

Institution: London South Bank University
Unit of Assessment: 17 - Business and Management Studies
<p>1. Unit context and structure, research and impact strategy</p> <p>1.1 Unit context</p> <p>At the time of REF2014 and for two years after that, Business School (BUS hereafter) staff and research activities were hosted under the umbrella of a multi-disciplinary research environment made up of three units of assessment (UoA) submitted in the RAE2008: Business and Management; Library and Information Management; and Computer Science and Informatics. In 2014 the focus was then on Information Systems and Management, Management Education and International Business. Today, BUS constitutes a standalone UoA and, even if it is young, the first buds of fruitful years are blossoming. Core strengths are realised in two main areas: 1. Leadership, management and governance of the business organisations; and 2. Agent-based and data-driven business, economic and financial models. The unit has developed a strong interdisciplinary and international profile evidenced by our cross-disciplinary publications and global network. In these two areas, our mission is to be recognised as a world leader by the production of top-quality original and rigorous research outputs creating significant real-world impact in line with LSBU's strategic vision.</p> <p>Business and Management at London South Bank University (LSBU) is a well-resourced UoA providing a sustainable and active environment in which contemporary business and management research is conducted. Our research helps businesses and organisations to be successful in a globally competitive environment by maintaining the core values of equality, social responsibility, and care for employee wellbeing. The research environment we have created filters through to the development of research outputs that help in shaping future managers and society members, providing them with cutting-edge knowledge, skills and abilities to compete in the business world.</p> <p>LSBU, in 2017, established a formalised framework of Research Centres of excellence. As part of this action, BUS's commitment to its research environment is evidenced by the successful establishment of the London Centre for Business and Entrepreneurship Research (LCBER). LCBER was established in parallel with a significant restructuring in BUS, which aimed to make research activities central to create real-world impact. The inception of LCBER is the first step in the implementation of the BUS research strategy, as detailed in Section 1.3. Most of the information provided in this document refers to the growth in research BUS has experienced since the inception of the LCBER until the REF2021 submission.</p> <p>1.2 Unit structure</p> <p>BUS comprises 54.2 FTE academic staff. 27 (corresponding to 25.6 FTE, 47% of total BUS FTE) have workloads allocated to research-related activities and are categorised as Research Active Colleagues (RACs). Of these RACs, 17 (corresponding to 15.6 FTE, 29% of total BUS FTE) have significant responsibility for research (SRR). The non-SRR RACs have research and development plans to gain SRR status in the near future (details about staff development are included in Sections 1.3, 2.1 and 3.2).</p> <p>LCBER involves 27 academic staff: 3 Professors (Prof Roy Cerqueti*, Prof Claudiu Herteliu*, Prof Karin Moser*), 4 Associate Professors (Dr Dag Bennett*, Dr Barbara Czarnecka*, Dr Gurjeet Dhesi*, Dr Rea Prouska*), 11 Senior Lecturers (Dr Sara Abdaless, Cherry Cheung*, Dr Valerio Ficcadenti*, Dr Charles Graham*, Dr Sara Hajikazemi*, Dr Sara Hasani-Darabadi, Dr Aidan McKearney*, Dr Carrie Rutherford*, Dr Weiou Wu*, Dr Heba Younis, Dr John Opute), and 9 Lecturers (Dr Olalekan Aladesanmi*, Dr Loua Khalil, Dr Emily Ngan, Dr Grace O'Rourke, Dr Sarah Sabbaghan*, Dr Rana Tajvidi*, Dr May Tungtakanpoung, Dr Mark Winter, Dr Nadeeka Withanage). With "*", we indicate those having SRR status.</p>

LCBER members are organised into research groups and are encouraged to hold appropriate affiliate membership roles with more than one group. This facilitates internal collaborations and integration of early career researchers (ECRs). To support the research activities, 18 pre- and post-doc research assistants have been employed on fixed-term contracts generated from external grants and Quality Related (QR) funding since 2017 (see Section 3 for details on QR funding).

The number of staff involved in research activities has now increased by 232% compared to 2017 when LCBER was founded. During the REF period, RACs have produced more than 200 journal articles; in 2014, they produced 24, and in 2020, the figure has risen to 44, yielding an increase in outputs of about 100%. The outputs selected for the REF submission have shown a substantial growth between 2014 and 2020, circa 400% increase. According to SciVal¹, the RACs with SRR status have increased "Publications in Top 5% Journal Percentiles by CiteScore Percentile" from 5.3% in 2015 to 34.5% in 2018. Also, from SciVal, in the year 2018, International Collaboration (%) in research papers is 58.6%, and the total citations obtained by RACs with SRR is 6,157. Field-Weighted Citation Impact is 45.25. Furthermore, from SciVal, the average h5-index (2014-2019), reported for the colleagues with SRR status that have a publication record since 2014, is in excess of 3.

1.3 Research strategy

LCBER was established as a grassroots Research Centre in order to trigger sustainable vitality in producing world-leading research, embracing the four research groups described below. At the outset, BUS identified two top-level research directions developed from the research environment as it stood in 2016:

1. Leadership, management and governance of the business organisations (with a focus on social values), acting in a complex and changing environment. Specifically, to meet this first direction, three research groups (Intercultural Management; Digital Economy; Business Ethics and Corporate Social Responsibility) were established to explore globalised and multicultural business environments, the importance of adapting/integrating digital technologies, and ethical sustainable and responsible entrepreneurship and leadership.
2. Agent-based and data-driven business, economic and financial models and measures, with the fit for purpose real-world applications. Specifically, to meet this second direction, the Economic and Financial Modelling research group was established.

These two research directions have been continuously and successfully developed and deepened during the REF period. These research directions are the focus of research activity within BUS and LCBER, delivered through the four research groups listed above that are nested within the Centre. In the next three years, given the productivity trends (see sections 1.1 and 1.2), we will exceed a critical mass of quality research base, so the intention is that LCBER will bifurcate into two research centres, developing from the grass-roots bidirectional research centre, to create two 'identity-focused' research centres.

The summary of the research focus of each of the four research groups is highlighted below. Greater than 50% of the output submissions to REF comes from Economic and Financial Modelling (EFM) research group members. This group's research profile is quickly maturing to provide the base of the 'agent-based and data-driven' business research centre of global recognition. The majority of the other three research groups (IM, DE, BECSR) members will constitute the base for the 'business' organisation and structure' research centre. These elements are a clear sign of the continuous realisation of our strategic goals.

Intercultural management (IM). Prouska is the lead of this group pursuing the first research direction identified above. IM's primary objective is to understand cultural, regional and national differences in consumer behaviour, work relationships and attitudes, cultural norms and values, crisis management, governance and social policy. The work produced by this group supports businesses to succeed across cultural and national boundaries by enabling them to work with a

diverse consumer base, leadership in nurturing the workforce, and deploying international collaboration partners. More precisely, the strong vitality manifested in the current REF period from this research group comprises: **Prouska's** research on employees/employers relations which develops and tests a scale for measuring adverse working conditions affecting SMEs in severe economic crisis conditions, her work on employee silence and work-life balance during crisis periods, her investigations of employee involvement and participation in decision-making, and conceptualisation of a framework for studying project-workers' voice; **McKearney** examines the profound changes regarding sexual minority rights in Britain and Ireland in the employees' context; **Hajikazemi** examines project and project organisation specifications that influence the effectiveness of responses to early warning signs in projects; and **Czarnecka** investigates the use of emotional appeals in business-to-business bank advertisements and the meaning of an 'ethnic group' from the perspective of different cultures.

Digital economy (DE). **Moser** leads this group, which also pursues the first research direction. DE's primary objective is to provide insight into how to respond to the digital age's challenges and opportunities. Such studies aim to understand online consumer behaviour and social media's role in marketing, virtual teams and remote collaborations, online fraud, and the value of big data to businesses. More precisely, the strong vitality manifested in the current REF period from this research group is demonstrated by the following activity: **Moser** investigates how digital transformation impacts leadership, teamwork and work communication; **Winter** and **Moser** study decision making in social dilemmas; **Ngan** and **Tajvidi** investigate boardroom decision making, voting behaviour and multi-stakeholder networks; **Ngan** and **Tajvidi** explore digital entrepreneurship and marketing and how it relates to business performance; **Tajvidi** and **Moser** examine the effects of virtual agents on work collaboration and consumer behaviour; **Sabbaghan** and **Moser** study the impact of fake news; and **Sabbaghan** examines statistical measurement on trees' similarity research methods.

Business ethics and corporate social responsibility (BECSR). **Cheung** leads this group pursuing the first research direction. BECSR's primary objective is to create knowledge that supports businesses in leading in a responsible, ethical and sustainable way. Such studies aim to apply principles of lean management and integrated reporting, examine the management of equality and diversity, and develop successful social entrepreneurship. More precisely, **Cheung** explores bricolage, collaboration and mission drift in social enterprises, path and place dependence of entrepreneurial ventures at times of war/conflict and displaced entrepreneurs during war/conflict.

Economic and financial modelling (EFM). **Dhesi** leads this group, which pursues the second research direction identified above. EFM's primary objective is to study business-related models and micro-founded measures based on agents' behaviours. Such studies aim to understand the underlying economic and financial environment and deploy fit for purposes models and measures for business and financial needs. More precisely, the outstanding vitality manifested in the current REF period from this research group comprises: **Dhesi** proposes a new Irrational Fractional Brownian motion used for modelling and forecasting the fat tails and the so-called irrational behaviour in finance; **Cerqueti** studies agents financial portfolio selection problems, Markov chain processes bootstrapping issues applied to financial modelling and, more in general, network-based agent models; **Aladesanmi**, **Dhesi**, **Herteliu** and **Wu**, in separate studies, model agents' interactions, leading to volatility clustering and contagious phenomena in the financial markets; **Ficcadenti**, **Cerqueti** and **Dhesi** explore agents' and institutions' communications with reference to the effects on markets, furthermore, agents' preferences problems are addressed by evaluating voters' entropic decisions making; **Herteliu** also makes contribution in investigating agents' preferences by means of alternative data such as religious orientation; and **Bennett** and **Graham** model consumers as agents to evaluate brand loyalty, market structure, marketing models in emerging markets and brand portfolio management.

In order to deliver on these research objectives, three tactical pillars support our strategy, as outlined below:

a. Expanding the pool of research-active staff

Expanding our pool of research-active staff is essential to realising our strategy. We have achieved this objective by strategically recruiting new research-active colleagues who contribute to our existing research route. Moreover, we will invest in research-active staff with varying experience but with a particular focus on early career and mid-career researchers, which we believe will help us build a sustainable future. Regarding the existing staff, the development plan supports the RACs' journey to achieve and maintain the SRR status.

b. Facilitating continuous staff development

We provide systematic support to all academic staff. Our investment is closely aligned with individual personal development goals and takes the form of both individual support (e.g. mentoring) and environmental support (e.g. innovative "Research Today" seminar talks, conferences, networking opportunities, seed funding, individual research rewards, writing workshops, methods training). Our tactical support - as we advance - builds on what we call the 'Mentor-Motivate-Monitor' (MMM) framework with the key aim of facilitating staff development and managing performance. MMM is based on supporting colleagues - at all levels - to progress in their research journeys via a close relationship with their mentors. Research Teams are being developed to further support this activity. Each of them has a Research Team Leader who is a RAC with the highest profile in the team, and Team Members made up of at least one established researcher, one mid-level researcher, one early-stage researcher and affiliated PhD students. The Research Teams create research projects and roadmaps, contributing to creating rigorous, original and significant outputs, impacting productivity, and focusing on research enterprise activities (e.g. consultancy, knowledge-transfer partnerships, and intellectual property and spin-offs). The performance of Research Teams is to be monitored through the production of task-oriented reports and tangible outputs.

c. Impact of our research benefits

The impact of our research benefits from integration with the surrounding civic environment. We continuously build tactical and strong links with external stakeholders, such as businesses, end-users and professional groups/associations, towards developing quality research with real-world impact. For example, the relationships that LSBU has developed with the Southwark/Lambeth project around the refurbishment of the campus area has been fruitfully developed in actions from the BUS with the collaborations of academics like **Graham** (see his Impact on community described in Section 4). This will enhance future integration with the local community benefiting from our leading global research.

1.4 Impact strategy

Glocalisation² is central to our impact strategy and direction. Our mission is to connect the integration with the local context (urban civic nature) of the LSBU's BUS and the objective of producing world-leading research and making a real-world impact. It happens by applying developed expertise in local areas. We are part of local communities, and we bring in innovations generated by our core research disciplines, "think globally, act locally".

Our impact strategy's realisation can be found at a public community level, informing the local government regarding commercial management practices and helping in planning decisions in the urban landscape (**Graham**). Similarly, we interact with 'systems' of health care providers and civic communities for helping the development of efficient networks for integrated care contributing to NHS policy (**Malby**) and in making data-driven decisions with solutions developed by the Global Burden of Disease network (**Herteliu**). At an individual level, we are supporting social entrepreneurial initiatives (**Cheung**) and at a society level, clarifying motivational, social, and cognitive factors that influence knowledge sharing and decision making in organisational contexts. An example is support to the European Asylum Support Office (EASO) and all EU+ member states

to improve their information-sharing (**Moser**). The details regarding these tangible contributions with partners and stakeholders are fully outlined in Section 4.

1.5 Research integrity

In carrying out research, BUS's staff is led by LSBU's values like excellence, honesty, integrity, cooperation, accountability, and constant development through training to ensure upskilling and safety³. At the BUS, we have an open-access co-ordinator to oversee and facilitate open access and open science compliance of 100% engagement in practices designed to ensure transparent and appropriate behaviours of the highest standards.

We have a school ethics panel responsible for the school's research ethics approval which reports to the university's ethics committee. All research conducted in the UoA 17 is subject to ethical scrutiny. Ethical approval for all research undertaken by staff and PGRs is being conducted by the school ethics panel, who also delegate and monitor undergraduate and postgraduate projects. During the assessment period, we have undertaken a detailed review of the business school's ethical procedures. In the last years, an average of 15 approvals per year has been granted for research projects, with approximately one-third of them asked by PhD students. These approvals are evidence of an integral and socially responsible research environment.

2. People

2.1 Staffing strategy and staff development

In line with the BUS strategy, we have increased the business school's academic appointments since 2017 by 32%, appointing staff with exceptional potential in our two key research directions.

Sixteen new RACs have been hired during the assessment period with the explicit aim to enhance research activities at LCBER. Thirteen of them are ECRs. RACs have increased by 133% since 2017, leading to a much more vital and sustainable research environment. The implementation of the staffing strategy and the increasing vitality of LCBER's environment has also led to a considerable increase in the number of RACs with SRR status, rising from 5 FTE in 2017 to 15.6 FTE in 2020 indeed yielding an increase of circa 300%. It is worth noticing that the percentage of FTE qualified as RAC increased from approx. 25% to approx. 50%, similarly, the proportion of FTE with SRR status have moved from approx. 10% to approx. 30%. This is a strong sign of the implementation of the present staff development plan. The RACs without the SRR status are developing, with the MMM model's support, research and development plans to gain it in the near future. The support framework has produced a significant upward trend in SRR-to-RAC ratio along the years 2017: 45%; 2020: 61%. Besides, we have invested in the appointment of two experienced full professors, increasing our research environment's sustainable capacity and implementing our MMM framework. In September 2020, 4 new RACs join the BUS's LCBER in line with the growing rates described (Dr Craig **Duckworth**, Dr Katrin **Franke**, Dr Mika **Khanh** and Dr Yehia **Nawar**).

Primarily due to the strength of their research contributions, during this REF period, two Lecturers have been promoted to Senior Lecturers (**Hajikazemi, Wu**; ECR), one Senior Lecturer to Associate Professor (**Dhesi**) and one Associate Professor to Professor (**Moser**). The vitality of the BUS's research environment has also been enriched by the LSBU's fully funded research sabbatical scheme obtained by one of the BUS's staff member (**Moser's** research highlights from this are listed in Section 4).

RACs meet the Director of Research and Enterprise (DoRE) twice per year to propose and agree on their objectives and quality and quantity output targets and agree on development needs. With this approach, RACs get research time allowance based on a fully transparent three-tier workload allocation model (WLM). The RACs also obtain individual research award for their successes. Additional funding opportunities are given by internal seed funding and the research group funds. With this self-targeting system, we guarantee a sustainable and productive environment. This system serves both as a motivational and a monitoring mechanism for staff. Research support

also comes through a team of paid research assistants mainly drawn from PhD students with particular merit in research skills (from 2016, approximately 20 RAs have been recruited).

The LCBER Centre and the research groups work within the well-defined University's Equality and Diversity Policy Statement and University Equality, Diversity and Inclusion Policy. Together, these positions, and the LSBU's commitment to proactively pursuing its values according to diversity, fairness, mutual respect and inclusion, guarantee a sustainable and non-discriminatory context. Figures supporting that are given by the fact that the 50% of RACs are ECR, and more outstandingly 33% of the ECRs have SRR status; more than 50% of the research group members have BAME origin and 50% of the research groups are led by staff with BAME origin; 60% of the RACs, 75% of the research group leads and 70% of the ECRs are females. Overall, ECRs have a consistent presence across all Research Groups, which is evidence of our commitment to their development. Our actions to have an integrated diverse environment rely on initiatives taken by staff members like **McKearney**, who, for example, served as Guest Editor for the special issue 'Reflections from Men Doing (In) Equalities Research' for the journal "*Equality, Diversity and Inclusion*" (2014). Furthermore, **McKearney** is an active member of the Race, Gender and Sexualities Research Group, of LSBU's Law and Social Sciences school. This connects with the attention paid at the university level by LSBU to these themes.

2.2 Research students

BUS has a Director of Postgraduate Research (**Czarnecka**) who manages the PGR processes. Postgraduate research (PGR) students and their supervisors are members of the London Doctoral Academy (LDA) established in 2017 to provide – among others – LDA-specific administrative support. LDA facilitates the development of core research skills. Those skills are pertinent for PGRs to progress towards post-doctoral work, and they are provided at the university level by the LDA and locally by BUS's staff. The LDA also hosts the annual summer school, a week-long programme of guest and peer-led sessions on career-focused topics, and PGR research presentations from students at all levels of the doctoral programme. All our PGRs are provided with desk space, workstation and technical assistance at the BUS. In our support framework, research students benefit from sponsored attendance to national and international conferences to meet leading scientists in their fields and present their research findings. The BUS provides each research student with a fiscal budget of £500 plus ad-hoc extra funding to attend research events. As part of the broader core skills training for a career in the academy, the PGRs undertake paid teaching-related activities, generally no more than six hours per week.

All research students are guided in their research by a staff supervisory team comprising a director of studies and a co-supervisor. Joint supervision is of extreme benefit to PhD students who have access to academics to provide them with subject and research methods expertise. It also serves to mentor and develop ECRs by giving them an opportunity to observe the process of supervision and training them to become director of studies in the future. The school offers opportunities for PGR to present their research to a School audience that is both supportive and critical through open staff/student seminars (see "Research Today!" Series in Section 3). For example, five PhD students presented their research advancement in "Research Today!" seminars during 2019/20. Furthermore, PhD students benefit from PhD "Writing Retreats" (see Section 3).

To address our objectives of maturing our research environment, we have invested in two fully funded scholarships for the PhD by publication program. There has been a noticeable increase in the number of applications made by national and international PGR students. For example, from 2018/19 to 2019/20, applicants increased from 101 to 162, representing a 60% increase.

In the current period, we had 18 PhD completions (44% of these in the last 2 years) and an average of 1.33 student per RAC as director of studies / first supervisor. Occasionally, the PGR students are co-supervised by associated academics, emeritus professors, or colleagues outside the RACs community (see Section 4 about collaborations) in pursuit of the research strategy engaging with other national and international institutions, e.g., Prof. Marcel Ausloos from the University of Leicester is jointly supervising students with staff from the BUS.

3. Income, infrastructure and facilities

3.1 Income

LSBU's investments for BUS in QR funding has grown approx. 36% between 2016/2017 – 2017/18 and has sustained itself at approx. £70k per annum thereon. In 2019, to address our research strategy, this income has been additionally increased by sponsoring two fully-funded PhD scholarships. The investment in staff can be summarised by looking at the "other operating expenses/investments" as accounted during the years: 2016, £7,547; 2017, £29,362; 2018, £40,492 and 2019, £121,523. Most of these amounts have been spent on staff. Furthermore, there have been investments in temporary staff (e.g., research assistants) to support research activities. The staff costs associated with these were in 2018, £3,241 and 2019, £12,614; the increments show the increasing investments made in the research environment.

Research grants

Grants obtained in the REF period by BUS are supporting the broader research strategy and first research direction outlined in Section 1.3. They are related to organisation and management and led by the achievements reached in that area:

Prouska, Moser and Tungtakanpoung successfully secured a grant from the European Commission (Erasmus+, KA2 Cooperation for Innovation and the Exchange of Good Practices) on developing the cross-cultural skills of graduates in response to the needs of European enterprise. The total value of the grant is €139,733, and the partner institutions contributing to this project are the University of Worcester (Project lead-UK), London South Bank University (UK), UC Leuven-Limburg (Belgium), Halmstad University (Sweden), and Bursa Uludağ University (Turkey). The project was developed in response to recent research highlighting the importance of intercultural competencies for graduates wanting to work in Europe and what intercultural competencies and skills higher education institutions provide.

Cheung has successfully obtained a research grant from the "Global Challenges Research Fund administered by London South Bank University" for a value of £10,699. The project has the purpose of capacity building training to help the refugees and internally displaced persons (IDPs) in Pakistan to overcome the challenges they face to develop their business. The research is conducted in collaboration with the University of Peshawar and Kohat University of Science and Technology, Pakistan. The project benefits refugees and IDPs in Pakistan. The activities aim to help the displaced persons to become entrepreneurially resilient to overcome and sustain trauma and various shocks experienced due to war and displacement; enable them to develop sustainable livelihood for promoting economic growth and welfare supported by strong foundations for inclusive economic growth and innovation; help them to find and use support, both formal and informal, to develop and sustain their business.

Alex **Murdock** is Emeritus Professor. He specialises in healthy ageing, charitable sector especially in health and social care, citizen engagement and collaborative agendas and social impact measurement. He has successfully obtained three grants via the ESRC Social Enterprise Capacity Building Cluster (one VOUCHER with ANXS Collective, £3,000; one VOUCHER with Global Institute for Entrepreneurship, £3,000; and one VOUCHER with Tara Yoga Centre, £3,000). He has also successfully secured a grant from Entrepreneurial Training for Enterprise Educators (ETEE), specifically for mental effectiveness training outcomes for health and social care students for £14,636.

Additional positive outcomes from our efforts to increase research income follows:

Hasani-Darabadi successfully obtains Erasmus+ K203 funding from the European Commission (€374,000, circa 30% directed to LSBU) submitted in May 2020. Her 'Training the educators to facilitate the teaching and assessment of abstract syllabus by the use of serious games' (TEGA) project aims to develop and implement innovative game-based teaching practices to capacitate Higher Education (HE) professionals in the enhancement of their students learning process and

ease the acquisition of crucial skills (e.g. decision-making, problem-solving, conflict resolution, or stakeholder management skills).

Younis successfully obtains a grant from Qatar National Research Fund through the National Priority Research Programme to study Qatarization's status quo, the role of the institutional environment in supporting Qatarization strategy, and the approaches that can be used to boost the effective implementation of Qatarization strategy (£84,173).

3.2 Infrastructure and facilities

Structure for research management.

To pursue research strategy objectives, an effective research management structure has been developed. **Moser** was the School's DoRE (2016-2020) when the LCBER was established, and the step one of the research strategy (see Section 1.3) was achieved under her leadership. **Dhesi** acted as interim DoRE (Sept. 2019 – Feb. 2020) while **Moser** was on sabbatical (see Section 4, where its impact is described). After that, **Dhesi** stepped down from the role of research group lead of Economic and Financial Modelling and has taken the role of DoRE to establish the strategy's second objective of routing the bifurcation of the research centre (see Section 1.3). **Prouska** and **Ficcadenti** (Deputy DoREs) support the implementation of the research strategy's tactical pillars. In this way, **Ficcadenti** benefits from the MMM framework being an ECR supported by **Prouska**. Furthermore, **Prouska** leads the research enterprise activities like consultancy, KTPs, intellectual property/spin-offs.

BUS research is promoted externally with press releases delivered through the recent role of media champion (**Moser**) and through the policy implemented by the open-access officer (**Prouska**). **Czarnecka** leads the progress of the PhD program. She is also the deputy director of LCBER. In this way, we grant a full integration between the development of promising scholars and the LCBER initiatives.

One of the staff's facilities is regular training courses on the most suitable software and tools for their research activities. For example, in the REF period, we had courses on NVivo, Qualtrics, Python, R Research Methods using SPSS and Academic writing. Additionally, staff working on publications benefit from at least two "writing retreats" per year led by experienced professorial level academics from LSBU and outside. For example, we had one led by Prof. Nick Theodorakopoulos, from Aston University - Business School (July 2019) for more established academics and another one more suitable for ECRs with Dr Bruno Schivinski from Birkbeck, University of London (June 2019). The staff also benefit from the weekly research seminar series "Research Today!" which runs during term time. It was initiated in autumn 2015 by **Moser**; with over 100 seminars since then, it is becoming an established platform for BUS employees and attracts external attention. Notable and renowned speakers have presented at the series, for example, Prof Ute Stephan, (King's College London), Prof Yehuda Baruch (Southampton Business School) and Dr Maria Anastasiadis, (Associate Professor at the University of Graz). These seminars also provide an opportunity for staff to develop their understanding of the publishing process in top journals and to network with prominent academics holding editorial roles in academic journals of international standing, as for example Dr Dermot Breslin, Co-Editor in Chief in the International Journal of Management Reviews presented at "Research Today!" in May 2019.

Physical research facilities

Staff (and PGRs) can access wider support from over 40 technicians (housed in LSBU's Technical Support Services team), providing easy access for the design, build and testing of required resources. In addition, the BUS has two dedicated technicians supporting needs on-site. There is also a Bloomberg lab with 12 terminals available for research. Software facilities and training courses are available for staff and doctoral students (see Section 2 for details on staff/student development opportunities offered).

4. Collaboration and contribution to the research base, economy and society

4.1 Academic, industry, public and third sector collaborations

LCBER members hold key academic collaborations for joint research activities with more than 23 universities and academic institutions. These collaborations have produced joint papers and collaborative research grants. Some examples follow: **Moser**, **Prouska**, and **Tungtakanpoung** have active cooperation with Worcester University, UC Leuven Limburg (UCLL) in Belgium, Bursa Uludağ Üniversitesi in Turkey and Halmstad University in Sweden that has produced a successful ERASMUS+ grant which will further lead to academic publications and outputs in future. **Prouska** and colleagues at Aston University, University of Birmingham, Birmingham City University and CITY College (International Faculty of the University of Sheffield, Greece) have produced a publication at the *British Journal of Management*. **Cheung** has active collaborations with Essex Business School that have produced journal outputs in *Entrepreneurship & Regional Development*. **Wu** collaborates with the Department of Business and Management (MaMTEP) in Aalborg University in Denmark and Northumbria University and Queen's University Belfast and has produced joint publications in *Research in International Business and Finance* and in the *Quarterly Review of Economics and Finance*. **Rutherford** collaborates with the University of Sciences and Technology Houari Boumediene (USTHB) in Algiers and has produced a journal article published in *Discussiones Mathematicae Graph Theory*.

Other examples of key collaborations include:

In the UK, Prof Jeremy Dawson, Dr Carolyn Axtell from the University of Sheffield, Management School, work on joint publications, joint international symposia, and delivering keynotes and guest editing special issues with **Moser**. **Moser** further collaborates on grants and research papers with the University of Bern in Switzerland, the University of Queensland, Australia, the Research Centre for AI Technology for Humankind (AiTH) at the National University of Singapore as an international member, the Centre for Cyber and Information Security, NTNU Norway, and with the Winton Centre for Risk and Evidence Communication at the University of Cambridge. **Moser** further collaborates with Dr Andrew Whittaker from LSBU's School of Health and Social Care in joint grants and publications, with Prof Lizzie Jackson in the LSBU School of Arts and Creative Industries and with Dr Tasos Dagiuklas from LSBU School of Engineering on joint grant applications.

Prouska collaborates with colleagues at Birkbeck College, Essex University, Aston University, Birmingham City University and the University of Birmingham on joint grant applications and publications, as well as with Prof Chris Brewster at the University of Reading, Prof Adrian Wilkinson at the Centre for Work, Organisation and Wellbeing at Griffith University in Australia and with Prof Elaine Farndale at the Center for International Human Resource Studies at Penn State University in the US on joint publications.

Graham collaborates with the Ehrenberg-Bass Institute for Marketing in Australia for joint publications, collaborative funding applications and has been working on an impact case study around this collaboration. **Bennett** collaborates with colleagues from Kingston University in the UK and with Universidad Rey Juan Carlos in Spain. **Cheung** works with colleagues from the University of Essex, Business School, on joint grants and publications. **Younis** collaborates with the College of Business and Economics at Qatar University. Other collaborations that our members have included the Institute of Management Studies at the University of Peshawar in Pakistan, the Institute of Business Studies in Kohat University of Science and Technology in Pakistan, Mohanlal Sukhadia University in India, Pokhara University in Nepal, Beijing Institute of Petrochemical Technology in China and the Heilongjiang Institute of Technology in China.

LCBER members have also made an impact and collaborated with the following public and third sector organisations as expert advisors in contract research and consulting, such as the EASO (**Moser**), the Chartered Institute of Management (CMI) (**Moser**), and the Swiss Olympics (**Moser**), Swiss Federal Ministry of Defence (**Moser**), the Ehrenberg-Bass Institute for Marketing Science, Australia, (**Bennett** and **Graham**) and the British Council, UK (**Khalil**).

4.2 External memberships, committee work and visiting positions/fellowships

LCBER members are affiliated with a range of external national and international institutions and professional bodies. We list here a few examples: **Moser** is a European Commission Senior Expert with the EASO to advise all EU+ member states on information sharing and use of digital platforms. She is also an Honorary Professor of Social and Economic Psychology at the University of Queensland (Australia) and an Adjunct Professor at the University of Bern in Switzerland. She is a lead judge for the "Management Book of the Year" Competition in the UK. **Herteliu** has roles in many National and European institutions like the European Master in Official Statistics (EMOS), Advisory Committee within Eurostat, European Statistical Advisory Committee (ESAC), Advisory Committee within Eurostat and National Council of Statistics and Prognosis for Higher Education in Romania. **Cerqueti** is a Review Panel expert in the European Cooperation in Science and Technology (COST)⁴. He also has held visiting positions in the University Paris 1 – Sorbonne (France), University of Milano-Bicocca (Italy) and University of Angers (France). **Graham** is an Adjunct Professor at the Ehrenberg Bass Institute for Marketing Science, University of South Australia⁵. **Bennett** is an Adjunct Senior Research Fellow at the University of South Australia. **Hajikazemi** is a Visiting Lecturer at Bartlett School of Construction and Project Management at University College London (UCL). **Aladesanmi** is a member of the Royal Economic Society. **Tungtakanpoung** has recently taken up the role of Director of Research & Academic Relations in the Society for Intercultural Education, Training, and Research (SIETAR) in the UK. **Wu** is an Adjunct Professor at the Beijing Institute of Petrochemical Technology in China, a Visiting Professor at the Siberian Federal University in Russia and an Academic Fellow at Levy Economics Institute of Bard College in the US.

4.3 Journal/special issue editorships and journal peer-review roles

LCBER members hold a range of editorial positions in internationally renowned journals and have been successful at being Guest Editors of Special Issues. Some examples follow: **Cerqueti** is an academic editor at *PLoS ONE* (Quartile1 Scimago), in *Annals of Operations Research* (Quartile1 Scimago; special issue in developments in financial modelling and risk management), in *Sustainability* (Quartile2 Scimago; special issue in economic and financial challenges for social and environmental sustainability). **Moser** is an editorial board member at the *Journal of Personnel Psychology* since 2014 (Quartile3 Scimago). **Prouska** is an associate board member of the journal *Work, Employment and Society* (Quartile1 Scimago) and an editorial advisory board member of the journal *Employee Relations* (Quartile1 Scimago). She is also currently a guest editor in *Human Resource Management Journal* (Quartile1 Scimago; special issue in macro-level turbulence and the worker experience in HRM). **Cheung** has led a special issue in the *Journal of Entrepreneurship in Emerging Economies* (Quartile2 Scimago) on 'Understanding Chinese entrepreneurship from a historical perspective'. **Bennett** has been a guest editor in *Sustainability* (special issue on CRM brand sustainability). **Hajikazemi** is a member of the editorial board in the *International Journal of Managing Projects in Business* (Quartile1 Scimago). **McKearney** was a guest editor of *Equality, Diversity and Inclusion* (Quartile2 Scimago).

In addition, many of the LCBER members are regular reviewers of internationally recognised peer-reviewed journals, such as *Annals of Operations Research*, *Applied Psychology*, *Asia Pacific Journal of Human Resources*, *British Journal of Management*, *Computers in Human Behaviour*, *Entropy*, *European Journal of Finance*, *European Journal of Information Systems*, *European Journal of Marketing*, *European Journal of Operations Research*, *European Journal of Social Psychology*, *European Journal of Work and Organisational Psychology*, *European Management Review*, *Expert System with Applications*, *Human Resource Management Journal*, *Information Technology & People*, *International Journal of Human Resource Management*, *International Marketing Review*, *Journal of Business Research*, *Journal of Occupational and Organisational Psychology*, *Journal of Small Business Management*, *Marketing Letters*, *Soft Computing*.

4.4 Research-based awards and honours

LCBER members have been receiving awards and honours for their research contributions in this REF period. **Herteliu** has obtained the prize "Best of UNICEF research 2015⁶". One of **Cerqueti's**

papers was elected as one of the three Editor's choice in the IMA Journal of Management Mathematics in 2019. **Prouska** has received the "Benedictine University Award for outstanding paper on Ethical Issues in Consulting" from the Academy of Management, Management Consulting Division (2020) and the "2019 Best Paper of the Year Award" from the *European Management Review*. **Graham** has received the "Best Track Reviewer 2018" award from the Australia and New Zealand Marketing Academy Conference and the "Best Paper Award 2017" in *Australasian Marketing Journal*.

4.5 Conference/workshop organisation and presentations, invited lectures/keynotes

Moser has delivered numerous keynote speeches and invited talks in the past few years. For example, she delivered as a senior expert advisor for the EASO at EU+ strategy meetings, as a keynote for the launch event of the European Branch of British Academy of Management at the British Embassy in Berlin. She was twice at the Chartered Association of Business Schools' research conferences and has delivered workshops to executives. Examples are a workshop for the minister and senior executives of the Bernese government and a workshop for the senior management team at the University of Arts Bern in Switzerland.

Herteliu was a keynote speaker at the 5th International Researchers, Statisticians and Young Statisticians Congress that took place in Turkey in 2019 and an invited speaker at the CEBSS Seminar in 2017 (Babes-Bolyai University, Romania). **Cerqueti** has organised many conference sessions, and he has been invited as speaker multiple times: NET 2016 International Conference (Italy), Workshops on Systemic Risk (France) in 2017 and 2018, 29th European Conference on Operational Research (Spain), Journées de Statistique (France) in 2019.

Cheung and **Moser** have organised the "Autistic Entrepreneurs: Research and Practice Today" conference at LSBU in 2018, including academic researchers, practitioners, and lobbyists. **Prouska** organised a British Academy of Management workshop in 2019 regarding the understanding of impact from "turbulence" through international HRM research. She was also invited as keynote panellist on "Rethinking Reward" at the Pensions & Benefits UK 2019 Conference. **Hajikazemi** organised the first "LSBU Project Management Conference" in 2019.

Graham has organised and delivered two marketing workshops for Tree Shepherd⁷ to displaced tenants of the Elephant & Castle Shopping Centre. **Dhesi** was an invited speaker at 28th and 29th European Conferences on Operational Research held in Spain and Dublin.

In addition, all LCBER members regularly present their research work to national and international academic conferences specialising in their fields, such as the Academy of Management, European Group for Organisational Studies (EGOS), European Academy of Management (EURAM), Academy of Marketing, and the British Academy of Management, European OR.

4.6 Contributions to media, public engagement/dissemination

LCBER members' work often appears in the media and is disseminated across multiple channels. For example, **Moser's** work is regularly portrayed in the media, such as in Personnel Today (2020), the BBC (2020), GQ Magazine (2020), the Financial Times (2020) and WIRED Magazine (2020).

Herteliu has been invited to TV shows to present his research such as in Speranta TV (Romanian Television) in 2018 and 2020. **Graham** has been invited to deliver seminars at advertising and marketing agencies such as J Walter Thompson, Saatchi & Saatchi, Landor Associates, Adam&EveDDB, and the Institute of Promotional Marketing. **Prouska** has had her work exhibited in "Employee Benefits"⁸ and referred to in The Guardian⁹.

4.7 Interdisciplinarity.

The UoA interdisciplinary research areas are mainly constituted by mixing econophysics, computational linguistic, demographics, psychology, and networks science with our research directions. The one benefiting the most from the interdisciplinary activities is the "agent-based data-driven" one (see Section 1.3). RACs contribution to realising the research strategy employing interdisciplinarity is presented below:

Cerqueti's community of reference is mathematicians and statisticians working in applied economics, finance and social sciences. His research approach follows two main routes. On one side, he develops and studies theoretical models whose background is operational research, stochastic optimisation, statistical modelling, applied probability and game theory. On the other side, he deals with extensive data analysis and simulations in the context of rank-size laws, time-series explorations, econophysics and complex networks. Often, such approaches are merged in a unified scientific product, where theoretical advancements are validated through empirical analysis or numerical simulations.

The financial studies by **Dhesi** are collating many techniques and models from the mathematical and physical domain. Hence, this aspect connects his studies with other fields, creating a favourable environment for interdisciplinary research activities. For example, in the contributions published in *Wilmott* and *Chaos, Solitons and Fractals*, he discovered the so-called psychological soliton factor to capture behavioural paths in finance.

Ficcadenti has worked in the cross of computational linguistic and rank-size. Key highlights include a paper on earthquakes economic costs through rank-size laws (*Journal of Statistical Mechanics: Theory and Experiment*); a paper on entropic analysis of split-voting phenomenon in Italian elections between 1948 and 2018 (*Entropy*); and a paper on words ranking and Hirsch index for identifying the core of the hapaxes in political texts (*Journal of Informetrics*).

Herteliu contributions to demography and scientometrics are published in interdisciplinary journals like *Entropy* and *Physica A: Statistical Mechanics and its Applications*. **Herteliu** is also part of the Global Burden of Disease network producing research outputs in *Nature* and *Lancet* regarding the economy and global public health issues.

Moser's research on human cooperation, communication and decision-making in the workplace is interdisciplinary because she connects psychology and business organisation related issues. She uses game theory to understand the costs and benefits of cooperation dilemmas, social identity and self-categorisation theory to model group processes, the impact of social norms, and cognitive biases. She also integrates core findings from social influence, communication theory, and human-computer interaction research. With this, her research spans the boundaries of organisational behaviour, social psychology, behavioural economics, human-computer interaction and cognitive science. It impacts business and management applications, such as knowledge management, strategy and leadership, teamwork, and digital transformation.

Our approach to developing research strength in key areas and facilitating cross-disciplinary and cross-justices engagement has ensured a more collaborative research activity focus. These cross-sectional collaborations include joint doctoral students supervised by members of the LSBU with scholars affiliated with different institutions.

4.8 Impact on business, economy and society

Following on from our Glocalisation mission stated in the impact strategy, as described in Section 1.4, details regarding tangible contributions with partners and stakeholders are detailed below:

Moser's research has focussed on the motivational, social and cognitive factors that influence knowledge sharing and decision making in organisational contexts. Her research has led to collaborations with and support of numerous private companies, public sector organisations, and government agencies to improve their knowledge management, internal and external collaborations, and digital media use. Key highlights of the impact of her work include appointment as expert at the EU level to support the EASO and all EU+ member states to improve their information-sharing; her advice at the country of origin information network meetings of migration and war "hot spots" across the globe, and individual meetings with the country and migration experts for risk assessments and decision making, and her leadership in delivering workshops on knowledge and digital management, influencing organisations' practices (e.g. the minister,

department directors and senior executives of the Bernese government; senior management team and department heads of the University of Arts Bern).

Predictive and diagnostic retail footfall conversion models developed by **Graham's** research is informing local government and commercial management and planning decisions. Evidence of impact is provided thanks to the usage of the models by Southwark Council, Tree Shepherd (a consultancy advising the 73 retailers affected by the Elephant and Castle Redevelopment), Chair of the Latin Elephant Traders' Association, Regional Operations Directors, Landmark Group, and Multinational Portfolio Brand Retailer based in Dubai.

The Industry Growth Initiative is a research project funded by Mars inc. at the Ehrenberg-Bass Institute at the University of South Australia. The leader of this impact project is **Graham**. Such a case aims to identify and understand the underlying patterns of aggregate market performance associated with persistent growth in Consumer Packaged Goods (CPG) categories. This case provides evidence of research impact on the strategic decision-making at Mars Pet Care Nutrition, Mars Wrigley Confectionery and at Frito-Lay, where **Graham's** research has defined how marketing investment decisions are shaped and how evidence-based marketing science decision-making can impact companies.

Cheung research interests in social entrepreneurship have given rise to investigations of entrepreneurs from socially disadvantaged conditions. Specifically, she has investigated the cases of refugees and/or autistic people. This research focuses on developing a culture of entrepreneurship amongst disadvantaged groups. The research is proving potential in the education field. In fact, training programmes are run in collaboration with the University of Essex with a practical focus on refugee entrepreneurs.

Across the world, networks have become the predominant organisational form of every domain of human activity. Collaboration in "systems" of healthcare providers and communities has become the predominant model of organising to secure "the triple aim" of improving patient's experience, population health, and health care cost. Prof Becky **Malby** has developed a body of knowledge on healthcare networks (although she is not affiliated at the BUS, her impact case study is submitted as part of UoA 17). Her developed knowledge and training materials have reached thousands of health service managers and clinicians nationally and internationally. She contributed at informing the network of integrated care and primary care units; this contributed to NHS policy development on networks in primary health care and improving health services.