

## Unit-level environment template (REF5b)

**Institution: 10007140 Birmingham City University**

**Unit of assessment: 17 - Business and Management Studies**

### **Section 1. Unit context and structure, research and impact strategy**

#### Overview

The Birmingham City Business School, part of BCU's Faculty of Business, Law and Social Sciences (BLSS), conducts research in Entrepreneurship, Entrepreneurial Finance, Human Resource Management, Sustainable Business Growth, Asset Pricing and Financial Markets, Technology and Sustainable Industries, and the Economics of Distribution and Community. Our mission is to be an inspiring, innovative, impactful and research-informed Business School, educating managers and professionals to meet societal and business needs, and preparing resourceful leaders for tomorrow's challenges.

We have submitted work for every research assessment since RAE1996. Historically, our returns have been small-scale. To REF2014 we returned only 4.7 FTE staff; of our outputs, 5.9% were deemed world leading and 29.4% internationally excellent. 50% of our impact submission was judged world leading, placing us in the upper quartile nationally for our discipline.

Following REF2014, we recognised the need to build research capacity and invest in the infrastructure required to sustain a culture of critical inquiry and impact. We set ourselves six key aims, informed by the University strategy set out in REF5a:

1. Create an inclusive research environment and a sustainable community of researchers (in the sense of developing our own talent pipeline);
2. Fully utilise research practice and outputs to support student learning;
3. Produce practice-based scholarship that would contribute to our accreditation ambitions, such as the Chartered Association of Business Schools (CABS) Small Business Charter, and AACSB;
4. Develop further commercial links and knowledge-exchange with businesses, and other organisations (in particular in Birmingham and the West Midlands), for example through ERDF and KEEN projects (see section 4);
5. Deliver research which has national and international impact;
6. Produce research outputs and publications that are internationally recognised, internationally excellent and world leading.

In turn, six key enablers were identified:

1. Establish a BLSS Graduate School as an arm of BCU's Doctoral Research College to develop mature, rigorous processes for recruiting, supporting and monitoring doctoral students.
2. As part of the new £63m Curzon Building (our home since 2015), create enhanced research facilities with a dedicated trading room, postgraduate office, bespoke equipment, software and databases.
3. Increase our pool of research-active staff through new recruitment and staff development, channelling expertise into a revised curriculum (2015-16) so that more students benefit from research-informed teaching.
4. Create a workload structure, using BCU's new model (WAM, 2015) that awards time to different categories of researchers on the basis of outcomes, subject to an appropriate forward plan. This has since been reinforced by the sabbatical scheme.
5. Form a structured programme of staff development for research through skills training (including training on software such as SPSS and NVivo), and clear processes for funding further training and conference attendance.
6. Institute a scheme of part-time doctoral funding for staff, with time allowed in the WAM.

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Table 1 shows the following achievements against our six aims.

Aim	Achievement
Research community	23 FTE returned against 4.7 in 2014; 33 PhD completions in the cycle, a 200% increase on 2014, with 13 full-time scholarships awarded; £392,884 investment in continuous professional development (CPD); realisation of all six enablers cited above
Practice and outputs for learning	Track record of research-informed teaching in Academy for Multi-Unit Leadership; 2015-16 curriculum review has resulted in consistently high scores in NSS and PRES
Contribution to accreditation	CABS Small Business Charter accreditations gained, with 'exemplar' for business diagnostics; AACSB eligibility established with plan to submit in 2024
Commercial links	Wide range of business engagement regionally and nationally, as set out in Sections 3 and 4
Quality of impact	£1.01m in European Regional Development Fund (ERDF) grants to support Small and Medium-Size Enterprises (SME) in the West Midlands; case studies reflecting international expertise in global entrepreneurial pedagogy and multi-unit leadership
Quality of outputs	85% increase in the calibre of journals in output return as measured by the CABS Academic Journal Guide

**Table 1:** Aims and Achievements

This growth in capacity and reach is reflected in a further statistic. 80% of our outputs are now co-authored with academics outside the School, including 38% internationally.

### Structure and Governance

Our research spans the two academic departments of the Business School: The Department of Accounting, Finance and Economics, and The Department of Strategy, Management and Marketing. Each Department has its own research centre: (1) the Centre for Enterprise, Innovation and Growth (CEIG), and (2) the Centre for Applied Economics and Finance (CAFÉ). Our Academy for Multi-Unit Leadership sits in the Department of Strategy, Management and Marketing, and is responsible for delivering corporate and executive education.

An Associate Dean for Research, Professor Maxine Lintern, maintains Faculty oversight of a research and enterprise strategy covering BLSS's three Schools of Business, Law and Social Sciences. The Business School's Research Policy Group provides local leadership on strategy and operations, with **Philp** as Head of Research and Enterprise. The Group includes staff from all academics levels – Lecturer to Professor – and so provides emerging talent with development opportunities, reinforcing the culture of empowerment and inclusivity which the School has actively sought to create.

Defined research centres and associated clusters provide the core framework by which we develop and sustain our growing research community.

### Research Centre Responsibilities

Their brief is to conduct termly research development meetings to encourage involvement and progression of all members. Each Centre is expected to develop international research networks, which are an important aspect of international accreditations, and to arrange a programme of

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external speakers, including those from outside the UK. All research active staff are expected to present one internal seminar every two years. CAFÉ has recently piloted a working paper series, which is listed in RePEc and IDEAS (editors **Yerushalmi, Lichtenstein** and **Ji**). Following its success, CEIG will be launching a series in 2021. Papers are subject to peer review, and researchers at all levels contribute to reviews. Doctoral students are also attached to a centre, and the latter propose funded doctoral research projects annually. Centres have their own websites, and ensure their external profile reflects events and achievements. Finally, nominated individuals within each centre, in collaboration with Research, Innovation, Enterprise and Employability (RIEE) central services, systematically capture a database of research impacts, organised thematically.

### Research Centre 1: CEIG

In 2016, we launched the Centre for Enterprise, Innovation and Growth (CEIG), a major strategic initiative under the leadership of new recruit **Gilman**, but building upon previous expertise in this area. The Centre is organised into four clusters, each led by an experienced researcher. Our impact case studies (ICSa, ICSb and ICSc) are primarily derived from three of these. In more detail:

- Entrepreneurship Research (see ICSa): This cluster comprises staff and doctoral students who are researching on entrepreneurship education, creative industries marketing, and ethnic minority entrepreneurship. Creative industries are a unique feature of the University, and this cluster has strong synergies with the Faculty of Arts, Design and Media. **Carey** leads Entrepreneurship Research, and has particular expertise in entrepreneurship education.
- Entrepreneurial Finance (also ICSa): This group complements entrepreneurship research and specialises in the financing of SMEs, financial education, and microfinance. The focus of the cluster is on understanding financing challenges and microfinance in development context, and its practitioners have worked internationally with lending institutions, to leverage impact. **Hussain**, who is a longstanding School academic, is an acknowledged expert in microfinance, and leads the cluster.
- HRM and Leadership (see ICSb): Colleagues in this cluster work on a variety of projects in SMEs and other organisations. The focus is on understanding HRM and organisational behaviour challenges. The purpose is to engage in interdisciplinary, research-driven initiatives, exploring the practice of managing people in business. An impressive body of outputs have been produced, some of which have been disseminated through the Academy of Multi-Unit Leadership. **Psychogios**, who joined the School with an extensive track-record of high-calibre outputs, leads the cluster.
- Sustainable Business Growth (see ICSc): This cluster researches sustainable performance in SMEs. Researchers analyse growth patterns, markets and competition, strategy, supply chain, change management, innovation, CSR, technology, leadership, performance management, training and development, communication, finance, advisory services/networks, and the family dynamic. This methodologies adopted have had significant impact in the region (as well as nationally and internationally), reinforcing our role as the University *for* Birmingham. **Gilman** leads this cluster as well as CEIG, having pioneered the use of business diagnostics to support SME growth. His work has been supported by two research fellows, **Salder** and **Yoruk**, who have published high-calibre outputs in this field. In 2017, the School received the Small Business Charter. Following a reassessment visit in 2020, we achieved a five-year award (the maximum permitted), with an “exemplar” for business diagnostics.

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CEIG works closely with the School's Academy for Multi-Unit Leadership (AMUL), which has been the conduit for much of the dissemination of SME, HRM and leadership impact. AMUL is led by **Edger**, an acknowledged industry expert in this field. The Academy provides corporate and executive education, underpinned by academic research. Its work is supported by **Psychogios** and **Lichtenstein**, who have contributed to the research-informed teaching of the AMUL programmes.

### Research Centre 2: CAFE

Following a mid-cycle review in 2019, the Business School identified a need to broaden our research base in order to support our aim to achieve the Association to Advance Collegiate Schools of Business (AACSB) international standard. The School's eligibility application was accepted in July 2020, and the ambition is to achieve the standard by 2024. This requires growth in the proportion of staff with SIGRES (significant responsibility for research) across our teaching portfolio. The development of our second research centre, the Centre for Applied Finance and Economics (CAFÉ), built on existing expertise but was led by **Yerushalmi**, who was recruited from the University of Warwick in 2017. The Centre consists of three clusters:

- **Asset Pricing and Financial Markets:** Researchers consider volatility analysis, market efficiency and liquidity, asset pricing and systematic risk, Islamic finance, and market structures and crowdfunding. This is achieved through rigorous, formal, dynamic modelling of financial time-series. The cluster is led by **Akbar**, who is an established School academic and financial econometrician.
- **Technology and Sustainable Industries:** This cluster examines advanced technology industries, such as the space industry, and developments in industries focusing on environmental sustainability. Given the topicality of these areas, we anticipate substantial research impact in these fields by the next REF. The cluster is led by **Paladini**, who was appointed in 2016, and brings academic and practical experience, having worked as an East Asia Trade Commissioner for seven years.
- **Economics of Distribution and Community:** Researchers in this group examine a variety of distributive issues, such as the macroeconomics of income distribution, distribution of worktime, inequality in health and wellbeing, and regional disparities. **De Ruyter** attracts high-profile media attention for his research on regional disparities, and the cluster is led by **Philp**, Head of Research and Enterprise.

The expectation is that one or more of these clusters will be an exemplar by the next REF, and proactive management of impact is underway. In 2018, the School also became a signatory to the Principles of Responsible Management Education (PRME), which endorses the UN Sustainable Development Goals. Sustainability is integral to each of our research clusters.

### Research Centre Output Analysis

The outputs in the UoA submission vindicate the structures that emerged through our strategic plan. Approximately 62% of our REF outputs fit within the research clusters of CEIG. High-calibre research outputs include publications in world-leading journals (i.e. measured at 4\* by the CABS Academic Journal Guide), such as *Human Resource Management Journal*, *Tourism Management*, *Journal of World Business*, and the *British Journal of Management*. Furthermore, the CAFÉ reflects an area of expertise which has seen tremendous development in the School in recent years. The latter emerged organically through researchers identifying commonalities. Approximately 36% of our REF outputs fit within these subject areas, in leading field journals such as *Ecological Economics*, *Journal of Production Economics*, and the *International Journal of Finance and Economics*.

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Centre-based research fosters knowledge-exchange from, and to, the wider Business School, thus encouraging competitive multi-disciplinary collaborative research links, peer-reviewed outputs of the highest quality, and impact through products and services rendered. At an operational level, CEIG and CAFÉ afford latitude for a series of underlying research themes, which are supported by explicit University-wide strategic aims and RIEE central research support services. However, the School strategy aims to be inclusive, with emerging researchers being given allowances to support their staff development, and transition to established researchers. Moreover, doctoral students are involved as prominent participants at School, Faculty and external events.

### Stock-Taking and Future Strategy

Table 1, above, shows how far we have progressed since REF2014. In this cycle, our current group of 23 FTE staff have produced 15 monographs and over 80 peer-refereed journal articles, 91% of which are in journals listed in the CABS Academic Journal Guide. We have exercised significant thought leadership among SMEs, evidenced by Charter Awards and 'exemplar' status for the diagnostic tools developed by CEIG. The growth in staff with SIGRES has broadened our expertise (e.g. in finance, as manifest by CAFÉ) and deepened our understanding in other areas, such as SME growth, HRM and leadership. All these developments have resulted in a substantially increased research focus within the School, with benefits for an enhanced research-informed curriculum and in professional and entrepreneurship education.

Following REF2021 we expect to consolidate our research with sustained growth, driving forward to establish ourselves as a mature, research-informed business school. The base for this will be a new strategic plan, which will identify the means by which we can achieve the following goals:

- G1.** Launch at least one new research centre in order to further expand the research subject base and support accreditations. One will likely be in the area of sports management, leisure and tourism, as it aligns with successful undergraduate programmes and BCU's major development of Sports Science as part of the Commonwealth Games 2022 legacy project.
- G2.** Ensure 50% of our academic staff are qualified at doctoral level by the next REF census date, up from 35% at present. This will be achieved through our own doctoral pipeline, enhanced with high-calibre external candidates. It will support our AACSB accreditation ambition, which requires each business subject area to have 40% of staff with doctorates. Concurrently, the ambition is to grow our doctoral student numbers from 82 to 150 by 2025.
- G3.** Grow annual research income from the present projected level of £150k for this academic year, to £200k per annum by 2025; and, (ii) to grow annual enterprise income from £200k projected this academic year, to £300k by 2025. This will be subject to periodic review.
- G4.** Building on the success of projects in ICSc, the School will pursue engagement opportunities which replace ERDF grants post-Brexit. More specifically, having secured one Knowledge Transfer Partnership (KTP), and multiple KEENs in this REF period, the School will target securing at least one new KTP per year over next REF cycle.
- G5.** Increase the proportion of staff with SIGRES from the current 17% to 35% of the staff base.
- G6.** Increase the proportion of women researchers, and their number among senior researchers, so that it better reflects the demography of School staff (for rationale, see

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section 2). To bring focus to this, the School is creating an equality, diversity and inclusion (EDI) lead, and this person will be an *ex officio* member of the Research Policy Group.

### Section 2. People

#### Staff recruitment

The Business School has engaged in strategic recruitment practices, which are conducted in line with BCUs recruitment policy, and underpinned by our “fairness and integrity” core value. Initial appointments targeted research leadership. In August 2016, a dedicated Research Director, **De Ruyter**, was appointed to lead Business research. Further recruits enhanced our strength in SME growth and organisation. **Gilman** was appointed in 2015 to form the CEIG, and solicit projects and partnerships with organisations. In order to widen its subject base, additional senior staff were appointed in 2017. **Psychogios** was recruited to lead the CEIG HRM and Leadership Cluster, while **Paladini** joined as Reader in Economics and Global Security. She now leads the Technology and Sustainable Industries cluster of CAFÉ. **Yerushalmi** — CAFÉ lead — also joined the School, from the University of Warwick.

In 2017, RIEE launched the Centre for Brexit Studies, and **De Ruyter** went to lead this interdisciplinary group, which focuses on the impact of Brexit on the economy and society. Through our ambitious appointments we have brought in further colleagues who have produced high-calibre outputs, such as **Akhtar** (with two articles in *Studies in Higher Education*), Dr Abdul Razak Alhassan (*Journal of Business Ethics*), **Hambler** (a monograph, and article in the *Industrial Law Journal*), **Kichuk** (*International Journal of Contemporary Hospitality Management*), **Szyborska** (*Structural Change and Economic Dynamics*) and **Yoruk** (*Technological Forecasting and Social Change*). More recently, the School has harnessed its doctoral research community as a talent pipeline, recruiting **Zahiri**, **Rana** and **Shaygan** into lecturer roles, all of whom are nearing doctoral completion.

#### Staff support and development

The Business School staff development strategy reflects its ambition to be research-active across the full range of business subjects, and to be a research informed teaching institution. There has been a conscious effort to expand staff involvement in research. The staff development strategy has focused on three strands: (i) systematic research allowances to allow researchers to flourish; (ii) staff development, e.g. for doctoral training, to develop the researcher pipeline; (iii) recruitment, to enhance our researcher base.

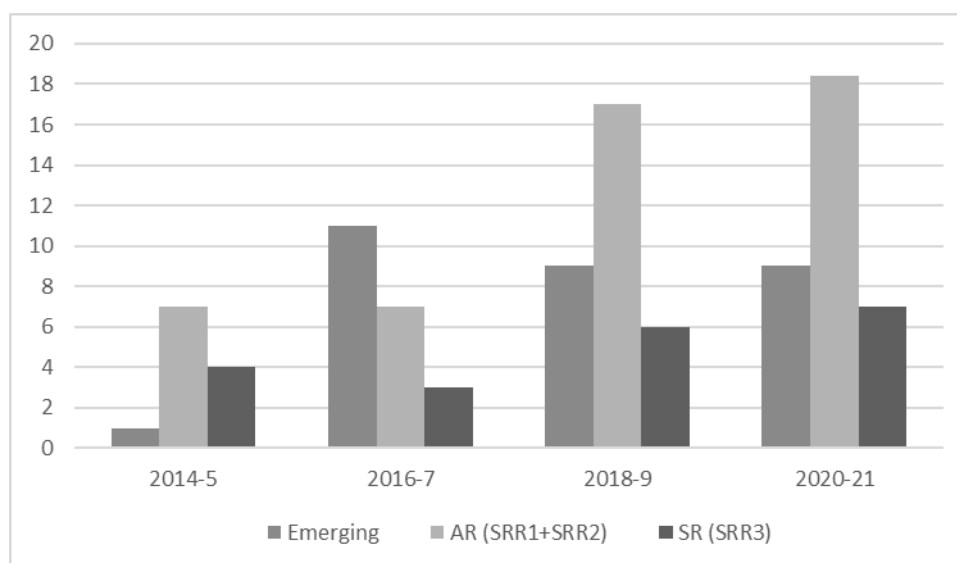
Research allowances are a principal driver of staff recruitment and retention. In the period 2014-18, three categories of researcher were used: (1) emerging researcher; (2) active researcher; (3) senior researcher. Based on an annual WAM of 1624 hours, allowances of 120, 220 and 320 hours were allocated. An additional allowance of 125 hours was allocated to all staff as “scholarship” time. In the 2018-19 academic year, a new system began, with four categories of researcher. Emerging researchers were retained, and three classifications of staff with SIGRES were identified (bands 1-3). Emerging researchers receive an allowance of 162 hours, and SIGRES researchers receive between 226 and 631 hours. An additional scholarship allowance was awarded to all staff so that, when combined, band 1 equates to 25% of workload, band 2 to 35% of workload, and band 3 to 50% of workload.

In 2014-5, eleven staff were given SIGRES, reflecting investment from the 4.7 FTE that were returned in REF 2014. In addition, one staff member was classified as emerging. In 2016, the emerging researcher left to take up a lectureship at a Russell Group university, and further researchers had retired or left the University. Hence, by 2016-7, staff with SIGRES fell, but a new cohort of eleven emerging researchers was identified. At the end of the output period, considerable growth in all categories was evident (see Figure 1, below). As well as the number of

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researchers, average research allowances in the Business School have risen in recent years. For example, in 2017-8, staff with SIGRES had an average research allowance of 430 hours (inclusive of their scholarship time). In 2018-9, this increased to 582 hours, and by 2019-20 to 645 hours.

The School operates an annual process through which staff apply for research hours (the individual research review, IRR). Hours are allocated by a panel comprising the Director of the Business School, the Faculty's Associate Dean for Research, the School's Head of Research and Enterprise, departmental heads, and a professor representing each department. Performance determines hours, including: outputs in well-regarded journals; contribution to the management of research; funding applications; and, participation in School and centre research activities. In the 2019-20 IRR process, one lecturer and one senior lecturer were awarded the maximum allowance, reflecting their achievements. All staff participate in this process, including professors. Hence, outcomes are meritocratic. During this REF cycle, three early career researchers have obtained lectureships at Russell Group universities, reflecting the value we have helped add.



**Figure 1:** Researcher by Category

Additional research hours are awarded via the BLSS sabbatical scheme. Sabbaticals are usually awarded to an active researcher for an “additional” or exceptional project, or to support transitional career development. In 2019-20, sabbaticals were awarded to **Wang** and **Yerushalmi**. The latter was a strategic intervention to support the development of CAFÉ, resulting in its successful launch. However, the sabbatical scheme was temporarily suspended in 2020-21, as class sizes were reduced because of social distancing in response to COVID-19.

### Performance Management

A cornerstone of the School's research strategy is effective performance management. Threshold and stretch targets for research are set for all staff with SIGRES. In 2019-20, principles were as follows:

1. All staff with SIGRES must submit at least one paper to a journal ranked “internationally excellent” or above on the CABS Academic Journal Guide (or equivalent for interdisciplinary research).
2. Professorial staff with SIGRES, or high-performing staff with the maximum tariff, are required to deliver multiple submissions.
3. Band 2 and 3 SIGRES staff are tasked with bidding annually for external research funds.

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4. All staff with SIGRES, as well as “emerging researchers” and doctoral students, are expected to participate in their centre’s scheduled activities.

Line managers monitor the performance mid-year, and at the end of the year progress against these targets needs to be demonstrated through the IRR. The bid pipeline is managed by the Head of Research and Enterprise in collaboration with the Research Development Support Officers (RDSOs, see Section 3, below); progress is reported monthly at the Research Policy Group, and termly at the Business School’s Advisory board. In July 2020, 117 FTE were employed in the Business School; 18.8% had SIGRES, 12.0% were classified as “emerging”, and 13.7% of staff were studying part-time on doctorates (i.e. 44% in total).

### Doctoral qualifications

The practice-focus of the School means the proportion of doctorally-qualified staff is relatively low (35%). The School has proactively pursued a strategy to increase this proportion, to develop research, and to contribute to our accreditation ambitions (AACSB, and the European Foundation for Management Development, or EFMD). It is particularly challenging to recruit doctorally-qualified staff in some fields (e.g. accounting and marketing). Because of this, the School supports many of its staff to undertake credit-bearing CPD, in particular for doctoral studies. In 2015-16, expenditure on staff doctorates was £33,233. This increased year-on-year, to the present level of £107,266 *per annum* (a 223% increase). Total expenditure committed in the period 2015-2020 was £392,884, representing a significant investment in research training for our people.

To support transition from doctoral or emerging researcher, to SIGRES, a Doctoral Research Group (DRG) was established in 2017. DRG is self-managing and comprises all staff members who are about to start, or are registered on, a doctoral programme (PhD, DBA, EdD). In 2020, the School funded 14 staff on doctorates (including PhD, DBA and EdD), with scholarship and study time of 342 hours each (tariffs are common based on the WAM model). In addition, the DRG includes those who have completed their doctorate in the last three years, thus supporting early career researchers. The group is led by two of its members. The DRG exists to provide a community of support and learning. It furthers this objective through a biannual research colloquium. The summer retreat is a two-day event, which incorporates a writing retreat on the second day, and research conversations. This serves as a forum for members to talk about their current research projects, and identify opportunities for collaboration, with supportive feedback from their peers. In addition to peer-presentations, leading researchers (including journal editors) contribute on topics suggested by the membership. For example, at the 2018 summer retreat, external speakers included the Head of the University of Birmingham Business School, and the Editor-in-Chief of the *International Journal of Entrepreneurial Behaviour and Research*. In 2020, the DRG opened up its events to all School doctoral students.

### Support for Training and Conferences

The School provides additional support for research by allocating funds to attend training and conferences. All staff (researchers or otherwise) may apply for conference funds. In the 2019 School Research Strategy, the Business School committed to ensuring sufficient resources to facilitate the following: (i) all emerging and SIGRES research staff would be able to attend their national “field” conference; and, (ii) all staff with SIGRES would be able to attend an international conference, when presenting a paper. The School remains committed to this, though the conference budget was substantially underspent in 2019-20, because of COVID-19. To guide staff, a list of prestigious target conferences has been produced, including: Academy of Management; British Academy of Management; CABS Research Conference; Institute for Small Business and Entrepreneurship; Production and Operations Management Society; Regional Studies Association Annual Conference; Royal Economic Society; British Accounting and Finance Association; European Accounting Association; Academy of International Business; and, the



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European Operations Management Association. During this REF-cycle, presenters from the School have delivered at each of these conferences, and at many other high-calibre events.

### Outputs, Accreditation, and Open Access

Peer-reviewed academic journal outputs notwithstanding, there is recognition that authored books have a role to play in bringing together grand narratives (hence we have selected two for inclusion in our 2021 submission). Likewise, practice-orientated publications are an effective mechanism to disseminate research more broadly. Research informed pedagogy plays an important role in disseminating research to students, with practice-orientated pedagogical publications especially emphasised by EFMD accreditations. Going forward, the School's development strategy will be framed by the School's accreditation ambitions. Specifically, increased research will be necessary to ensure we meet faculty sufficiency standards of the AACSB. This requires 40% of academics in each business field (e.g. HRM, accounting, marketing, finance) to be scholarly academics. Consequently, we must continue to support academic staff development through doctoral studies. Furthermore, we will ensure doctorally-qualified staff maintain currency in their scholarly academic classification, through publishing research outputs at a rate which will satisfy the AACSB threshold, and the average output requirements of REF. In both cases, the School's Research policy Group will continue to establish fair processes and incentive structures to ensure outputs meet quality thresholds.

Open access was limited in this REF-cycle because the BCU Open Access (OA) Repository did not become fully operational until January 2017. Academic researchers in the School are fully committed to the widespread dissemination of their research, and so had adopted practices such as using co-authors' institutional repositories and subject repositories (e.g. SSRN). From October 2017, the Head of Research and Enterprise in the Business School undertook a systematic audit of outputs and identified instances of OA non-compliant papers. A programme of workshops was established, and colleagues who had authored non-compliant work were supported in ensuring compliance going forward. The Faculty's RDSOs began to assist colleagues in the uploading process. Colleagues expressed anxiety about copyright, and so training was offered on the SherpaRomeo system for determining OA conditions. Given the delay in establishing a repository, BCU has a waiver in place to cover outputs published before the BCU OA repository existed, in line with REF2021 guidance. Other in-scope outputs in our submission were deposited, and accessible through BCU's open-access repository.

### Support for Doctoral Students

During this REF-cycle, the University has invested substantial QR funding in PhD bursaries. Since 2014, the Business School awarded 13 bursaries (fees and subsistence, at the UKRI rate). One additional student, who was working on a Business School KTP with Walsall Housing Trust, was granted a fee-waiver. Over this REF-cycle, the Business School recorded 33 completions, an increase of 200% relative to 2014. There are presently 61 PhD students and 21 DBA students registered on doctorates in the School. There are a number of instances where doctoral graduates have co-authored with BCU supervisors. For example: Hussain and Carey, 2019 in ICSa; Arntsen, Philp and Donegani, 2018; Hussain, Mahmood and Scott, 2018; Karimu, Salia, Hussain and Tingbani, 2019. The latter three are returned as 2021 REF outputs, demonstrating the quality of our doctoral training, our academic staff, and the sense of community which our alumni share.

The Business School research community is an inclusive one, where we encourage doctoral students to participate and co-create successful research events (for example at the BLSS Research Conference). Similarly, the School's training provision for postgraduate researchers (PGRs) is aligned with the University's guidance and the Faculty's provision. The initial phase of research training is provided by the PGCert in Research Practice, which is a compulsory assessed course for PGRs students. To acclimatise PGRs with the University community and resources, students are provided with further information about library resources, student and

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language support, and wellbeing. There is a Faculty induction, with bespoke sessions for the Business School, tailored to our research-centre activity.

### Doctoral Training and Supervision

The PGCert provides training into the planning and execution of a research project. The process provides an opportunity for the PGRs to establish their own position in relationship to their research project. The course, lasting a semester, enables students to explore a range of interdisciplinary methods and approaches. The summative assessment is a 6000-word research proposal and 3000-word critical reflection. The course facilitates transition from a passive learner within a taught course to an active independent researcher, culminating in a research plan.

The supervisory process is key, and is supported through the WAM. For a full-time student, the “pool” of supervisory hours for the team is 100 annually, and for a part-time PGR it is 50 hours. The School has proactively sought to build capacity through pairing experienced supervisors with less experienced researchers. In instances where a supervisor with completions is not on the team, the School will appoint a formal mentor to the supervisory team, who receives a small portion of the supervisory hours. PGRs also benefit from their attachment to research centres.

The School’s research centres are a focal point for PGR development, through research seminars. The CEIG has four clusters, and 24 PhD completions in this REF-cycle align to these (see Table 2). CAFÉ has three clusters, with recent completions in income distribution and international trade research respectively. Research in the fields of asset pricing and financial markets were significant in the formation of CAFÉ, hence the 8 completions in this area reflect doctoral research in this REF period, some of which predates CAFÉ’s launch. Finally, to illustrate our success, a number of doctoral graduates are members of academic staff, such as **Millman** and **Saha**, who have gained SIGRES in this REF-cycle, with outputs returned in REF 2021.

Centre	Cluster	Completions
Centre for Enterprise, Innovation and Growth (CEIG)	Sustainable Business Growth	7
	Entrepreneurship Research	6
	HRM and Leadership in SMEs	6
	Entrepreneurial Finance	5
Centre for Applied Finance and Economics (CAFÉ)	Asset Pricing and Financial Markets	5
	Trade, Technology and Sustainable Industries	1
	Economics of Distribution and Community	2

**Table 2:** PhD Completions by Centre and Cluster

### Research Integrity for Academics and PGRs

The University has a robust system in place to ensure staff and PGRs adopt ethical research practices. There is an Ethical Compliance Team, with designated managers and officers in place, to facilitate the ethical approval process of potential projects. To that end, BLSS have a Faculty Academic Ethics Committee that oversees the ethical approval of researchers’ projects.

In some fields (e.g. economics and finance), which involve the use of large publicly available datasets, ethical approval is not usually required, though academic staff are still governed by University policies to report results with integrity, and disclose any conflicts of interest. Where primary data is gathered, researchers (whether academic staff or doctoral students) are required to receive ethical approval from the BLSS Ethics Committee, prior to gathering any data (or the equivalent from another university, in the case of joint-research). Applications are processed via an online system, with blind peer-review. In considering research proposals, research is divided into three categories, ranging from high to negligible risk. The School has a dedicated research

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ethics lead — currently **Paladini** — who is a senior researcher with responsibility for coordinating ethical approval, including major projects on level 6 and level 7 taught programmes.

### Equality and diversity policy

The School recruits and promotes staff in strict accordance with the University's HR policies. The Equality, Diversity and Inclusion in Employment Policy is the relevant framework, which incorporates all relevant employment legislation, and is underpinned by the University's Core Values. At its heart is the principle that every member of staff is entitled to a working environment that promotes dignity and respect to all. This policy is reinforced with data gathered through the Equality Impact Analysis, a Dignity at Work Policy, Trans Policy, Flexible Working Policy, Prayer and Contemplation Facilities Policy, and framework for Family Related Leave. This is reinforced by active University employee and Student Union groups that support diversity and inclusion. These include the BAME Steering Group, the Disabled Steering Group, Mental Health and Well-being Network, and the LGBT+ Staff Network.

One of the aspects of the University's Equality, Diversity and Inclusion in Employment Policy is that we aim to have a workforce that reflects the local community. The West Midlands is the most ethnically diverse UK Government Region outside of London. In the Business School, 40.5% of academic staff are from a BAME background, significantly higher than the West Midlands population averages. Relative to the 2011 West Midlands Census data, women are under-represented in the School (40.0% of academic staff), but from an intersectional perspective, the proportion of female BAME staff (14.4%) is above their composition in regional and national figures. In addition, 33.9% of the School's faculty are white males, this being below that in the regional composition for this demographic group. Data for those that disclosed identify is summarised in Table 3.

	BAME	White
Female	14.4% (10.6%)	25.6% (40.4%)
Male	26.1% (10.2%)	33.9% (38.8%)

**Table 3:** Composition of Academics (School)  
(West Midlands Population, 2011, in parentheses)

The School data on diversity among staff with SIGRES is also limited since three people declined to disclose ethnicity. For those that did, the data indicates that women (both BAME and white) tend to be under-represented in the SIGRES group, relative to the School proportions. In contrast, BAME males are over-represented, relative to the School's distribution.

	BAME	White
Female	4.9% (14.4%)	20.0% (25.6%)
Male	40.0% (26.1%)	35.0% (33.9%)

**Table 4:** Composition of School (SIGRES only)  
(Composition of Academics, School, in parentheses)

Other data on religious belief and sexual orientation is more limited because over 25% of School academics declined to provide information on their religious beliefs, and 28% declined to disclose sexual orientation. This notwithstanding, the EDI data does indicate under-representation of women as a whole, among staff, and especially among those with SIGRES. The statistical driver

## Unit-level environment template (REF5b)

of this is an over-representation of BAME males. The group that societal inequality traditionally advantages, i.e. white males, are statistically under-represented. In the new School research strategy, which is in development, mixed-methods research will examine the career paths and historical drivers that are at work, with a view to creating enablers and removing any barriers identified. As per BCU's REF Code of Practice, all staff involved in the selection of outputs have undertaken Unconscious Bias Training.

### Section 3. Income, infrastructure and facilities

#### Income

Research and enterprise income has come from a number of sources: (i) QR income; (ii) knowledge-exchange, including KTPs and consultancy; (iii) ERDF projects to support SME growth; (iv) Erasmus+ grants to support the development of entrepreneurship education; (v) business-to-business (B2B) contracts. We aim to continue to target these revenue streams, though will need to be agile to respond to UK Government initiatives which replace EU funding.

QR monies, awarded through REF 2014, were used to support PGRs via student bursaries. In addition, during this REF period, the School has secured £304K in research funding, as classified by HESA for REF-purposes. However, total external funding secured was far higher, in particular to support the CEIG's knowledge-exchange with SMEs. Indeed, combining the multiple sources of third stream-income attached to research, enterprise and research-informed CPD, the School secured c.£2.02m in funding and B2B contracts in this cycle. With the exception of ERDF funding, which runs to 2022-23, the secured funds were committed during this REF cycle.

A large part of School third-stream income facilitated knowledge-exchange. Building on the practice-based focus of the School, a KTP, and multiple KEENs, have been secured. Between 2014-17, the School supported a KTP with Walsall Housing Group (project value c.£187k), and it delivered five KEEN projects with Indestructible Paints, Rayburn Plastics, Malthouse Engineering, Right Check, and the Builders Merchant Federation (project values totalling c.£151k). For example, **Yerushalmi** worked with the Builders Merchant Federation to develop a forecasting model that members could utilise to aid their planning. More recently, further CAFÉ analysis for the Council of Canadian Academies, on behalf of the Public Health Agency of Canada, looked at the potential socio-economic impacts of antimicrobial resistance in Canada (income to BCU, c.£21k). Researchers also recently provided consultancy to Vitality Health, exploring the cost of physical inactivity (value c.£10k).

CEIG was established partly with a view to securing extensive EU funding to support SME development in the West Midlands. For example, in 2016, working in collaboration with the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP), **Gilman** secured income of c.£206k through the Enterprise for Success Programme (total project value c.£915k). In 2016, the School secured funding as part of the Innovation Vouchers programme, delivered in collaboration with the ERDF. The initial funding, which ran until 2019, had a value to the Business School of c.£262k (total project value c.£534k). As outlined in ICSc, this funding had a profound effect on SMEs in the West Midlands region. In 2019, the School secured further funding of c.£178k, as part of Innovations Vouchers 3 (value c.£1.6m). This phase of Innovation Vouchers is scheduled to run until 2022-23.

**43.** In 2014, the Entrepreneurship Research cluster secured c.£32k of funding to support a project examining Business Education for Sustainability (Erasmus+, overall value c.£320k). This supported entrepreneurship education in Eastern Europe (ICSa). Building on this, in 2017-20, further funding was secured on a project examining African Higher Education Leadership in Advancing Inclusive Innovation, with the School receiving c.£52k (Erasmus+, overall value c.€706k). Further third-stream income associated with research-informed CPD was secured by the Academy for Multi-Unit Leadership (ICSb), generating income of c.£775k from B2B clients.

## Unit-level environment template (REF5b)

### Infrastructure

In order to support income generation, research and impact, much of the research infrastructure is coordinated centrally by RIEE, as described in 5a, who liaise with the Faculty Associate Deans for Research to direct resources. The primary support in income generation and support is provided by Research Support and Development Officers (RDSOs); the Business School have one (full-time) devoted to research activity, and another (0.5 FTE) who focuses on enterprise activity. The role of the RDSO is to identify funding streams and communicate them to colleagues, and to provide support in the mechanics of the bid process. The RDSO liaises with finance to ensure bids are properly costed. For successful bids, the RDSO liaises with finance and the University compliance team to ensure the grant is appropriately managed. Additionally, the RDSO will support the OA Repository, guiding and supporting academic staff in uploading documents.

Within the School, an additional level of academic support is provided to the Head of Research and Enterprise through a dedicated Assistant Lecturer who supports events management, collates impact, and assists in PhD monitoring (liaising with the Faculty Graduate School). The incumbent in this role is one of our PhD students (**Zahiri**), who is currently revising her thesis post-viva. There is an administrative Enterprise Team within the School, comprising four staff, all of whom are currently funded through the ERDF (Enterprise for Success; Innovation Vouchers; and, Higher Level Skills Match) and the UK Government (Department for Business, Energy and Industrial Strategy). They have supported the impact reported in ICSb and ICSc.

### Facilities

Over this REF cycle, the University has relocated to the City campus, with enhanced physical space, teaching technologies and research environment. This is manifest through the initial £63m investment in the Curzon Building, which hosts the Business School and University Library. The improved infrastructure now offers research students the opportunity to access library and electronic resources more easily, which are essential for much of our research, most of which is desk-based. The library has received significant resources to update its technologies, databases, electronic books and journals. Within this new development there is dedicated space to support events (backed-up by a School and University Events Team), and teaching infrastructure which can also be used to support dissemination activities. Examples of infrastructure include the Link Marketing Agency (which links academics and students in supporting local business with marketing projects), the Trading Room, and the Business Advice Centre, launched in November 2019. The latter aims to support students with live client projects, connecting academics, our student body, and knowledge-exchange.

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

### Collaboration

Since REF 2014, the Business School has consciously become more outward-looking, and has expanded the scope of its collaborations. In REF 2014, there were eight externally co-authored outputs, involving 47% of submitted papers. Only one output had an international collaborator. In the present output submission, this has been transformed. There are 45 external paper collaborations, involving 80% of submitted papers. Of these, 38% are international (with scholars in Australia, Canada, China, Egypt, Finland, France, Ghana, Greece, Iraq, Ireland, Romania, Russia, Spain, Taiwan, UAE, and Vietnam), reflecting a wide range of countries.

As well as co-authored research, members of the Business School actively participate in research networks, supporting the external peer-review of outputs and grants. This evidences esteem and contributions to the research base of business and management. School academics have acted in editorial capacities for five journals, and participated on the editorial boards of a further nine

## Unit-level environment template (REF5b)

journals over this REF cycle (including *International Journal of Entrepreneurial Behavior and Research*, *Review of Political Economy* and *American Journal of Management Studies*). Colleagues have served as referees for 79 journals (such as *British Journal of Industrial Relations*, *British Journal of Management* and *Regional Studies*). Researchers have also supported the peer-review process for grants: **Gilman** and **Philp** are members of the ESRC peer-review college, while **Hussain** has been a referee for the Council of Canadian Academies.

### Collaborative Events

In order to further our links outside the University, Centres were also tasked with soliciting high-calibre external events, to be hosted by the School. These organisations are conduits for professional bodies and wider networks. COVID-19 has slowed this, but in the first year of the new strategy, events included:

1. CABS, "DBA Symposium: The DBA journey", 2019;
2. The British Academy of Management (BAM), HRM Annual Conference on "HR Opportunities and Challenges in SMEs", 2019;
3. Institute of Small Business and Entrepreneurship (ISBE) conference, "Financing Green Innovative SMEs: Regional Perspectives", 2019.

In the School, business engagement and collaboration is also enhanced through our Visiting Professor Network. Professor Vicky Pryce has supported Business School events, drawing on her research and experience as former joint-head of the Government Economic Service, acting as an advisor to CAFÉ, and conduit to practitioner-economists. As a School with a Birmingham-focus, our connections to the Greater Birmingham Chambers of Commerce are established via Council Members who act as Visiting Professors (Steve Brittan, Deb Leary, Paul Cadman and Mark O'Sullivan). The latter three also serve on the Business School's Advisory Board, informing us and acting as ambassadors for the School. The Board is Chaired by Professor Paul Brown, Director of Government and Public Sector at Ernst and Young, who also advises on research into business practice, applied finance and economics. These institutional links provide a conduit to local businesses, reinforcing the pipeline to SMEs, which the School supports, via its funded projects. The Advisory Board provides guidance on matters related to research priorities and business engagement. For example, in 2019, a sub-committee of the Advisory Board was formed which examined the way the research pipeline was developed, and this began to be managed in a way consistent with project planning in the commercial, private sector.

### Networks and Projects: Regional

CEIG has engaged with a variety of organisations, including the Department for Business, Energy and Industrial Strategy (BEIS), the Federation of Small Businesses, the Manufacturing Training Centre, and CABS. The School is now (since 2020) engaged with BEIS and CABS in delivering its Small Business Leadership Programme; **Gilman** was an active member of the steering committee that developed it. Local collaborations are particularly important as we are the University *for* Birmingham. As noted in ICSc, collaborators include Solihull Borough Council, Sandwell Council, and Birmingham City Council. Through its connections and work on the Enterprise for Success and Innovation Vouchers projects, CEIG has worked with the Greater Birmingham Chambers of Commerce and the Black Country Chambers of Commerce. Since its inception, CEIG has worked extensively with a great number of businesses through workshops and its diagnostic (which received a Small Business Charter "exemplar"). Members have also made a significant contribution in ISBE, holding positions such as trustee, as well as chairing two Special Interest Groups (**Carey**, Creative Industries Entrepreneurship; **Gilman**, SMEs and Growth). Connections to business are also manifest within the HRM and Leadership cluster of the CEIG, and through research-informed CPD delivered by the Academy for Multi-Unit Leadership, which has been a conduit for research impact. Research conducted by members of the Academy have supported the teaching and learning of cohorts of managers from Premier Inn, Greene King, Mitchells and

## Unit-level environment template (REF5b)

Butlers, Marstons, Stonegate, St Gobain, and many Builders Merchants Federation member companies (ICSb).

### Networks and Projects: International

To support our research into entrepreneurship education and social enterprise, the Business School has participated in two major Erasmus+ projects, which have sought to enhance entrepreneurial outcomes (ICSa). These are international collaborations that have considerable reach. The Business Education for Sustainability (BEST) project examined sustainable business development in Bulgaria, Greece, Lithuania, Spain, Portugal, Turkey and the UK. Business School academics worked with colleagues from the University College Birmingham, and further afield, including Polytechnic Institute of Bragança (Portugal) and Izmir University of Economics (Turkey).

More recently, CEIG members from the Entrepreneurship Research cluster participated in a network looking at African Higher Education Leadership in Advancing Inclusive Innovation for Development (AHEAD). This involved a consortium of European and African universities (see Table 5) working in collaboration to further entrepreneurship education and entrepreneurial learning (for more details see ICSa). The project supports the UN Sustainable Development Goals, and aligns to the Business School's commitment to PRME.

Country	Partner University
Romania	University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureş
Poland	University of Social Sciences, Warsaw
Italy	University of Molise
Kenya	Kenyatta University
	Kibabii University
	Kisii University
	The Catholic University of Eastern Africa
	Mount Kenya University
Tanzania	Dar Es Salaam Institute of Technology
	The State University of Zanzibar
Uganda	Makerere University
	Kyambogo University
	Lira University

**Table 5:** AHEAD Partnerships

CAFÉ is a more recent innovation and its collaborations are therefore less extensive. Nevertheless, **Yerushalmi** has worked on two funded projects — on anti-microbial resistance, and the economic cost of inactivity — with RAND Europe. Our KEEN project with the Builders Merchants Federation involved the development of a forecasting model for the building trades. The Federation reported that this was utilised by many of its members, to inform business decision-making. It is our ambition to develop such links and establish CAFÉ as a conduit for research-based knowledge exchange, in the same way as is with CEIG.

### Conclusion

Overall, the number, depth and geographical reach of the School's collaborations mirror the tremendous growth evidenced elsewhere in the submission. They provide opportunities to make a difference to business and society in Birmingham, as well as nationally and internationally. In the next REF cycle, we will look to consolidate these relationships through strategic interventions, but will continue to facilitate collaborations that emerge organically. Indeed, this combination of strategic planning, with openness to new ideas from colleagues, has been a hallmark of our success since 2014.