Dr. Syed Zaidi

Place of work: School of Justice, Security and Sustainability, Staffordshire University, UK

Contact address: Room LW002, Law Building, Staffordshire University, Leek Road, Stoke-on-Trent, UK.

Phone number: +44 (0)1782 294129

Email: syed.zaidi@staffs.ac.uk

I. General objectives, specific objectives of the training programme

(Comments on the objectives for knowledge, skills, and autonomy and responsibilities)

The general objectives and specific objectives are well-defined and make logical sense, given the training requirements of the disciplines by the Vietnam MOET.

II. Expected Learning outcomes

(Comments on the expected learning outcomes of the programme at the bachelor's level)

Learning outcomes have covered knowledge, skills and autonomy as regulated. The outcomes align with the contemporary demands in the industry.

III. Programme structure

(Comments on the suitability of the modules in the programme, the arrangement of the blocks of knowledge, learning hours of each module, the ratio of the common skills and knowledge to the specialised skills and knowledge, the ratio of theory to practice)

The programme has an overall good structure. It was clearly developed with reference to that of other universities in Vietnam and in leading universities in the world. Additionally, the

enhancement of traditional learning hours like in the Vietnamese system is positive and would work well for Vietnamese students.

IV. Academic load

(Is the academic load reasonable?)

The academic load seems suitable for the level and is reasonably distributed across the years. It is comparable to that in the UK system (i.e., CATS).

V. Programme content

(Comments if the programme content is developed based on the expected learning outcomes of the programme, is suitable for the level of training and the country's socioeconomic development, is modern, and can support the transition to other levels of training and global integration)

Very selective modules with expected learning outcomes that match the programme objectives. The areas covered are contemporary, relevant, and updated given the national and international socioeconomic development and demands.

VI. Conclusion

Please choose one of the following

- Satisfactory and no amendments required**
- Conditionally satisfactory – amendment(s) required
- Unsatisfactory

If any amendments needed, please provide more detail below

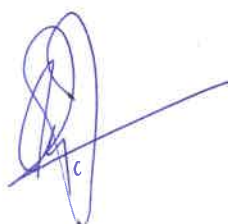
None.

Stoke-on-Trent, 12 April 2023

(Place, Date)

Reviewer

(Signature and Full name)



Dr. Syed MT Zaib

APPENDIX IX

BRITISH UNIVERSITY VIETNAM

SOCIALIST REPUBLIC OF VIETNAM

Independence - Freedom - Happiness

No: 1004D/2023/QD-BUV

Hung Yen, 10 April 2023

DECISION

**On Setting up the Programme drafting Committee of
Finance and Economic programme at Bachelor Level**

**DECISION OF VICE CHANCELLOR & PRESIDENT OF
BRITISH UNIVERSITY VIETNAM**

Pursuant to:

- *Law on Higher Education No. 08/2012/QH13 dated 18 June 2012 and amendments to the Law on Higher Education No. 34/2018/QH14 dated 19 November 2018;*
- *Circular 17/2021/TT-BGDDT of the Ministry of Education and Training dated 22 June 2021 providing for standards and formulation, appraisal and promulgation of training programmes of higher education;*
- *Circular 02/2022/TT-BGDDT of the Ministry of Education and Training dated 18 January 2022 regulating conditions and procedures for opening disciplines, as well as suspending operations of disciplines at the bachelor's, master's, and doctoral levels;*
- *Circular 09/2022/TT-BGDDDT of the Ministry of Education and Training dated 06 June 2022 on the statistical list of educational disciplines in higher education;*
- *Policy on Discipline Opening and Programme Issuance attached to the Decision of 0304/2023/QD-BUV of the Vice Chancellor & President of British University Vietnam dated 03 April 2023;*
- *Meeting Minutes of the University Council of British University Vietnam No. 002/2023/BB-HDT dated 10 April 2023;*
- *Resolution of the University Council of British University Vietnam No. 1004D/2023/NQ-HDT dated 10 April 2023.*



DECIDES

Article 1. Approving the setting up the Programme Drafting Committee of Economics Programme at Bachelor Level with the individuals as listed in the Appendix 1 to this Decision.

Article 2. The Programme Drafting Committee is responsible for drafting the Economics programme in accordance with provisions as stipulated in Circular No. 17/2021/TT-BGDĐT. Once the committee has completed its mission, it will be dismissed.

Article 3. This Decision takes effect from its signing date.

Article 4. The Programme Drafting Committee and other relevant departments and individuals are responsible for implementing this Decision.

Recipients:

- Per Article 4;
- Archived.

ON BEHALF OF

BRITISH UNIVERSITY VIETNAM



PROF. DR. RAYMOND DANIEL GORDON

VICE CHANCELLOR & PRESIDENT



APPENDIX I TO THE DECISION NO. 1004D/2023/QĐ-BUV

LIST OF PROGRAMME DRAFTING COMMITTEE

(issued by the Vice Chancellor & President of
British University Vietnam on 10 April 2023)

No.	Full name	Qualifications	Current work place	Position in the Committee
1	Raymon Gordon	Professor. Doctor	British University Vietnam	Chair
2	Jyotsna Ghildiyal Bijalwan	Doctor	British University Vietnam	Member
3	Prabu Mohan	Doctor	British University Vietnam	Member
4	Mike Perkins	Doctor	British University Vietnam	Expert Representative
5	Mr. Nguyen Hai Minh	Master	Partner in charge of Tax & Business Advisory Services, Mazars Vietnam	Employer Representative



BRITISH UNIVERSITY VIETNAM

SOCIALIST REPUBLIC OF VIETNAM

Independence - Freedom - Happiness

No: 1304A/2023/QD-BUV

Hung Yen, 13 April 2023

DECISION

**On Setting up the External Programme Appraisal Committee of
Finance and Economics Programme at Bachelor Level**

**DECISION OF VICE CHANCELLOR & PRESIDENT OF
BRITISH UNIVERSITY VIETNAM**

Pursuant to:

- Law on Higher Education No. 08/2012/QH13 dated 18 June 2012 and amendments to the Law on Higher Education No. 34/2018/QH14 dated 19 November 2018;
- Circular 17/2021/TT-BGDĐT of the Ministry of Education and Training dated 22 June 2021 providing for standards and formulation, appraisal and promulgation of training programmes of higher education;
- Circular 02/2022/TT-BGDĐT of the Ministry of Education and Training dated 18 January 2022 regulating conditions and procedures for opening disciplines, as well as suspending operations of disciplines at the bachelor's, master's, and doctoral levels;
- Circular 09/2022/TT-BGDĐT of the Ministry of Education and Training dated 06 June 2022 on the statistical list of educational disciplines in higher education;
- Policy on Discipline Opening and Programme Issuance attached to the Decision of 0304/2023/QD-BUV of the Vice Chancellor & President of British University Vietnam dated 03 April 2023;
- Meeting Minutes of the University Council of British University Vietnam No. 002/2023/BB-HDT dated 10 April 2023;
- Resolution of the University Council of British University Vietnam No. 1004A/2023/NQ-HDT dated 10 April 2023.



DECIDES

Article 1. Approving the setting up the External Programme Appraisal Committee of Finance and Economics Programme at Bachelor Level with the individuals as listed in the Appendix 1 to this Decision.

Article 2. The External Programme Appraisal Committee is responsible for appraising the Finance and Economics Programme in accordance with provisions as stipulated in Article 18.2 of Circular No. 17/2021/TT-BGDĐT. Once the committee has completed its mission, it will be dismissed.

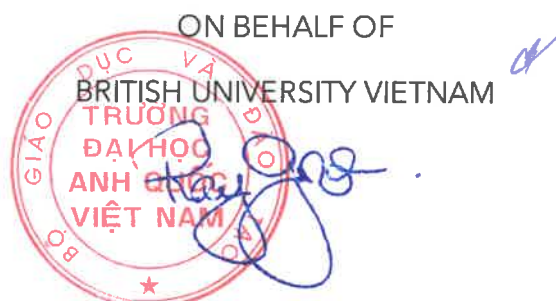
Article 3. This Decision takes effect from its signing date.

Article 4. The External Programme Appraisal Committee and other relevant departments and individuals are responsible for implementing this Decision.

Recipients:

- Per Article 4;
- Archived.

ON BEHALF OF
BRITISH UNIVERSITY VIETNAM



PROF. DR. RAYMOND DANIEL GORDON

VICE CHANCELLOR & PRESIDENT



APPENDIX I TO THE DECISION NO. 1304A/2023/QD-BUV

LIST OF EXTERNAL PROGRAMME APPRAISAL COMMITTEE

(issued by the Vice Chancellor & President of

British University Vietnam on 13 April 2023)

No.	Full name	Qualifications	Current work place	Specialized fields	Position in the Committee
1	Assoc. Professor Dr Jason MacVaugh - Dean (Higher Education)	Associate Professor, Doctor	British University Vietnam	Business Management	Chair
2	Linh Dao - Quality Assurance Officer	Master	British University Vietnam	Marketing	Secretary
3	Dr. Syed Zaidi - Senior Lecturer - School of Justice, Security and Sustainability, Staffordshire University	Doctor	Staffordshire University	Finance	Reviewer 1
4	Dr. Sionade Robinson - Vice-President (Enterprise, Engagement & Employability), University of London	Doctor	University of London	Systems and Management Science	Reviewer 2
5	Ms. Dang Thi Mai Trang - Country Head, ICAEW Malaysia Limited Representative in Hanoi	Master	ICAEW Malaysia Limited Representative in Hanoi	Banking and Finance	Employer Representative



BRITISH UNIVERSITY VIETNAM

SOCIALIST REPUBLIC OF VIETNAM

Independence - Freedom - Happiness

No: 1804A/2023/QD-BUV

Hung Yen, 18 April 2023

DECISION

**On approving and issuing the programme curriculum of
Finance and Economics at Bachelor Level**

**DECISION OF VICE CHANCELLOR & PRESIDENT OF
BRITISH UNIVERSITY VIETNAM**

Pursuant to:

- Law on Higher Education No. 08/2012/QH13 dated 18 June 2012 and amendments to the Law on Higher Education No. 34/2018/QH14 dated 19 November 2018;
- Circular 17/2021/TT-BGDĐT of the Ministry of Education and Training dated 22 June 2021 providing for standards and formulation, appraisal and promulgation of training programmes of higher education;
- Circular 02/2022/TT-BGDĐT of the Ministry of Education and Training dated 18 January 2022 regulating conditions and procedures for opening disciplines, as well as suspending operations of disciplines at the bachelor's, master's, and doctoral levels;
- Circular 09/2022/TT-BGDĐT of the Ministry of Education and Training dated 06 June 2022 on the statistical list of educational disciplines in higher education;
- Policy on Discipline Opening and Programme Issuance attached to the Decision of 0304/2023/QD-BUV of the Vice Chancellor & President of British University Vietnam dated 03 April 2023;
- Meeting Minutes of the University Council of British University Vietnam No. 002/2023/BB-HDT dated 10 April 2023;
- Resolution of the University Council of British University Vietnam No. 1004A/2023/NQ-HDT dated 10 April 2023;
- Meeting Minutes of the External Programme Appraisal Committee of Business Administration Discipline at Bachelor Level dated 13 April 2023;



- Meeting Minutes of the Senate approving the programme of Business Administration Discipline at Bachelor Level dated 14 April 2023;
- Programme curriculum of Business Administration Discipline at Bachelor Level is enclosed with this Decision.

DECIDES

Article 1. Approving and issuing the programme curriculum of Finance and Economics as attached to this Decision.

Article 2. This Decision takes effect from its signing date.

Article 3. The Dean, Registry, Discipline lead and other relevant departments and individuals are responsible for implementing this Decision.

Recipients:

- Per Article 3;
- Archived.

ON BEHALF OF
BRITISH UNIVERSITY VIETNAM



The stamp is circular and red, containing the text: "BỘ GIÁO DỤC VÀ ĐÀO TẠO VIỆT NAM" around the perimeter and "TRƯỜNG ĐẠI HỌC ANH QUỐC VIỆT NAM" in the center. A blue ink signature is written over the stamp.

PROF. DR. RAYMOND DANIEL GORDON
VICE CHANCELLOR & PRESIDENT



The stamp is circular and red, containing the text: "BỘ GIÁO DỤC VÀ ĐÀO TẠO VIỆT NAM" around the perimeter and "TRƯỜNG ĐẠI HỌC ANH QUỐC VIỆT NAM" in the center.