

Institution: Keele University
Unit of Assessment: UoA17 Business and Management Studies
<p>1. Unit context and structure, research and impact strategy</p> <p>Keele Business School (KBS) (launched 2019), formerly Keele Management School, is part of the Faculty of Humanities and Social Sciences (HumSS), housed in Keele University's multi-million-pound state-of-the-art new facility, the Smart Innovation Hub. The sector-leading Hub, co-funded by the Denise Coates Foundation, Staffordshire County Council, UK Government Growth Deal Funding, and the European Regional Development Fund (ERDF), and Stoke-on-Trent & Staffordshire Local Enterprise Partnership is also home for incubated companies working closely with KBS. KBS is structured into two cross-disciplinary groups for programme and line management purposes, namely: Economics, Accounting and Finance (EAF) and Marketing, Management and Organisations (MMO).</p> <p>KBS research objectives and underpinning strategies are aligned with the University Research Strategy and supported by the Research and Innovation Support Enhancement (RaISE) team. Research in KBS is led by the Director of Research (DoR) working closely with the Director of the Business School, Postgraduate Research (PGR) Director and Heads of Groups (HoGs), to ensure that University and Faculty research strategic targets are met, governance is safeguarded, and effective resources are deployed to support staff and PGRs.</p> <p>KBS embraces the University's founding ethos of "the pursuit of truth in the company of friends" to create and disseminate knowledge with rigour, depth, impact, and sustainability. Building on Keele's long-standing reputation for interdisciplinary research, KBS research strategically aligns excellence in research, innovation, collaboration and impact with the University's interdisciplinary research institutes: Keele Institute for Social Inclusion (KISI), Keele Institute for Sustainable Futures (ISF) and Keele Institute for Global Health (IGH).</p> <p>Research and impact strategy</p> <p>The research objectives set in REF2014 were to address broad societal interests related to work and organizations with an orientation toward engagement and impact. KBS endeavours to contribute toward creating economic and social value for a more sustainable, prosperous, and inclusive world through our research and engagement with industry. The co-location of KBS and the Smart Innovation Hub (SIH) has helped us to achieve these goals through bringing together academics, entrepreneurs and innovators to collaborate on business challenges and opportunities. Although global in outlook, our research strategy has a regional focus. Supported by a change in 2019 from Keele Management School to KBS, research activity has been consolidated around three research clusters: (1) work and employment; (2) equitable, inclusive and sustainable futures; and (3) financial markets and the macro-economy.</p> <p>The School's strategic vision and culture are realised through the following approaches, which develop the position at REF 2014:</p> <ul style="list-style-type: none"> • Recruiting and developing senior appointments to shape and lead interdisciplinary research in the three research clusters; • Recruiting and developing diverse early career researchers; • Maintaining and developing an integrated and vibrant PhD programme; • Developing interdisciplinary research partnerships for mutual and sustainable research impact on a regional and global level. <p>KBS harnesses a collegial vitality in its research portfolio (outputs, collaboration, and grant income) engendering an active and supportive research culture for staff and research students, underpinned by close engagement with industrial and societal stakeholders.</p> <p>Since 2017, KBS research activities have been further supported by the RaISE team, which draws together professional services staff with expertise in research development, governance, integrity, ethics, contracts, public engagement, commercialisation and impact. The team provides support</p>

for the development of research and innovation projects involving Keele University and its external partners.

Research is focused around three clusters.

Work and Employment: Since REF2014, the KBS Work and Employment research cluster has been strengthened with new appointments and promotions (**Huang; Li; Cao; Mather**). Steered by the strategic research priorities of Keele Institute for Social Inclusion (KISI) and Institute for Global Health (IGH), researchers study industrial relations, labour economics, and well-being issues, harnessing a local and global perspective. Workplace studies encompass the growth of the service sector, and the implications this has for contemporary experiences of work, as well as employee misbehaviour, gender, and diversity.

Regional economic development is researched through the lens of entrepreneurship, SME engagement, innovation, and knowledge exchange, reinforced by our colocation with the Smart Innovation Hub which enables local SMEs and start-ups to collaborate with our academics in a bespoke environment. Drawing on new appointments and corresponding boundary-spanning work facilitated by the Keele Institute for Social Inclusion (KISI), the impacts of foreign direct investment, multinational enterprise strategies, firm performance, and innovation provide a focus for this group (**Huang; Cao; Li; Sikdar; Brannan; Forrester; Papadopoulos**) with publications including *European Management Review* and *Human Resource Management Journal*. KISI's collaborative approach catalysed **Cao** and **Huang** to lead a Research England Global Challenge Research Fund (GCRF) funded project ('Foreign investment, labour market, and employment relations: the challenges of Kenya's sustainable development') partnered with KISI colleagues (from Social Science & Public Policy) and collaborators from Universities of Nairobi and Kenyatta. KISI strategic impact research funding supports a project ('Sustainable development challenges in low-income countries and China's One Belt One Road Initiative: the case of China-Pakistan Economic Corridor') with Kenyatta and Sun Yat-Sen University (**Cao and Huang**). Industrial relations research in collaboration with Staffordshire Fire and Rescue Service underpins one of UoA17's Impact Cases (**Mather**). Other collaborative work (e.g., with Coventry and Cardiff universities) analyses gender, CSR, and career capital in the UK jewellery industry. Publications (*Journal of Business Research*: **Carrigan**), and keynote speeches (e.g., #NoGlassCeiling International Women's Day Event, Birmingham, June 2018) evidence the research quality and reach.

Equitable, inclusive and sustainable futures: Built on the strategic aims of REF2014's 'Culture, Organisations, and Markets' group, and aligned to KISI and the Institute for Sustainable Futures (ISF), this cluster has been broadened and deepened with new appointments and promotions (**Dani, Dewick; Round; Tsoukis; Helfaya; Sikdar**). The cluster is dedicated to the systemic study of individuals, organisations, and communities in the context of social inclusion and sustainable futures e.g., **Dani** and **Dewick's** work on sustainable supply chains, food supply chains, and the circular economy, published in journals such as *Ecological Economics* and *International Journal of Production Research*. Embracing the UN sustainable development goals (SDGs), international and interdisciplinary expertise and qualitative and ethnographic methodologies feature strongly, with research funding and outputs contributing both scientifically and practically, both internationally and regionally.

International collaborations are reflected in the work of **Helfaya**, who, with colleagues from Beirut Arab University, published research in the *Journal of Business Ethics* examining how the composition of corporate boards influence environmental impact disclosure, as well as how CSR attitudes reflect religiosity. **Xu's** joint work with colleagues from the University of Wollongong on categorising greenhouse and energy auditors has been published by *Critical Perspectives on Accounting*. Interdisciplinarity is at the heart of the SOLACE project (Stories of Public Health through Local Art-based Community Engagement, £195k AHRC-MRC GCRF funded) (**Kelemen**), which uses local art-based community engagement to study public health in Philippine rural communities and includes cluster staff working with researchers from medicine, arts, and humanities. CASIC's - Community Animation and Social Innovation Centre, an internationally recognised research centre co-founded in 2014 by Keele University in collaboration with the New

Vic Theatre - global community-based research (led by **Kelemen**) featured in the launch of the Keele Deal Culture. This landmark agreement between Keele University and local partners in Stoke-on-Trent and Staffordshire aimed to realise the full potential of the University's cultural resources and assets for the benefit of the local area's economic and social future. Developments in the space over the period underpin one of UoA17's Impact Cases (**Keleman, Hamilton, Mangan, Surman, Moffatt**). In addition, **Sikdar's** work on prejudice, bias, and identity blind policy has been featured in the Stoking Curiosity engagement event in 2019.

Financial Markets and the Macro-economy: Since REF2014, KBS has embedded and grown capacity and leadership in finance and macroeconomy with new appointments (**Sorwar; Tsoukis**). Researchers in this cluster (**Audzeyeva; Legrenzi; Tsoukis; Sikdar; Sorwar; Wang; Yu; Sousounis**) study the macroeconomy and financial markets from a variety of angles and methodological perspectives (e.g., macroeconomic policy and forecasting, experimental economics, and behavioural psychology). Work of the cluster is aligned with Institute for Sustainable Futures in particular **Legrenzi's** study of energy markets, published in *Energy Economics*, and **Sikdar's** environmental impact-related research in *Environmental and Resource Economics*.

Supporting KISI's research into inclusive and sustainable governance, **Sorwar's** work has focused on the 2008 financial crisis, including a first study of its kind published in the *Journal of Economic Behavior and Organization*, contrasting the behaviour from a market risk perspective of a sample of Islamic and conventional banks. **Audzeyeva's** research published in the journal of *International Money and Finance* forecasts the credit spreads of sovereign bonds and the yield curve of defaultable bonds. Published in the *Journal of Financial and Quantitative Analysis*, **Steeley's** work uses an experimental asset market to show that the increased trading volume of cross-listed stocks observed in overlapping trading periods reflects information revealed in the overlap period, rather than lower trading costs in these periods. **Demirag's** expertise on public-private partnerships (PPP) and Private Finance Initiatives (PFI) is demonstrated by written evidence submitted in May 2018 to the House of Commons Public Administration and Constitutional Affairs Committee on the enquiry into the collapse of Carillion, and contributions to the United Nations PPP forum in Geneva (May 2018), and the International Managers Forum in Istanbul (2015). This research also underpinned a guest editorship for a special issue by Accounting Forum devoted to the topic of public sector reforms, public-private partnerships, and accounting.

Supporting and enabling impact

Building on the University and Faculty infrastructure and support for engagement and impact, KBS achieves its impact through the development of partnerships, provision of a supportive environment for collaboration, and a commitment to 'engage with the public to enhance the understanding of the research we do'. Impact has been supported and enabled by the following initiatives introduced over the REF cycle.

First, since autumn 2018, a series of workshops have been organised by the University's Directorate of Research, Innovation, and Engagement (RIE) drawing on internal and external expertise and involving Fast Track Impact, the New Economics Foundation, and the Parliamentary Office of Science and Technology. The Celebrating Impact Conference, organised annually by the University, provides a platform for showcasing impact arising from KBS research and from external organisations such as the National Coordinating Centre for Public Engagement, Elsevier, and Times Higher Education.

Second, the Faculty has an Engaged Research Network, which hosted a range of seminars and workshops and has developed guidance on policy engagement, collaborative partnerships, evaluation, funding, and public engagement. The network has been supported by the Faculty's Research Development Manager and a permanent Engagement, Partnerships, and Impact Development Officer with two newly created Postgraduate Engaged Research Fellow posts.

Thirdly, KBS has developed its own mechanisms for impact, facilitated by externally led impact training workshops as part of the research seminar series. This also includes dedicated time for academics interested in enhancing co-production, engagement and impact in and from their research, and the use of students as knowledge exchange mediators. This is underpinned by the enhanced reward and recognition for impact and engagement activities through, for example, the establishment of a Public Engagement with Research Excellence Award and an emphasis on impact, engagement, and knowledge exchange in new Academic Role Expectations.

Fourthly, the unit has benefitted from University's financial investment in support of impact. Following on from an initial £100,000 Impact Acceleration Fund in 2015-2016, between 2018 and 2020 Keele dedicated an additional £283,000 funds to support training and the development of impact from research on a competitive basis.

In 2017, Keele was one of seven organisations awarded funding under the 'embedding' stream of UKRI's Strategic Support for Expediting Embedding Public Engagement with Research programme, which supports HEIs to enrich and embed cultures around Public Engagement with Research.

Unit Impact and engagement activity

Researchers in KBS address key social challenges at regional, national and international scale, facilitated by the research institutes, including multidisciplinary symposia: 'Tackling Inequalities', 'Supporting Communities', and 'Providing clean energy and reducing carbon emissions'. As such KBS is fully engaged in robust and rigorous research that boundary spans our clusters, and our doctoral supervision mirrors these principal themes. For example, KBS-led CASIC works with colleagues from the Institute for Liberal Arts and Sciences (ILAS) to provide a vibrant hub within Keele University that brings together experts in global health, humanities and social sciences, and natural sciences. KBS CASIC colleagues hosted Polish academics and NGOs as part of the Stoke on Trent City Council 'Human Smart Cities' knowledge programme exchange in 2019. Research on community-based responses to the Japanese tsunami features in the European Journal of Operational Research (Kelemen) and doctoral student Lin published in the Journal of Sustainable Tourism about building community resilience, both of which underpin a KBS impact case study.

Through its research (**Allman, Forrest, Huang, Piga**), KBS designs content and engagement strategies that support small and medium sized companies (SMEs) to address productivity challenges and improve their innovation capacity and capabilities. This has been consolidated by large-scale (circa £9m) ERDF-funded projects, namely the Keele Research and Innovation Programme (KRISP), Mercia Centre for Innovation Leadership (MCIL), Smart Innovation Hub (SIH), and Smart Energy Network Demonstrator (SEND). These initiatives have helped early-stage and aspiring entrepreneurs in the region and developed a successful student-mediated knowledge transfer mechanism to work with SMEs and help shape the Business Gateway delivery of the programme. 370 SMEs have benefitted from KRISP, MCIL, and, more latterly, SIH, with 107 FTE new jobs and 153 new products/services/processes brought to market since 2016. Supported by Staffordshire County Council, KBS's home in the SIH brings together business support programmes and incubator space, and hosts events such as the Staffordshire Business Festival and 'Breaking the Mould' awards for those businesses engaging with the University through ERDF projects.

KBS research has other substantial reach, impact, and significance for real-world organisations, engaging our staff with local, regional, and global organisations such as the New Vic Theatre, Staffordshire Fire and Rescue, Cadent, Birmingham Assay Office, Competition and Markets Authority, UK's Cabinet Office and the US Federal Reserve. Projects forge important business links and impacts, with research funded by a range of bodies, including the ESRC and the Office for National Statistics. A 2018 AHRC funded workshop on Creative, Digital Methodologies highlighted technology meets arts-based methodologies. Building on a strong academic foundation, the activities of the group going forward will foreground action, impact, and engagement.

Future research objectives

KBS will continue to inform policy and co-create research programmes with our partners to support the social and economic ambitions of the region through innovation. Internationally, KBS will continue to contribute original, critical, and impactful research working with interdisciplinary academic partners and industrial and societal stakeholders. KBS is committed to shared learning, collaboration, and wherever possible co-designing of research projects with global and local businesses and communities. We have the following strategic priorities:

- (i) KBS will put a strong emphasis on high-quality publications for the next REF by providing a supporting, collegiate culture where individuals can thrive. KBS is committed to developing junior staff to reach their full potential as excellent researchers by implementing a structured mentoring scheme aligned with the Vitae Researcher Development Concordat. Activities include research workshops, writing retreats, internal and external seminar series. Experienced researchers within KBS will support early career researchers in their publishing aspirations by providing peer review feedback, joint authorships, and creating interdisciplinary project opportunities with academics across the university. KBS will support colleagues who are aspiring to high-quality publications and reward those who achieve high-quality publications as part of the promotion process.
- (ii) Working with RIE, KISI, ISF and IGH, KBS will develop a joint research and engagement theme that will contribute to the creation and dissemination of knowledge linked to sustainable development, social inclusion, and global health. Across the research clusters, the work and employment cluster will focus on digital, green entrepreneurship, and decent work; the equitable, inclusive, and sustainable futures cluster will foreground the challenges and opportunities of a transition to a circular economy and other more sustainable systems of consumption and production; and the financial markets and macro-economy cluster will focus on the assessment and evaluation of new green financial instruments such as green bonds and new approaches to interest rate modelling that overcome the deficiencies of current interest rate models. To support this research, KBS will target traditional grant-awarding bodies, and work closely with the rest of the university and academic, industrial, and societal partners in co-creating and submitting interdisciplinary research applications.
- (iii) KBS will strengthen its engagement agenda and impact at the regional level. This includes promoting regional innovation and development, in partnership with the Smart Innovation Hub, interdisciplinary colleagues from across the University, and industrial and societal stakeholders. These initiatives will focus on improving employment opportunities for the local workforce, contributing to greater social inclusion, and tackling raised social inequality as a result of the COVID-19 pandemic. One such initiative will see KBS collaborate with the School of Computing and Mathematics and IGH to model and study the impact of big data with respect to health and financial markets/banking.

KBS will prioritise a diverse, inclusive, and professional community of scholars and progress will be benchmarked against equality charter marks, including Athena SWAN and the Race Equality Charter. KBS will also seek to increase PGR student numbers and create a vibrant research community, with the aim of establishing an organic pathway from PGT through PGR to Faculty.

Future investment and growth

KBS will continue to prioritise research aligned to grand challenge themes of social inclusion, sustainable development, and global health, including relevance to Covid-19 recovery, and broaden impact and engagement while ensuring sustainable capacity by growing our portfolio of interdisciplinary projects and income generation through collaborations. This will provide a robust platform for the future development of interdisciplinary, critically informed, and policy/practice-relevant research in KBS, high-quality academic outputs, and a strong impact agenda.

KBS will also continue to encourage and support a diverse range of research topics of rigour and impact aligned with academic freedom. The infrastructure supports a culture of dissemination and dialogue that seeks to grow research from the bottom up, as much as direct it from above. Administrative priorities for research will be guided by a strategic focus on more rigorous performance monitoring and support for individual research plans, embedding research plans into staff development and appraisal as a priority development to enhance post-REF research culture.

Building and maintaining an environment for open research and integrity

Research integrity is one of the strategic pillars of Keele University's Research Strategy 2020. Open research and integrity are key components of the KBS research culture. This Unit is at the forefront of developing an open research environment; research outputs are made openly available, which began in advance of the current REF policy and is reflected in its 100% open access compliance for REF 2021. KBS goes beyond the REF policy by also making book chapters and working papers openly available for others to utilise. KBS works with partners to seek external funding for open research, and where this has not been possible, utilises Keele's research repository. Research integrity is supported by continuing professional development (CPD) training for staff and PhD researchers offering a discipline and methodology specific approach. A Faculty Lead for Research Integrity (**Eccleston-Turner**) ensures an appropriate methodological and discipline approach. Further, KBS encourages all staff to share work-in-progress and examples of best practice, to openly discuss methods, transparency, and reproducibility, and to raise concerns of malpractice. KBS manages and accesses open research through the Symplectic repository, and good governance and research integrity underpinned by adherence to the Concordat to Support Research Integrity, DoRA, and the HumSS Faculty Research Ethics Committee.

Keele has a quality management system for the main areas of research that are governed by legislation and also a research ethics committee in every faculty. KBS has two dedicated academics who sit on the Faculty Ethics Committee and help researchers in the School address ethical issues. This is supported by the Research and Innovation Support Enhancement (RaISE) team, which draws together professional services staff with expertise in research development, governance, integrity, ethics, contracts, public engagement, commercialisation, and impact. All applications for ethical approval were accepted in this REF period.

2. People**Staffing Strategy**

KBS's staffing strategy is informed by Keele's People Strategy and linked HR policies. Recruiting, developing, and retaining international faculty, at different levels, who have the potential to develop and shape the research direction of KBS is a key strategic objective. Firstly, we maintain equilibrium in high calibre, research-active staff through a focus on strategic recruitment of staff with experience as well as those with early career developmental capability, aligning this to KBS and University research strategy aims, and buttressing research-led teaching. KBS has appointed four senior professors (**Dani, Dewick, Huang, and Sorwar**) and two early career researchers (**Wang, Yu**). New professorial appointments in the areas of entrepreneurship and management (**Huang**), sustainability and innovation (**Dewick**), operations management (**Dani**), and finance (**Sorwar**) are driving strategic research aims and the work of the three clusters. Secondly, KBS inclusively nurtures all research careers with a commitment to invest in people and develop their career for excellence. KBS has invested in recruitment and retention of excellent researchers, adding mid-career capacity to develop future leaders in international business (**Li**), marketing (**Round**), and economics (**Tsoukis**). Thirdly, it has developed organisational processes to ensure that academic staff have the time, resources, organisational support, and collegial environment necessary to undertake high-quality research that can inform practice and policy. Fourthly, support for the career development of research-active, fixed-term staff in KBS allows research assistants to progress to secure, permanent academic posts within the university and beyond. For example, Dr **Millward** started her career as a graduate teaching assistant, engaged in CASIC activities and is now a KBS Teaching Fellow and working toward a translation to the Education and Research pathway, while Dr Lin progressed from a graduate teaching assistant to a lectureship at Portsmouth University. During the REF period, the internal promotion of several ethnic minority scholars (e.g., **Cao, Helfaya, Sikdar**) with their respective specialisms has significantly enhanced the research output and reputation of the School, providing further evidence of the School's supportive and inclusive research environment.

REF2021 has 17 FTE Category A staff submitted. This is slightly down from REF2014, where KBS selectively returned 18.3 FTE Category A staff, which can be attributed to career progressions and promotions to prestigious UK and international institutions, and a period of a major restructuring.

Staff development

KBS' work allocation process ensures that academic staff have the time, resources, organisational support, and collegial environment for conducting research. Staff development is recognised as important for research-active staff to support development and sustain a continuous body of work, evidencing integrity, independent research capacity, and consistency. The Academic Role Expectations include criteria that balance research outputs, income, engagement, knowledge exchange and impact, citizenship, and leadership. Following REF2014 commitments, approaches for staff development include:

- As part of the workload allocation model (WAM), 20% of time is allocated for research activity by teaching and research staff; Staff can secure further research time with external grant income and are also allocated time for business engagement (up to 10%). Additional allocation is given to early-career staff, who also benefit from a senior mentor, allocated at induction. Research mentoring has been enhanced by senior appointments (e.g., **Dani, Dewick, Huang, Sorwar**), each of whom brings a unique set of complementary expertise.
- Staff are required to submit an annual research plan aligning research with the Faculty's research strategy. The DoR (**Dewick**) annually meets research active staff and research plans feed into the annual appraisals process, which offers a further opportunity for mentoring and identifying training and development opportunities. The School Director, DoR, and HoGs collectively oversee the process to ensure equity and consistency.
- KBS has a full and active commitment to Vitae's Concordat for Promoting Excellence in Research. Regardless of career stage, all staff are encouraged and supported to enhance their research expertise via training courses. For example, KBS is an active member of the Northern Advanced Research Training Initiative (NARTI) - a network of research-led universities in the north of England providing specialist advanced training tailored to business students, through the facilitation of research training events, retreats, and conferences to establish networks to share cross-regional expertise. Keele 'Writefest' offers a month-long structured writing retreat and research development opportunities.
- KBS funds staff to attend conferences and research training (£11,692 in **2018-19**) and arrange visiting speakers and research workshops (£2,698, **2018-19**). One example is the Distinguished Lecture Series with international collaborative institutions (ESSEC, Paris; WZB Berlin Social Sciences Centre). In addition, researchers can apply for KISI funds annually to support inter-disciplinary research network development, pump-prime projects, or organise partnership building and engagement events: £40,000 has been invested since 2017/18. KBS' success in external funding enhances development opportunities (e.g., funding from the British Universities Industrial Relations Association). In 2019, the annual KISI Active Partnership Programme (KAPP) was launched, offering seed corn funding for researchers to work with non-academic members to propose innovative projects around social inclusion.
- KBS has a structured mentoring programme in place, with senior researchers helping ECRs plan their careers and develop their research potential. This is enhanced by several recent retirees who have remained as Honorary Research Fellows and Visiting Scholars. The support network is committed to maintaining and developing a critical mass of research-active staff that can support and mentor our vibrant PGR community as future leaders.
- KBS has a research leave policy aligned with the School and Faculty's research priorities. Staff are eligible to apply for one semester after a minimum of seven semesters of teaching, and approval is granted by the School and Faculty. Mid-leave progress and post-leave reports are monitored and the outcomes from research leave are part of the governance process. In this REF period, 5 staff undertook research leave.

Research and Innovation and support

Operational support for research and impact is provided by the University's Directorate of Research, Innovation, and Engagement (RIE). Within the Faculty, a dedicated engagement officer supports individual researchers and projects. KISI helps sustain partnerships, engage with stakeholders and the public, and develop and evaluate impact. The officer works with a cross-faculty research development team to identify funding opportunities and to embed pathways to impact. These well-trained professional services staff work closely with researchers to develop impact from research on a one-to-one basis and support the delivery of public engagement and impact training. Researchers are encouraged and allocated time for engagement. They also have access to monthly impact and public engagement drop-in sessions by colleagues with expertise in arts and cultural engagement, business engagement, knowledge exchange, communications and outreach to provide holistic support for the development of a range of pathways to research impact.

Research Students

A key strategic target for the university is to increase the number of PGR students, enrolments, and awards. KBS, led by the PGR Director (**Audezeyeva**), contributes to the University target and has increased doctoral awards to 26 in the current REF period (from 24 in REF2014) with a PGR population of 117 FTE in this REF period.

Recruitment: KBS attracts PGR students in different ways. Funded student recruitment aligns to the three Institutes. To recognise the diverse needs of PGR students, we advertise projects internally and externally to UK, EU and international students, on a full or part-time basis. Positive action statements are used to encourage applications from under-represented groups and to ensure a fair process. All applicants are interviewed prior to the offer, to confirm their suitability for the project.

Funding: KBS has benefitted from HumSS Faculty PGR studentships and Graduate Teaching Assistantships together with competitive 1+3 ESRC/AHRC studentships. Students are funded to attend external training courses, conferences or workshops, research visits, and other events. Community Animation and Social Innovation Centre (CASIC) provides Summer School funding for PGRs (15 AHRC scholarships awarded in 2017, for example) and free methodology workshops. KBS PGRs have also won competitive grants and bursaries from external funders such as the Royal Economic Society to support prestigious conference attendance and training.

PGR supervision and training

The University's Code of Practice on PGR Degrees governs supervision, training, and examination of research students, and ensures a robust and structured programme of supervision and training for PGRs, underpinned by our commitment to PGR experience. All PGR students are members of the newly founded Keele Doctoral Academy (KDA), which provides a unified platform for PGR support, governance, and training. The KDA also provides opportunities for PGR students to connect with communities of interdisciplinary researchers across the university (e.g., through an annual, university-wide postgraduate conference). KBS nurtures a collegiate and inclusive environment for training and developing research students by providing each student a lead and second supervisor, who have undergone compulsory training on supervision as part of their professional development, with the first supervisor only approved after seeing at least one student through to completion.

PGRs are required to complete the minimum subject-specific training and also engage with personal development and employability skills training. Their further training needs are identified through supervision meetings and the personal development and learning plan (PDLP), which includes a training commitment of two weeks per year or 200 hours over a three-year full-time doctoral programme. In addition, PGRs are encouraged to attend external training, for example, the above mentioned NARTI and North West Consortium Doctoral Training Partnership (NWCDDTP) and relevant conferences/seminars/workshop in the School, Faculty, and University, for example, CASIC's Embodied Research through Creative, Digital Methodologies (2018) and British Universities Industrial Relations Association (BUIRA) meeting (2019). KBS PGRs are invited to present their research and chair tracks at the annual student organised PGR Social

Sciences symposium, alongside others from the ESRC/AHRC DTP network. One PhD student was invited to speak at the UK Parliament on blockchain and bitcoin.

Support and experience:

All the above provides not only an excellent environment for PGR students to develop their skills and confidence to conduct independent research but also enhances their experience and employability. Additional support for PGRs includes Faculty PGR Handbooks, PGR advisor, Student Representatives, the Keele Postgraduate Association, and Student Mental Health Project Officers. In the 2019 national Postgraduate Research Experience Survey (PRES), KBS was in the top quartile for business & economics subject (85% satisfaction), and top quartile for professional development and research culture. PGR leavers' destinations include academic posts at the University of Birmingham (**Hodder**), Keele (**Pender**), and industry roles at Bank of China (**Zhang**) and Goodwin International (**Jayathilaka**).

Equality and diversity

Keele is committed to improving and developing practices in equality, diversity, and inclusion (EDI). Our Faculty Dean for Research is one of our LGBTi role models for the University. Keele has renewed its institutional Athena Swan Bronze award in 2018 and in 2019 it became one of only 12 HEIs to secure a Race Equality Charter Bronze Award. KBS has policies, procedures and training in place to ensure equality and diversity and to address bullying and harassment. Appointments and promotions are transparent and based on merit, ability, achievement, and potential, with Equality Analysis training available for those involved in panels. Our recruitment advertising follows the principles of Disability Confident employer, Athena Swan, Stonewall Diversity Champion, and Race Equality Charter. We encourage applications from individuals with BAME backgrounds for all roles in KBS, and we actively promote transitions to leadership initiatives (Aurora and Springboard) to colleagues, especially women. Two of our part-time members of staff have become full-time (**Pender**, **Millward**). Compulsory recruitment and selection training further bolsters commitment to equality and diversity for staff participating in recruitment panels. All new academic staff are required to attend the Welcome to Keele training which includes an introduction to EDI and unconscious bias. KBS staff are active in various EDI initiatives in the university (e.g., members of the university's BAME Staff Network, which is currently led by KBS' Sikdar, who also organizes the university's Race Equality lecture series). KBS is committed to supporting and promoting equality and diversity in research careers by adopting a policy of transparency and fairness in its research strategy and activities, with individual circumstances being accommodated to reflect the impact on the ability of staff to work productively. EDI Training is provided for our REF decision-makers to ensure that equality is considered in all decisions (at the level of individuals, UoAs, and institutions), and personal and individual circumstances are respected to avoid conscious and unconscious bias. As part of its research culture, invited speakers to the seminar series of the school have been well balanced with respect to gender and ethnicity.

KBS is committed to employee and student well-being with designated members of staff responsible for staff and student welfare (Student Experience and Advancement Lead) respectively. Staff can request either short-term or longer-term/ongoing flexible working arrangements to deal with bereavement, caring responsibilities, or unexpected problems, and help staff to balance work and personal commitments, regardless of the length of continuous service.

All staff are encouraged to attend conferences and personal development opportunities with funding support. All female research-active academics who expect to return from maternity or adoption leave can access the Academic Returners Fund (up to £3,300). The Faculty supports additional research funding to cover childcare or partner attendance at conferences. Maternity leave is factored into promotion cases, and a mentoring scheme operates for female staff close to promotion, providing additional training/coaching on standards required for promotion.

KBS proactively embeds equality and diversity and complies with equality legislation for submitting staff and outputs to REF. Among the 17 FTE staff returned for REF, there is a balance of

researchers for gender and ethnicity: five of the returned staff are female, while 10 are BAME staff and two early career researchers.

3. Income, infrastructure and facilities

Income

Our strategic aim, included in our REF 2014 strategic objective to nurture interdisciplinary groups of researchers to bid for and secure a broad base of research grant income has enabled KBS to achieve significant growth in the average annual income from £92,660 (REF 2014) to £165,622, with a 7-year total of £1,159,357 representing a **79% increase in average income for the period**. Over this period KBS has maintained a broad portfolio of funding sources, receiving grants from funders that include Leverhulme, ESRC, AHRC, EPSRC, Santander, UK Department of Business, Innovation and Skills, and Sir Halley Stewart Trust.

Key projects include:

- A Leverhulme International Network Grant (£108,873) (**Cao**) studying Collective pay determination and the changing labour relations in globalised China
- QR GCRF Funding (£25k) to investigate foreign investment, labour market, and employee relations and the challenges of Kenya's sustainable development in collaboration with colleagues in Kenyatta University, Kenya, and Sun Yat-Sen University, China (**Cao** and **Huang**).
- A series of AHRC grants, including Connected Communities funding, that harnessed arts-based community engagement research in projects such as the AHRC (£195k) 'Stories of public health through local arts-based community engagement – SOLACE', with Atheneo University and New Vic Theatre. An AHRC Connected Communities development grant (£100k) *Evaluating the Legacy of Animative and Iterative Connected Communities Projects: A Three Dimensional Model of Change*, in collaboration with the New Vic Theatre, Jericho Road Solutions, and Leicester University.

Further grants on work in food sustainability and security include funding from XLFarmcare UK Limited (£20k); Higher Horizons, Food matters - A project exploring stories of food and sustainability supported by ArtsKeele and New Vic Borderlines (£20k); Heseltine Institute for Public Policy & Practice (£13.7k) funding on Hungry for Change: Working together to tackle food poverty in Liverpool and Stoke-on-Trent, collaborated with University of Liverpool and Royal Holloway, University of London; EPSRC Community and Culture Network (£22k) funding on Beyond the Foodbank: Using Digital technologies to escape food poverty; and AHRC Connected Communities Festival grant (£15k) on Animating Local Appetites: a Celebration of Community Food and Health in Stoke on Trent. KBS staff have won funding to support cluster related research, including: ESRC 'UK in a Changing Europe Seminar series' (£10k), Halley Stewart Trust grant to research migrant workers and their employment experiences, as well as a UK Dept. of Business Innovation and Skills grant of £41k to study employment relations in the hotel industry.

Small but strategically important grants include a British Academy grant (£5.3k) to study the roles of accounting and marketing communications in supporting arts engagement, in collaboration with the University of Liverpool; and a Connected Communities Catalyst Fund Award (£3k) in collaboration with Open, Leicester, and Brunel Universities funded a series of writing retreats. KBS won a Social Innovation Sandpit Award (£2.7k) to support On the Town: A Local Ambassadors' Programme and a Connected Communities: ECR Development Award 'What football players do...is part of the kids' lives': Exploring the connections between young people and sporting celebrity' (£6k), while an ONS grant (£4.6k) studied the dynamics of online UK house prices. A Santander Research Scholarship (£1.6k) was also awarded to study Economics of Discrimination and Affirmative Action.

Infrastructure and facilities

The co-location of KBS with incubated companies in the same building provides (a) incubation and grow-on space for innovation-led SMEs; (b) a Hub for business-university interactions and open innovation, and (c) a home for KBS in the heart of the innovation-oriented business

community. Supported by circa £9million of ERDF funds, the Hub enhances research and innovation infrastructure and capacities, and promotes business investment in research and innovation. The Hub also enables PGR students and staff to work and research collaboratively with on-site entrepreneurs and business owners, stimulating an even greater ecosystem that drives impact benefiting businesses locally, regionally, and globally, and ultimately delivering a world-class learning environment. This new investment underpins planned growth in PGR student numbers over the next five years, enabling the School to continue its commitment to widening participation in higher education.

The School supports research with dedicated IT infrastructure for staff and students, including software provision (e.g., NVivo, SPSS, Stata), with specialised software funded following individual requests. Through the Keele Learning Environment, staff and students can access high quality IT, learning and library facilities, and research databases. The School funds Bloomberg Professional Services Platform and Thomson Reuters Datastream for researchers and has a dedicated library budget. KBS has also different task working groups to consolidate both hard and soft infrastructure needed for research and impact, which includes Equality, Diversity and Inclusion Lead, in addition to Athena SWAN Lead and champions.

KBS has robust procedures and resources to facilitate the dissemination of our research and to promote activities that communicate our research strengths and achievements through engagement with the wider external communities. Each year Community Animation and Social Innovation Centre (CASIC), a key platform for engagement, has around 1500 members of the public engaged in their outreach and workshops. Our Digital Marketing Officer, in collaboration with the University Strategic Communications and Brand Marketing team, works with researchers to draft website material, press releases, and to promote School events, research papers, and new projects. We sustain an active social media presence, with academic staff frequently contributing to The Conversation (**Cao, Legrenzi, Millward, Sorwar**) and other international press and media outlets (**Round**) such as NPR Morning Edition, BBC Radio 4 (**Tsoukis**), TRT World (**Huang**) and BBC Radio (**Sorwar**). Public engagement with KBS research has been recognised by the ESRC Festival of Social Science awards, and investment in post-doc careers has been supported by a Leverhulme Early Career Fellowship (£81k).

Going forward a key aim is to increase research funding. To facilitate this, we will further diversify our funding sources, leveraging our local community and corporate networks where we have had significant success. We will explore further how our research can inform and enhance enterprise and innovation of the regional SMEs, starting from those located in SIH and working with local authorities and local enterprise partnerships. We will strengthen collaboration with academics across disciplines to address challenges through research. We will leverage internal and external networks for more substantial interdisciplinary grant applications made by syndicates of academics and practitioner/policy partners. Research Institutes are catalysts for KBS staff to partner with colleagues from across the University. We will make the strategic use of internal pump priming funding for grant application development and evidence gathering. KISI funding, for example, is thematically targeted and interdisciplinary, and can further support KBS research. ECR staff can apply for small grants and get support from experienced mentors, while more senior staff are expected to apply for larger grants. New senior appointments come with a track record of winning external grants (e.g., **Dani** from ERDF LLEP and **Dewick** from ESRC, Innovate UK, US National Science Foundation, amongst others). We will leverage international networks for joint research, particularly to address global challenges (e.g., green supply chain, circular economy and poverty, and food security), underpinned by the Keele Global Challenges Research Network. These grant capture activities will be supported by the Research and Innovation Support Enhancement (RaISE) team in RIE.

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

Supporting collaboration and contribution to the research base, economy, and society

KBS is committed to providing a supportive environment for collaboration and to engage with stakeholders to maximise impact on the research base, economy, and society. Developing

interdisciplinary research and partnerships for sustainable research impact is a key approach, supported by a dedicated Arts Officer (within its Marketing and Communications Directorate (MAC), providing extended support across this REF cycle) and a Development Coordinator for Arts and Public Engagement (working with the Development Manager for Arts and Public Engagement to provide a range of mechanisms to facilitate effective collaborations and engagement). Highlights across the REF period include:

Interdisciplinary collaboration: Through its extensive national and global research links, networks and collaborations, KBS continues to develop a sustainable interdisciplinary research base, working with other disciplines in the university and beyond. Leveraging deep roots in their respective domains, KBS researchers take leading roles in driving collaborative projects, nurtured by the interdisciplinary incentivisation culture. For example, CASIC organised an international Summer School on creative methods for research and community engagement, attracting 36 participants from five countries whose interdisciplinary specialisms include education, geography, dance, health, politics, and management. The event was held at New Vic Theatre in Staffordshire, featured with key-note speakers including KBS researchers, professionals from the National Council for Voluntary Organizations, and staff from the New Vic Borderlines Outreach Department.

Networks and user collaborations: KBS places significant emphasis on building research relationships with a variety of stakeholders with diverse interests, shaping an influential policy and practice environment, contributing to the economy and society. Notable examples include Cultural Animation, MCIL/KRISP/SIH, and industrial relations and change management in public services. Informed by interdisciplinary research, KBS and New Vic Borderlines (the outreach department of the New Vic Theatre) co-developed Cultural Animation (CA) an innovative approach that democratises relationships between academics, creative practitioners, and communities. This has changed practices in Borderlines and other organisations, influencing their engagement methods and stimulating community organising around food poverty, healthcare and disaster management, in the UK and internationally. This research led engagement with diverse audiences has enhanced cultural participation and improved community and practitioner understandings of specific issues. The New Vic are the principal beneficiary of this work, along with organisations that have adopted these methods and over 5000 community members who have participated in CA projects.

KBS designs research-led content and engagement programmes (namely, KRISP, MCIL and SIH), which support SMEs to address productivity challenges and improve their innovation capacity and capabilities in Staffordshire and Stoke-on-Trent – a region with some of the most pronounced economic challenges in the UK, and characterised by low levels of innovation, productivity, and leadership, especially within the region's SMEs. KBS research has underpinned and enabled these programmes to forge effective HEI-enterprise knowledge transfer mechanisms, for example through KRISP (student-academic support programme for SMEs) and MCIL (SME leadership programme); create networks and routes to innovation leading to market impact, and challenge conventional business practices through innovative pedagogical tools and techniques, enabling performance improvement, for example through SIH – we proactively work with stakeholders to use SIH as a shared space for novel interactions, networks and intensive incubation. Independent economic assessments have modelled that the GVA will continue to grow to £14.6 million and create 160 jobs by late 2021 as a result of support from MCIL, KRISP and SIH.

An invitation from Staffordshire Fire and Rescue Service (SFRS) for a critical review of the organisation's industrial relations led to the adoption of new working practices, with further research commissioned about enabling the involvement of fire service support staff in decision making. Subsequent outreach activities included the development and delivery of CPD for SFRS and other regional fire and rescue services, keynote presentations (e.g. at the Asian Fire Officer's Annual Conference, 2015) and written and oral submissions to wider public policy debates (e.g. Sir Adrian Thomas' Independent Review, 2015).

Other examples of engagement include written evidence to the House of Commons Public Administration and Constitutional Affairs Committee on the enquiry into the collapse of Carillion

(**Demirag**); evidence submitted to the NHS Pay Review Body Special Remit on Seven-Day Services(**Mather**); (research findings presented to the Competition and Markets Authority on airline and market pricing (**Piga**); and offering insights to the Cabinet Office into financing the circular economy as part of their 'Distinguished External Speaker Series' (**Dewick**).

International academic collaborations:

Leading and contributing to the wider research agenda of the discipline is an important aspect of KBS' research strategy and staff are encouraged to take an active part in developing international networks and shaping research trajectories. Evidence of activity over the REF period includes invited keynotes and speaker invitations at conferences such as the Sustainable Brands Conference 2019 (Paris), Academy of Management Professional Development Workshop 2020 (Vancouver), and Chartered ABS Annual Research Conference. In addition, invitations to overseas universities including Osaka, Aix-Marseille, Uppsala, Piraeus, Wuhan, Sun Yat Sen, and in the UK, institutions including Oxford, Edinburgh, Bristol, Sheffield, Liverpool, Cardiff, and Warwick.

Key roles held by KBS researchers in international research networks or international bodies include: visiting professor at Capital University of Economics and Business in Beijing (**Cao**); visiting scholar at the National University of Singapore (**Sikdar**); advisory board member of the International Symposium of Logistics (**Dani**), elected member of the Steering Committee of Future Earth's Knowledge Action Network for Systems of Sustainable Consumption and Production (KANSSCP) and co-lead of the KANSSCP Working Group on Circular Economy (**Dewick**).

Conference organisation

In 2016 KBS hosted the Gender Work & Organisation International Interdisciplinary Conference, with 410 delegates from 38 countries, mirroring Keele's reputation nationally and internationally as a centre for research in gender, diversity, and organisation studies.

In 2020 **Dewick** organised two online Open Forums and an online mini-conference on topics related to sustainability transitions post-COVID. The events were supported by a US National Science Foundation grant and involved over 750 participants from academia and beyond.

Other convened conference streams have been led by KBS academics at the International Labour Process Conference, Berlin, EGOS colloquium Athens with Universities of Warwick and Manchester, Academy of Marketing, Stirling, and International Critical Management Studies, London stream with EM Lyon and MMU.

Journal editorships, seminar series, and reviewing: Several KBS staff contribute to the research base through leadership roles in editing and reviewing peer-reviewed journals, including editorships, associate editorships, and editorial board positions on journals including the *International Journal of Human Resources Management* (**Cao**), *Gender, Work & Organisation* (**Kerfoot**), *Supply Chain Management: An International Journal*; *International Journal of Operations and Production Management* (**Dani**) *Critical Perspectives on Accounting* (**Oakes**), *International Marketing Review* (**Carrigan**), *Circular Economy and Sustainability* (**Dewick**), and the *Journal of Marketing Management* (**Carrigan**). Special Issues shaping the discipline and edited by KBS academics include *Accounting Forum* SI on Public Sector Reforms and Public-Private Partnerships, *Entrepreneurship and Regional Development* SI on contextualisation of Chinese entrepreneurship research (**Huang**), a *Journal of Cleaner Production* SI on sustainable systems of consumption and production, and *Resources, Conservation and Recycling* on the circular economy and climate change (**Dewick**).

KBS researchers' take prestigious reviewing and membership duties for British Academy/Leverhulme Small Grants, British Academy of Management, UKRI Future Leaders Fellowship Peer Review College, the EPSRC Peer Review College, UKRI Interdisciplinary Circular Economy Research Coordinator's interview panel, ESRC-AHRC Japan SSH Connections awards panel, ESRC Celebrating Impact Award, British Council (Newton) Panel, Swiss National Science Foundation, and ESRC Large grants.