

## Institution: University of Stirling

Unit of Assessment: C17 Business & Management Studies

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

#### Context

Research within Stirling Management School (SMS) helps deliver the School's overall mission of contributing to knowledge and learning through *responsible and sustainable business, policy and practice.* Our research has a strong focus on policy and organisational behaviour change, enabling organisations to deliver wellbeing and societal objectives, alongside economic growth.

In 2014 our REF submission reflected our stated aim of seeking *effective ways of improving business, society and lives through academic excellence.* The emphasis was on responsible leadership, successful organisations and sustainable societies, whilst creating impact through contributions to debate, public policy and management practice. Our strategy then was to:

- develop and invest in our four disciplinary divisions and a small number of specialist School based centres (including Social Marketing, Retail Studies and Behavioural Science)
- provide mentoring schemes and other mechanisms to support academic colleagues, research staff and postgraduate students at all career stages.

During the current REF period we have reviewed this strategy, to prioritise and deliver research initiatives within our established areas of expertise and to be agile in embracing new opportunities arising from emerging societal issues. In alignment with the University research strategy, with its three cross-disciplinary priority research themes and associated research programmes, we have introduced a set of mission driven School-level research themes and invested in a set of new academic and early career post-doctoral appointments, as we continue to build on a supportive and collegiate research culture.

#### Strategy

Our goal as a *Management* School is to stimulate policy and behaviour change to address economic and societal challenges. This requires an approach beyond the traditional disciplinary boundaries within business and management. Given the University and School (as well as Scottish Government) mission, we have adopted the UN Sustainable Development Goals (UN SDGs), as the underpinning framework for our research strategy, in order to shape our priorities and act as the focus for the impact of our research on real world issues.

Our research strategy is to:

- focus on real world challenges through a set of mission based inter-disciplinary school research themes to identify solutions within a regional and global context
- build on existing (and develop new) strengths within our **disciplinary areas** reflecting the expertise and academic curiosity of colleagues to build core competences and capacity
- embed the concepts of **impact and public engagement** throughout our research and other knowledge transfer dissemination activities to contribute to economic and societal growth
- provide an **inclusive**, **transparent and supportive research culture** creating the time and space for academic colleagues and research students to develop at all stages of their careers



This strategy is the outcome of an environmental scanning process and widespread consultation with colleagues to ensure that it is owned and understood and that we benchmark our research activities against business\management schools of a similar size and composition to measure performance and establish appropriate KPIs.

Our strategy is dynamic and continues to evolve through a process of reflection and refinement to ensure that it is aligned with the University research themes and programmes, remains relevant and is positioned to take advantage of the changing external landscape particularly the sector-wide focus on societal needs and challenges, the UK R&D Roadmap and NCUB Research to Recovery report. At a regional level, the Stirling and Clackmannanshire City Region Growth Deal and the Scottish Scale Up project will provide further opportunities to demonstrate the value of our research in the future.

### 1. develop a set of mission based inter-disciplinary school research themes

Based on our existing strengths and core competencies we have identified five School research themes, crossing traditional disciplinary boundaries within business and management to generate different perspectives and solutions to major societal challenges. These themes are aligned to specific UN SDGs but are flexible to enable us to anticipate and respond to emerging issues at regional, national and international level and to proactively seek research opportunities and synergies across these themes. The School themes are also designed to contribute to the three University research themes: Cultures, Communities and Society; Global Security and Resistance; and Living Well.



- **Informing Sustainable Communities**: addresses the impacts of change on global and local communities, places and spaces including digital lives and smart cities, through our research in resource economics; the role of town and city centres; environments & ageing; and grassroots and community organisations.
- **Transforming Consumption & Production Markets:** investigates change in the consumption and production lifecycle, bridging the gap between business, markets and consumer behaviours, through our research in retailing and supply chains; consumer behaviour; sustainability and consumption markets.
- **Supporting Healthy Behaviours**: examines why people make the decisions they do, and how societies can better support a healthy population at all stages of life, through our

research into nudging behaviours; medical tourism; the management & organisation of healthcare; wellbeing, and public health economics.

- Understanding Decent Work: addresses workplace challenges related to diversity, inclusion, new technologies, innovation and the impact on employment through our research on human capital; working lives; un\under-employment, employability and skills.
- **Exploring Sustainable Organisations:** explores changes in organizational structures and the processes, systems and governance mechanisms that drive sustainable economic development and wellbeing, through our research on co-production and co-creation; the responsible use of digital technologies and data; start-ups and SMEs; organizational accountability; change and leadership.

Through these five School research themes we actively encourage colleagues, from our four disciplinary based Divisions (Accounting & Finance; Economics; Management Work & Organization [MWO]; Marketing & Retail), to provide cross-disciplinary management perspectives to the same underlying challenge, for example in:

- *Transforming Consumption and Production Markets,* research on employment and global value chains in MWO links to retail internationalisation and supply chain relationship research in Marketing & Retail,
- Supporting Healthy Behaviours, public health research in Economics has synergies with research on the management and organisation of healthcare in MWO
- Understanding Decent Work, work, well-being and research on ageing populations in Economics integrates with the quality of working life and labour market and process research in MWO

The intellectual benefits and impact of researching across traditional management discipline boundaries to seek solutions to real world societal challenges is recognised and colleagues also work with researchers in other Faculties to provide a management perspective to research questions. For example, in the Faculty of Natural Science our environmental economists work with colleagues in areas of marine pollution; in Health Sciences & Sport our retail marketing and behavioural economists explore the impacts of interventions in health-related campaigns, and our operational management academics research staff optimisation and productivity issues in the health service, whilst in Social Science colleagues bring an economic and behaviour perspective to research on ageing. These linkages and contributions are further facilitated through the three University research themes and associated research programmes which support grant applications and intellectual debate.

## 2. Build on and develop our disciplinary based research strengths

The School research themes draw from four discipline-based divisions exhibiting long standing and emerging areas of strength, evidenced by research activity and outputs, in which we will continue to invest.

In **Accounting & Finance** (12.0 T&R FTE) our research pursues issues of public interest by exploring the interaction and discharge of accountability between organisations, individuals and society to improve individual financial well-being and market efficiency and to champion sustainable and responsible reporting and governance. We have developed strengths in two areas:

• **Financial Economics** research applies concepts from behavioural finance, psychology and economics to investor behaviour, incentives and risk perceptions and inter-firm relationships. This includes modelling and forecasting aspects of asset price behaviour and the relationship with both market risk and the wider macro-economy, and the implications for asset pricing and asset and R&D management. These relationships have implications for the stability of the financial system as well as acting as indicators for



economic wellbeing. (McMillan, Webb, Gavriilidis, Herbst, Campbell K, Dionysiou, Tabner, Kambouroudis, Changwony).

 Interdisciplinary Accounting research focuses on the communication of social and environmental impact, intercultural and interlingual accounting and the accounting profession. Our interests are connected through a commitment to critical investigations of power and ethics in accounting and accounting regulation, and to contributing to a more positive role of accounting in society. (Evans, Dey, Ou)

Our **Economics** (13.0 T&R FTE) research has a strong focus on public policy outcomes. We draw on behavioural science approaches, choice modelling, causal inference design and applied theory to improve our understanding of how people and firms make decisions to inform how environmental, health, labour and constitutional policy can be made more effective:

- Environmental Economics research focuses on the economics of sustainability and ecosystem services, including plastic pollution control. This includes environmental valuation, led by our applied choice researchers, market design and policy evaluation (de Vries, Campbell D, Moro, Börger)
- Wellbeing and Health research explores the economics of happiness, health, unhealthy behaviours and their psychological aspects, including the broader analysis of how agents make rational or heuristic decisions that may impact their welfare. (Erdem, Campbell D, Comerford, Moro, Stowasser, Wollbrant, Diasakos, Bell, Blanchflower)
- Economic Policy and Politics research focuses on the study of labour and asset markets for macroeconomic stability, including measures of underemployment. This research links with how fiscal and constitutional changes shape, and are shaped by organisations, local and national governments (Bell, Blanchflower, Sas, Rufrancos, Stowasser, Comerford, Grydaki, Wollbrant)

**Management, Work and Organisation** (17.65 T&R FTE) research draws on disciplinary and inter-disciplinary research in the sociology of work, organisational analysis, innovation\ entrepreneurship and operations management. Areas of distinctive strength have developed around two core areas:

- **Working Lives** building on a long tradition of research on societal influences on the quality of working life and the consequences for employee experience and well-being. This includes research on:
  - the labour process examining changes in skill formation and organisational control systems, new technologies (including social media) and their influence on employment relations and worker voice (Thompson, Bolton, Marks, Laaser);
  - the labour market exploring access to work, skills and employability, and patterns of labour market exclusion with a policy-oriented focus on improving opportunities for disadvantaged groups (McQuaid, Marks, Baxter-Reid)
  - the impact of workplace and social change on professional, occupational and other social identities; and divisions of age, gender, socio-economic status and ethnicity in access to and experiences of work (Marks, Mallett, Perriton, Broadbridge, McCabe).
- **Management and Organisation Studies** research investigates the ongoing significance of management and organisation for present-day democratic societies through research on:
  - policy processes and governance (Webster, Docherty, McQuaid); healthcare management and operations (Bowers, Walsh) and the ethics of care with respect to commercialization and financialization in health and social care settings (Marks, Pierides).
  - scenario planning, top management teams and strategic learning and interorganisational dynamics (Burnes, Burt G, Forbes), reappraisals of classic management texts and debates on ethics in management learning, education and



research (Burnes, Casler, Perriton, Pierides).

- innovation and management in SMEs, especially high growth firms, through policyorientated research relating to government, university and industry interactions and to regulation, business support programmes and entrepreneurial finance (Grant, Mallett).

Research in **Marketing and Retailing** (14.0 T&R FTE) explores consumption and consumer behaviour in a changing social landscape and specific contexts, with an emphasis on the interrelationships between consumers and society reflected through changes in consumption and retailing:

- **Consumers Cultures and Societies** research explores the ethical (or unethical) aspects of everyday consumer behaviour, consumer responses to corporate social responsibility and the formation of consumer communities, tribes and subcultures in specific consumption contexts. (Tinson, Black, Moufahim, Branco-Illodo, Rodner, Goode, Wilson-Nash)
- **Retailing** research examines the impacts of structural and behavioural change on market structures and behaviours. This includes retail internationalisation; retail 'spaces', places and communities; and supply chain relationship power dynamics (Sparks, Burt S, Freathy, Davies, Siebers, Maglaras, Calderwood)

We will further embed our School research themes and disciplinary strengths within our research activities over the next planning period and have sought to make appointments that contribute across both themes and disciplines.

### 3. Embed the concepts of impact and public engagement throughout our research

SMS has an established tradition of theoretically informed, applied research built on long-term collaborative relationships with a wide range of government, business and third sector stakeholders. We believe that research can, and should, make a difference across a range of organisational and societal contexts and we seek to make a difference through policy and behaviour change.

Our impact and public engagement strategy create the conditions that enable our research to achieve the broadest impact, guided by our five School research themes. This approach is showcased through the impact cases selected for this submission, which reflect our commitment to policy and behaviour change to deliver both societal and economic objectives. We deliver multi-level policy impacts addressing major challenges in the areas captured in our School research themes:

- To **understand sustainable communities** we need to recognise that the places and spaces in which people live, work and socialise will be different in the future. Going beyond traditional views of 'high street' redevelopment, our research has enabled a holistic approach to town centre regeneration that brings together researchers, public authorities, commercial organisations and consumers. This approach is having major impact across Scottish town centres and now forms a best practice model for regeneration across the UK and internationally (case study REF3.UoS.C17.4).
- A change in the way we allocate and manage resources within the heathcare system is needed to support healthy behaviours. With colleagues from the Faculty of Health Sciences and Sport, our research on improving NHS operational efficiency and patient experience through modelling has been instrumental in implementing management science modelling practices incorporating management behaviours in decision making across the UK, leading to greater efficiency through improved patient flows and resource allocation (case study REF3.UoS.C17.2).
- Changes in the world of work and the need to **understand decent work** in the future necessitate a rethinking of labour markets and employment support policies. Our



pioneering work developing understanding of underemployment and its incidence in economies has led to traditional measures of employment being rethought at the highest levels of economic policy across the globe. This has impacted on central bank decisions in, for example the UK and US, and benefitted millions globally (case study REF3.UoS.C17.1). Further reappraisal of perceptions of unemployment is evidenced through our research on changing policy approaches to employment support. A focus on long term sustainability and careers, to help certain disadvantaged groups, is now central to policy measures across Europe (case study REF3.UoS.C17.3).

• The spread of digital technologies and growth of digital data have raised questions about civil liberties and surveillance which are central to **sustainable organisations**. Our research collaboration with the Universities of St Andrews and Edinburgh in CRISP (Centre for Research into Information Surveillance and Privacy) is at the forefront of pioneering policy approaches that are ensuring responsible and accountable government and management of surveillance cameras in England and Wales and has directly led to the public being more informed and actively involved in this rapidly moving area. Our research has made sure that transparency and the public voice are embedded in government policy (case study REF3.UoS.C17.5).

Further impactful research has contributed to the redesign of the Scottish Government's consumer sentiment data collection instrument; the development of communication strategies encouraging healthier food consumption and the fiscal framework employed within the devolved nations. SMS research has been selected to be part of a joint CABS\BAM initiative (led by Cardiff) to promote the impact and public value and support for local regional economic development of business and management research, scheduled for release in 2021.

Impactful practices are diverse. To facilitate awareness of impact and the value of impactful research within the School, SMS has an Impact Champion. A sub-group of cross-Faculty Impact Champions share good practice and promote inter-disciplinary impact across the University. At the institutional level, awareness is further supported through a Research Impact Officer and Public Affairs manager. To engage colleagues with a wider range of stakeholder engagement activity SMS has a designated Associate Dean (Business Engagement) is accredited by PRME (Principles of Responsible Management Education) and holds the Small Business Charter. The School's International Business Advisory Board also provides colleagues with the opportunity to work together with local, national and international business leaders who guide, advise and engage in the activities of the School including research and knowledge exchange.

We have explicitly integrated research impact practices and stakeholder engagement into the annual personal development process (Achieving Success) to identify impactful activities, stimulate communication and user engagement and identify training and support needs. This includes:

- impact toolkits for public and policy engagement to enable colleagues to recognise the range and variety of research impacts,
- stakeholder writing workshops and media training,
- modules on research impact within the institutional staff development programme

Our ongoing commitment to enhancing the vitality and sustainability of the environment for impact within SMS is focused on:

- encouraging greater use of non-academic channels to communicate with user communities, building on existing press contributions, contributions to outlets such as The Conversation and blogs,
- strengthening funding, workload and other support mechanisms that can enable staff to embed impact more effectively in their portfolio of research activities,



- establishing a network of impact and business engagement coordinators at divisional and theme level to work with the Impact Champion and act as mentors to colleagues,
- integrating and promoting the developmental opportunities offered by the Institute of Advanced Studies at School level,
- integrating more clearly impact into the VITAE framework underpinning the development of our research staff and PGR students,
- refreshing our DBA programme and developing a DMan programme to ensure strong research skills can be applied to practice in a reflective way

### 4. Provide an inclusive, transparent and supportive research culture

A fundamental pillar of our research strategy is the continual enhancement of a supportive research culture and ethos for academic staff and research students. We engage colleagues in creating both our strategy and the 'spaces' in which they work. This entails opportunities to network and engage in intellectual discussion, and the creation of time and space within the Workload Allocation Model, and formal and informal mentoring schemes (both discussed in section 2).

Intellectual discussion to encourage cross-disciplinary thinking is stimulated in a number of ways. Colleagues participate in discrete research 'away-days' to identify potential areas of interest, initiate project applications and discuss support for research. An **Annual SMS Research Conference** allows new members of staff introduce themselves and their research, and all staff and PGR students participate in a poster session displaying their current research activities. This provides a forum for interaction amongst colleagues across management-discipline areas and is open to colleagues throughout the University to further encourage collaboration. With respect to institutional initiatives, colleagues from SMS are currently involved in the institutional research programmes on Health and Behaviour; Global Food Security; Extreme Events and Contextual Guidance in Humans and Machines, are active members of the University Research Environment Group and lead sessions in the annual University Festival of Research.

SMS has disciplinary based **research seminar series** involving internal and external speakers from leading UK and international Universities. These are open to all staff and PGR students within the School and are promoted across the University. Annual symposia involving internal and external contributors have included the ESRC funded Behavioural Science Workshop Series (Economics); the Stirling Business History Annual Conference (Accounting & Finance and MWO); bespoke workshops and symposia linked to funded projects and centres (CRISP, HAGIS) and one off events such as the Academy of Marketing Political Marketing and the Arts & Non-Profit Marketing SIG workshops in 2019 and the SEPA funded International Workshop on Experiments for Environmental Policy Formation in 2016.

In addition to the international networks of individual colleagues SMS regularly **hosts visiting academics** for periods of research leave and PhD students for shorter study visits. For example, during this REF period, SMS hosted academics seeking to interact with colleagues and use the Institute for Retail Studies information resources for extended research leave from Aarhus, Ariel, Kagawa, Lund and Nihon; for shorter study stays from the Universities of Zagreb, Lille, ESCP and Guelph, and PhD students from Parma, Zagreb, Lille and Cape Peninsula. These visitors contribute to the intellectual life of the School through debate with colleagues, participation in research projects and joint authorship.

In terms of **governance**, **transparency**, **integrity** and best practice, research is overseen by the School Research Committee which meets four times a year and is tasked with shaping the School research strategy, policy and practice including ethics, and monitoring performance. Chaired by the Associate Dean (Research), the committee is comprised of four divisional research directors, the School Impact Champion, the Associate Dean (Business Engagement), the director of research postgraduates, the chair of the School ethics committee, the School Manager and the

School Research Officer. We endeavour to ensure a gender balance when allocating these roles, so of the nine academic members of the committee, four are female. Colleagues from the University Research and Innovation Services are in attendance as is the School representative from the Communications Marketing & Recruitment Directorate. Committee minutes are available to colleagues and items and achievements are recorded in the monthly School newsletter. The committee reports to the School Executive and to the University Research Committee through the Associate Dean (Research) who is a member of both. Research is a standing item on the School Executive and Divisional Committee Agendas. Major strategy and policy issues, e.g. the revised research strategy and ethics processes, are fully and openly discussed and developed through these fora and the School Assembly to which all staff are invited.

Research in business and management is conducted in accordance with the appropriate **ethical**, **legal and professional frameworks**, including health and safety. Ethical approval for research is granted primarily through the General University Ethics Panel which meets monthly and for which SMS provides three panel members. The ethics process includes considerations of due diligence of partner institutions and agencies; risk management for both researchers and participants; the recruitment of participants, participant consent procedures, data collection and data storage protocols and the use and reporting of data.

With respect to **open access** SMS outputs including PhD theses are made publicly accessible via the green and the gold route in compliance with funder, publisher, ethical and legal requirements. Final drafts of outputs are deposited in the long-standing University open access repository (STORRE) and are visible via individual staff webpages.

## Section 2. People

To deliver our research strategy we aim to attract and develop high quality colleagues who are aligned to our vision and committed to achieving our objectives. We aim to:

- build capacity in our key research areas, both disciplinary based and inter-disciplinary School themes;
- recruit to maintain a balanced staffing structure in terms of career stage to provide opportunities for advancement and succession;
- provide the environment and opportunity for colleagues to develop their research skills and reach their potential, and
- provide equal access and opportunity for all colleagues.

## Academic Staff

SMS has a complement of 56.65 Teaching & Research (T&R) FTE, 7.10 Research Only (RO) FTE plus 15 Teaching & Scholarship (T&S) FTE. There is a balanced profile of T&R colleagues across grades with 34.3% professor, 35.3% senior lecturer\associate professor, and 30.4% lecturer\early career fellow. Since 2014 through our recruitment activities, we have increased the proportion of female T&R staff to 32% from 26%, and of the 24.4 T&R FTE appointments made since 2014 included in this submission, 45% are female, and 5 of these 11 appointments are on associate or full professor grades. All T&R staff except one, who joined from industry, have a PhD.

There have been significant staff changes within SMS since our 2014 REF submission. Retirements and departures of senior staff to external promotions particularly affected the Economics and Marketing & Retail Divisions, with two senior colleagues from the latter also serving terms as Deputy Principal of the University over the census period. Further, the Institute of Social Marketing (ISM) moved to the Faculty of Health Sciences and Sports to reposition the University's contribution to the public health agenda. This has provided the opportunity to reshape our staff base to support and deliver our research strategy.

# Staff Investment

Staff turnover has provided the opportunity to invest in those areas most relevant to our future strategy. Where possible appointments are made that contribute both to a specific disciplinary area and an inter-disciplinary School research theme.

- to further build the **Understanding Decent Work theme**, new senior posts have been taken up by prominent scholars in work and employment (Thompson, Marks, Mallett, Perriton) and early career staff (Baxter-Reid, Laaser), joining existing professors (Bolton, McQuaid).
- within the **Informing Sustainable Communities theme** the appointment of Docherty with his mobility infrastructure expertise enhances our research into sustainable and smart cities alongside existing research on urban surveillance (Webster and CRISP) and town centre regeneration (Sparks and IRS)
- in **Economics**, we have invested in established areas of strength such as environmental economics through the appointment of Börger, rebuilt capacity in behavioural science (Wollbrant, Erdem, Stowasser) and given the importance of policy-based research as a cross-cutting interest, invested in the area of political economy, combining young researchers (Stowasser, Rufrancos, Sas) with established leaders (Bell, Blanchflower).
- in **Marketing & Retail** investment in the consumers, cultures and societies area includes senior appointments (Black, Moufahim) matched by early career appointments (Branco-Illodo, Rodner, Wilson-Nash, and Goode)
- in **Management Work & Organisation** in addition to the posts in the working lives area noted above, strategic investment has strengthened expertise in organisational analysis (Pierides, Casler, adding to Burnes, Burt G) and in entrepreneurship, innovation and SME growth (Grant, Mallett).

With future succession in mind, we have proactively recruited across all grades including at senior lecturer\associate professor level (eg Mallett, Moufahim, Siebers, Stowasser, Wollbrant) and at early career stage to create a balanced staffing profile providing mentoring and opportunities for career development and progression. We have seen successful transition from postgraduate researcher to early career fellow and then into permanent lectureships (e.g. Changwony, Laaser), from lectureship to senior lectureship (eg Comerford, Erdem, Maglaras) and then to Chair (e.g. Campbell, de Vries)

Through our staff investments we have created a cohort of researchers with diverse disciplinary backgrounds and nationalities, representing a balanced demography.

# Creating Time & Space for Research

Providing time and the intellectual 'space' for research is part of our strategy to build a supportive research culture. The **workload allocation model** is used to allocate responsibilities across research, teaching and citizenship duties. The model is transparent, changes to the principles and 'tariffs' of activities are discussed in the School Assembly (held every semester) and allocations are visible across the school. All T&R colleagues have a 40% allowance ring-fenced for research, increased to 60% for Early Career Fellows and probationary staff. Further 'buy-out' of time may occur if large research projects provide recharges to direct staff costs. Additionally, the University **research leave** scheme allows colleagues to apply for six months research leave following six full semesters/three years of service. Applications are made annually (twice per year) and during the current REF period, 27 colleagues took research leave over the period were female.



Individual research development needs, commensurate with career stage, are identified during the annual *Achieving Success* (AS) **personal development** meeting which entails a discussion with line managers of future plans for research outputs, stakeholder engagement and impact, and funding, alongside a review of progress against previous plans. This scheme is also used to explore career aspirations and advise on the promotion process. Following the AS round, adjustments may be made to workload allocations, and mentoring and staff development programmes put in place.

A senior academic within the School acts as a research coach and career mentor for the junior staff cohort. Early career T&R staff – those on their first academic contract - are individually supported by the allocation of a "senior colleague" in a formal **mentoring** role during the probationary period (typically three years), and who may adopt a less formal "buddying" role thereafter. During the early career\probationary period, colleagues have a further reduction in teaching and citizenship duties (to 40%) allowing more time to establish their research careers and relevant researcher development programmes are identified.

Depending on experience, colleagues at the start of their career may be appointed to a lecturing post (with a probationary period) or an Early Career Fellowship (ECF) a three-year fixed term contract which becomes permanent following successful completion of their Fellowship plan. The ECF role was initiated by the School in 2013 to support the transition to a full-time lecturing post for those having recently completed or submitted their PhD. Typically, circa 10-15% of the T&R staff base are on the ECF route - currently six colleagues spread across each of our four Divisions. Since the inception of the ECF programme several colleagues have successfully completed this pathway and have transitioned into permanent roles in SMS or moved to permanent lectureships externally.

### Support for Academic Researchers

In terms of financial support 15% of any research overheads generated in year are made directly available to the PI to support research activity. If the PI is unable to use this funding or has other sources available, these funds are used to boost a generic **seed fund** within SMS. This fund supports pilot studies, workshop organisation and\or proof of concept exercises prior to grant application, and impact dissemination activities. Colleagues in SMS have also benefitted from one Connect (travel) and two Spark (pilot study) competitive awards from the internal University research investment fund.

Colleagues are routinely encouraged to attend and present their research at **academic conferences** and in other suitable fora. Attendance is financially supported on the basis of paper acceptance. Following the hosting of the Academy of Marketing Conference at Stirling in July 2018 a proportion of the financial surplus was retained, against an approved action plan, to boost the conference fund and other engagement activities which included the hosting of two Academy of Marketing SIG workshops in Stirling during 2019.

**Staff development** for research is provided through the Researcher Development Programme offered by the University's Institute of Advanced Studies. This programme is open to all colleagues and is based upon the Vitae Researcher Development Framework. Following the assessment of staff development needs through the Achieving Success personal development process colleagues may be supported to attend appropriate externally provided research training workshops. Within the School revise and resubmit groups and writing syndicate workshops further support early career researchers and PGR students but are also open to all colleagues.

Supervisors of doctoral students must participate in **supervisor training** provided by the Institute for Advanced Studies. The *Supervising Doctoral Studies* programme comprises eight on-line training sessions and ten face to face workshops (two delivered by SMS staff) allowing colleagues



to mix with supervisors from other Faculties and disciplines to discuss common issues, observe best practice and encourage multi-disciplinary networking.

## Support for Research Students

Our research student community benefits from an extensive support network and rigorous, constructive progress monitoring. The PGR cohort reflects the size of our School, typically comprising circa 35-40 FTEs and recruiting and graduating 8-10 students per year. Whilst many of our PGR students are self-funded, we regularly secure **scholarships** through the open competition for Accountancy, Finance, Business and Management and Economics pathways of the ESRC Scottish Graduate School for Social Science (SGSSS). Students are enrolled four times a year and allocated to a supervisory team comprising the principal supervisor and a secondary supervisor but may also call on other academic colleagues for specialist advice on research design, methodological approaches, and research ethics. New PGR students within SMS attend a programme of internal induction events to assist integration and facilitate cohort-building. All students are provided with a designated desk and office space, PC and access to library, database and printing facilities and other resources within SMS. Office space is allocated to encourage cross-disciplinary interaction.

The School Director of Doctoral Studies and equivalents in each of the four divisions, provide the interface with the PGR community for academic and social integration – a monthly 'coffee and cake' event is organised - and oversee policy and practice. The School Director of Doctoral Studies is a member of the School Research Committee and the institutional sub-group of Doctoral Studies directors.

Within three months of enrolment research students (with the support of their supervisory team) undertake a **skills analysis**, through *Research Compass* (a bespoke University of Stirling support system). This skills matrix, based on the Vitae Researcher Development Framework, provides the basis for identifying future development needs. The skills analysis is updated over the course of the students' studies.

To further **develop skills**, the School offers an MRes programme, which research students formally complete as part of a 1+3 programme or attend individual modules depending on their needs. Students have access to DataCamp online data science modules and further support and specialist skills training is available through the Institute for Advanced Studies and modules offered by other Faculties within the University (typically Social Sciences or Arts & Humanities). Additionally, we participate in the SGSSS Doctoral Training Programme and led the Scottish Graduate Programme in Economics from 2012 to 2018. Conference support and attendance at relevant training courses external to the University is provided on a case-by-case basis dependent on needs and stage of study. The portfolio of relevant modules\workshops is determined by the supervisory team and student during an annual review.

Research students are encouraged to participate in all aspects of **academic life** within the School particularly the SMS Annual Research Conference - a best poster prize is awarded to the research student entrants – and a stand-alone annual PhD conference (organised by students) provides a focused event for the PGR community. Research students attend and present to the disciplinary research seminar series which are viewed as an integral part of their training, providing networking opportunities with external presenters, exposure to alternative research designs and methodologies and how these are applied across different fields, and guidance in presentation techniques.

Research Compass is used to **monitor progress.** Supervisory meetings are recorded providing a repository of the agreed notes and future actions from these meetings. This provides a full and transparent record of student\supervisor engagement and flags any issues concerning progress that can then be addressed. Progress is formally reviewed after 9 months and 22 months. For



each checkpoint students submit a structured document, including a record of training needs completed. A panel of two colleagues, outside the supervisory team, assess the material, an oral review is held to discuss progress, and a report with feedback and recommendations is prepared.

## Equality and Diversity

Treating everyone equally and with respect is central to the University and SMS ethos. From 2014 to 2016, Bolton was the first University Dean for Equality & Diversity and the school held an annual SMS Women in Business panel where a group of successful businesswomen shared their career experiences (2015-2018). The University holds the Athena SWAN bronze award and this award is being pursued in SMS, although the submission has been delayed by Covid-19. We have a SMS Equality Champion and proactively engage with institutional processes and policies such as the Equality Action Forum which promotes activities and raises awareness of best practice and support.

The School Equality, Diversity and Inclusion Team (EDIT) comprise staff at different career stages including research staff and doctoral researchers. The team reports to the Faculty Executive and the institutional Athena SWAN group. The EDIT benchmarks data, reviews the implementation of policy and procedures within the school and authored the Athena Swan submission. A biannual SMS staff survey exploring equality and diversity perceptions was instigated in 2019 to supplement the University Staff survey. Colleagues involved in promotion panels and the Achieving Success procedures are trained in unconscious bias and colleagues from SMS are involved in Stepping Stones (a PPD programme for female staff), Stirling Women, the University's gender equality forum, and the AURORA scheme.

Staff and research students returning from periods of leave are fully supported. Over the REF period four colleagues took advantage of the University scheme providing up to 6 months research leave on return from maternity/paternity/adoption leave. We predominantly schedule meetings between 10.00 and 16.00 to support family/caring responsibilities and have a flexible approach to working, both for academic and professional support staff. Access to shared drives allows academic staff (subject to approval by line managers) the freedom to work at home, providing teaching, supervisory and administrative responsibilities are fulfilled, and the supportive atmosphere of a scholarly community is maintained on campus. Most flexible working is implemented informally, and staff adjust their working hours to accommodate family commitments, travel arrangements or personal circumstances. More formally, following periods of leave (e.g. for parental leave, illness, or carer responsibilities), staff can apply to work flexibly or part-time upon their return. If they wish, they can request a move to part-time work for a defined period and return to full-time. Some colleagues have adjusted working hours and patterns to reflect changing family circumstances. University and school staff surveys indicate that the informal and formal flexible working arrangements are well received.

As part of the University's Mental Wellbeing Campaign, a champion has been appointed in SMS to raise awareness of mental health issues and signpost available support, and a member of the Professional Services Staff acts as Bullying and Harassment Officer.

To mitigate against unconscious bias and ensure equal consideration in constructing our REF submission we considered the composition of groups developing the documentation and selecting outputs. This included the gender balance of the SMS research committee which contributed to drafts of the REF submission. To ensure disciplinary expertise was taken into account, recommendations for output selection were made by the four Divisions via the Head of Division and Research Co-ordinator. In the two Divisions with a male research co-ordinator a senior female academic was co-opted to the group.

## Section 3. Income, infrastructure and facilities

### Research Funding

The move of the Institute for Social Marketing (ISM) into the Faculty of Health Sciences and Sport has impacted on our overall research income compared to our REF 2014 submission, although colleagues remain actively involved with projects led by ISM. Additionally, the departure during the current REF period of several senior colleagues in behavioural science contributed to fluctuations in income and new awards. Following our investment in new staff and realignment of our research strategy around School research themes, we have reversed this trend. In 2018/19 we received new research awards of over £1million and in 2019/20 new awards would have exceeded £600k had the start date of circa £325k of confirmed 'awards' not been delayed owing to Covid-19.

£k	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
<b>Research Income</b>	707.1	731.7	608.8	300.5	305.9	627.2
New Awards	693.3	192.2	402.9	249.9	1,146.4	286.8

Research funding has followed a typical pattern for business & management research with a number of larger projects funded by the research councils or the European Commission complemented by smaller focused awards sponsored by a variety of public agencies and early career support from the British Academy and Carnegie. Our mix of funding over the current REF period since 2014 reflects a diverse range of funding sources with 49.7% from UK research councils, 16.2% from UK charities through competitive processes; 11.4% from UK government, local and health authorities and 8.7% from EU government sources.

Since our REF 2014 submission funding has been obtained to support research in all five School research themes:

- Informing Sustainable Communities, has received the largest grants, typically funded by the UK research councils. Our successes include funding of over £1 million for environmental economics research into the economics of marine plastics from ESRC and the benefits of green infrastructure for flood resilience in Vietnam from NERC. Further funding for research on sustainable plastics has been obtained from NERC as part of a major £3.4million award led by the Faculty of Natural Science, due to commence in 2020/21. In an urban context we were the recipients of an ESRC funded project on the smart governance of sustainable cities earlier in the review period. Alongside these grants, agencies such as SEPA (Scottish Environment Protection Agency) have provided smaller scale funding for the evaluation of sustainability projects.
- **Transforming Consumption & Production,** funding for this theme with the exception of an EU Marie Sklodowska-Curie fellowship award exploring the influence of information search on stated preference formation, learning and choice, is comprised of short term grants supporting research into the potential for behaviour change in specific contexts: for example, to examine the impact of retail store environments on healthy purchase behaviours for Food Standards Scotland; to examine the sustainability of community retailers in isolated communities for NHS Scotland; to develop a segmentation scheme of climate change behaviours for the Scotland. Early career funding has also been obtained from the British Academy into the consumption of music subscription streaming services and managing agency in the liminal self and from the Chartered Institute of Logistics and Transport for the effects of power dynamics on commercial practices within supply networks.

- **Supporting Healthy Behaviours**: during its pilot phase The Healthy Ageing in Scotland (HAGIS) initiative received significant funding from the US National Institute of Aging and the Nuffield Foundation, and ancillary funded projects have since been based on the data resource and panel, illustrated by a project using the HAGIS data to analyse the use of health service resources by smokers funded by the Health Foundation and an ESRC award led by the Faculty of Social Science to explore the impact of Covid-19 fear amongst older people on social, health and economic recovery. Other funding has been obtained to explore lifespan issues such as childhood self-control and adult health from ESRC and to examine specific policy interventions such as the impact of winter fuel payments on the health of UK households from NIHR. A series of small grants from the Health Foundation have supported research into other heath related behaviour change mechanisms and colleagues in retail and behavioural economics also continue to support various projects awarded to ISM in the Faculty of Health Sciences and Sport
- Understanding Decent Work research has benefited from several EU projects exploring disadvantaged groups in the labour market. The recent award of EU funding for improved social inclusion and female participation in mobility and an ESRC Covid-19 award on home working follows a series of funded projects exploring employment opportunities for excluded and disadvantaged young people and older people returning to work. Other funding relevant to this theme include grants from the Moffat Trust to examine young people, skills, and front-line service work in the Scottish hotel industry and early career grants from Carnegie to examine the organization of work and customer interaction in the online food retail sector and the mobility of employment in the UK horticulture and healthcare industry.
- **Exploring Organisations** funding includes grants to research work, community, and class in the British Coal Industry between 1947-1994 from AHRC; to explore expected stock returns and asset pricing from the Qatar National Research Fund; for research on patient flows in hospitals and smaller grants researching various aspects of employee-owned business and policy support for high growth firms from the Scottish Government. A KTP Innovate UK award made to two colleagues whilst at SMS with Clydesdale and Yorkshire Bank Group to develop an open innovation platform for SME support transferred to another University before the project could commence.

The move towards inter-disciplinary research through the SMS research themes, alongside the University strategy of promoting and supporting cross cutting priority research themes and programmes has stimulated colleagues to seek funding through collaboration with other faculties. Policy expertise in ageing, social care and healthcare modelling has contributed to applications led by the Faculties of Health Sciences and Sport, and Social Sciences, environmental and behavioural economics expertise to Faculty of Natural Science led projects and expertise in marketing and retailing to ISM led research examining policy interventions within Scotland (the Healthcare Retail Standard for hospital shops, and the Minimum Unit Price of alcohol).

## Infrastructure and Facilities

Access to publication databases and software packages for data analysis are provided at institutional level supplemented within SMS with Bloomberg and Stata. Cloud and campus based secure storage for research data is provided through Research Drive and can be shared with colleagues and external collaborators, and DMP Online provides a customised data management planning tool for researchers.

Within SMS the role of our school-based centres has been reviewed since our 2014 REF submission and the emergence of the School research themes. Our approach to SMS based **specialist centres** is now two-fold. These named centres are based upon areas of long-established specialised expertise and are designated as such to increase the visibility and impact



of our research with external stakeholders and to provide a vehicle for knowledge exchange activities. These centres are either project focused, based on a sustained series of funded research grants and collaborations, and\or have a research-based knowledge exchange focus, often involving management development and other engagement activities with user communities.

The purpose of the centres is to provide a specialised infrastructure through data, materials, and networks and provide colleagues with access to stakeholder groups and methodologies to support our research themes. Additionally, these centres provide a 'branded' focus for social and traditional media activities to promote our research and impact and ensure a level of visibility with stakeholder groups. Currently the four SMS centres are:

- Healthy Ageing in Scotland (HAGIS). A major focus of research activity aimed at building research infrastructure within the School has been the *Healthy Ageing in Scotland (HAGIS)* project. The pilot project, co-funded by the National Institute of Aging and the Nuffield Foundation, collected data on the health, economic and social circumstances of adults aged 50+ in Scotland, and generated a dataset of over 1,000 respondents now deposited in the UK Data Archive and available through the Gateway to Global Aging portal. This dataset is a resource which colleagues across the institution can analyse for research outputs and as a base for other funding applications. HAGIS is part of the global Health & Retirement study family of longitudinal ageing studies, which together covers more than half of the world's population aged 50+. Funding is being actively sought to scale up the data collection waves to make this dataset a national resource.
- Centre for Research into Information Surveillance and Privacy (CRISP). A longstanding collaboration between SMS, the University of St Andrews School of Management and University of Edinburgh's School of Social and Political Sciences and School of Law. CRISP provides a platform for research and knowledge exchange with and between different stakeholders and user groups. CRISP at Stirling hosts the Scottish Privacy Forum a group of academics, policy makers and practitioners from central government, local authorities, the NHS and private practice who debate the impact of public policy and service delivery initiatives on privacy and organised the UK's first national surveillance camera day in June 2019.
- Institute for Retail Studies (IRS). In addition to almost forty years of engagement with the retail and associated sectors, the IRS resource centre houses a collection of commercial material – annual reports, consultancy reports and trade press – covering retailing in various countries. A retail archive based on the academic collection of the founding Chair is currently under construction. This resource, plus the expertise of staff and our networks underpins our media work and regularly attracts visiting researchers and visiting PhD students to SMS.
- **Behavioural Science Centre**. A recurrent approach within our research is understanding the role and impact of the decision-making environment in improving outcomes through 'nudging' behaviour change. This centre provides the focus of our expertise in this area allowing researchers from different disciplines to explore these techniques and approaches in different contexts. The ESRC sponsored behavioural science workshops, focused on specific applications (e.g. healthcare, food consumption) bring together external contributors and colleagues from a range of disciplines to explore the role of behavioural economics in different contexts. A range of knowledge exchange activities and workshops are provided to stakeholder groups particularly in the public sector in Scotland.

Internally, these entities support colleagues across our School research themes. The HAGIS dataset and the IRS resource centre provide resources relevant to all five themes, whilst behavioural science approaches to research design and data collection methodologies has particular application to research in themes 1-3 (informing sustainable communities; transforming

consumption and production markets; and supporting healthy behaviours) and CRISP provides an important interface with stakeholders for research in themes 1 and 5 (informing sustainable communities and exploring organisations). Our future intention is to continually review and reconsider the portfolio of specialist centres. We are currently considering creating new support centres in the areas of sustainable business and sustainable cities following recent appointments and successful grant capture.

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

Engagement with user communities and key stakeholder groups within society is central to our impact strategy and the wider dissemination of our research.

Interaction & Engagement with Research Users and Wider Contributions to Economy and Society

Given our focus on research impact through policy and behaviour change, colleagues have shaped policy debates with stakeholder groups through government or industry advisory roles. Whether as expert members of committees\agencies or through the provision of evidence to these bodies our research and expertise influences decision makers and we have made strong contributions to policy making in several areas within a devolved Scotland. For example, Bell's government interactions include acting as specialist advisor to the House of Lords Economic Affairs Committee investigation into the financing of devolution (2015-16) and regular appearances before Scottish Parliament Committees as an expert witness to the Economy Committee, the Welfare Committee, the Health and Sports Committee, the Devolution Committee and the Finance Committee. His long-standing contribution to economics and public policy was rewarded with a CBE in 2018. Other colleagues with substantive Scottish government advisory roles include Docherty who is a Commissioner on the National Infrastructure Commission for Scotland (2018-20) and has been a member of the Scottish Government's National Transport Strategy Delivery Board and Strategic Transport Projects Delivery Board since 2018, and Sparks who is a member of the Scottish Government's Social Renewal Advisory Board and the only academic member of its Retail Strategy Steering Group and is involved in a number of government sponsored agencies focused on town centre sustainability including the Professional Research and Data Group of the UK High Street Task Force..

Interactions and engagements with stakeholders responsible for shaping policy are evident in all of our School research themes

- In the Informing Sustainable Communities theme our research on town centre sustainability, smart cities and transport policy and surveillance society is reflected in strong and sustained interactions with and contributions to user groups. Colleagues have chaired several advisory groups\commissions for example, Scotland's Towns Partnership, IDS Scotland the company established by the Scottish Government to oversee Scottish Improvements Districts and the Scottish Government's Town Centre Action Plan Review (Sparks), the Strategic Advisory Group for Strathclyde Partnership for Transport and the Glasgow Connectivity Commission (Docherty, Deputy Chair 2018-19), and advise the Office of the (UK) Surveillance Camera Commissioner (Webster)
- Within the *Transforming Consumption and Production Markets* and *Supporting Health Behaviours* themes, our research in retail and distribution channels and food consumption behaviours involves a track record of stakeholder engagement. We have advisory roles with the European Technology Platform: Food for Life Consumer Working Group, which brings together food industry, academic partners and policy makers to contribute to the future of food agenda within Europe (Burt, academic retail advisor) and the Food Standard Agency and Food Standards Scotland through the FSA Social Science Research Committee and provide the chair of the horizon scanning group (Erdem). Our expertise in a behaviour change has seen colleagues play a key role in developing the Scottish



Government's consumer sentiment index, and act as expert advisor to the Office of the Chief Economic Advisor to the Scottish Government on collecting consumer sentiment data (Comerford, 2013-16). The revised instrument is now used to collect sentiment data feeding into a number of Scottish Government publications and policy assessments. Other policy assessment contributions include membership of review groups for example the Scottish NHS Minimum Unit Pricing of Alcohol Economic Impact and Related Studies Evaluation Advisory Group which assessed government interventions to instigate behaviour change impact (Sparks)

In the Understanding Decent Work and Exploring Sustainable Organisations themes, our expertise in labour markets and the evolving workplace is evidenced by several contributions to the policy debate. This includes membership of the Scottish Government Expert Advisory Groups on New Social Security Powers (Marks since 2016) and Migration (Bell, Deputy Chair 2018-2020); the UK Governments 'Better Regulation Executive Network of Experts' (Mallett since 2018) and the Scientific Committee of the European Regional Labour Market Monitoring Network (McQuaid). Evidence and presentations have been given to BEIS on better regulation for SMEs (Mallett, 2018), to the Scottish Parliamentary Working Group on tenement maintenance (Wollbrant, 2019) and to the House of Lords Covid-19 committee inquiry on home working (Marks & Mallett (2020).

Colleagues also hold governance roles in a number of organisations including the governance board of Scale Up Scotland, Entrepreneurial Scotland and Scotland CAN DO, which seeks to develop the capabilities amongst entrepreneurs required for scale (Grant), and non-executive directorships with the UK Cooperative Group (Calderwood 2006-2015, including chair of the Remuneration Committee 2008-2015); Scotrail (Docherty 2014-19) and Platinum Informatics a Dundee University Spin-Out data analytics company partnered with the Welcome Trust (Grant).

Other routes to engagement with and contributions to user communities and society are through roles within industry associations and learned societies: Bell is VP for Arts Humanities and Social Science, Royal Society of Edinburgh and an Honorary Fellow of the Institute and Faculty of Actuaries; Doherty was elected as Fellow of the Academy of Social Sciences (2020), Royal Society of Edinburgh (2019) and Institution of Civil Engineers (2018); and Bolton became a Chartered Director and Fellow of the Institute of Directors in 2018. In 2015 Docherty was also appointed as one of the five 'thought leaders' in the Innovation Caucus funded by ESRC and Innovate UK to foster business innovation through integration with social science research. Involvement in organisations linking user communities with the academic community provide the opportunity for colleagues to contribute to real world economic and societal issues. This type of engagement takes a number of forms from chairing these associations: Friends of the Earth Scotland and Sustainable Lifestyles and Behaviour theme chair for the International Sustainable Development Research Society (ISDRS) from 2013-2017 (Black); vice chair of the Scottish Deans Group of CABS (Grant) and co-chair of the eGovernment Study Group of the European Group of Public Administration (Webster); to academic representative roles on associations: academic director of the Behavioural Insights Community Scotland (Comerford); management committee of the European Accounting Association and deputy convenor Research Committee of the Institute of Chartered Accountants of Scotland from 2017-19 (Evans); Council member of the Marketing Society Scotland (Tinson 2016-19) and member of the Research Ethics Review Panel of the Financial Conduct Authority (Wollbrant).

Another mechanism for knowledge transfer and engagement with industry and public agencies is through invitations to be a **keynote\invited speaker**. Examples include contributions to events organised by national and international agencies such as the Institute of Directors, the Chartered Institute of Taxation, the Faculty of Actuaries, the European Central Bank Frankfurt, the Scottish Chambers of Commerce, Scottish Council Development & Industry, and Scottish Government Fiscal Commission and more specific sector based events within accountancy and finance (the Institute of Certified Public Accountants of Kenya and the Qatari Stock Exchange); environmental



economics (the East Asian Seas Congress and Korean Maritime Institute), and retailing (Scottish Grocers Association, the Booksellers Association and Charity Retail Scotland annual conferences, regional Town Planning Institute events, and the Architectural Heritage Society of Scotland and the Scottish Civic Trust)

Other **activities** demonstrating the impact of our research include a variety of interactions with opinion formers through regular contributors to the media via TV, radio and print and through social media. The University is a founding partner of *the Conversation* and SMS colleagues are regular contributors providing over 50 articles in the period including a dozen contributions on Covid-19 and behaviour change in the past few months.

#### Contributions to Sustainability of the Discipline/Academic Community

Within the broader **academic community**, colleagues have contributed in each of our four disciplinary areas through active involvement with major conference organisation; academic journals (as editors, associate editors, guest editors and editorial board members); academic organisations (as post holders), funding bodies (as grant reviewers) and institutions (as PhD examiners).

Individual recognition from the academic community over the review period includes Broadbridge, who was awarded the Medal for Leadership for 'sustained and outstanding leadership of, and contribution to, the academic community by a BAM member' at the BAM 2019 conference for her role in founding the BAM Gender in Management SIG in 2003 and acting as its chair for twelve years, and Campbell K who was awarded the Gold Medal of the University of Gdansk in 2018 in recognition of his research cooperation with the University of Gdansk over a 25 year period. Bell is a recipient of the Adam Smith Medal from the Scottish Economics Society, and before her departure, whilst an Early Career Fellow, Wilson was awarded the Sir Alec Cairncross Prize by the Scottish Economics Society in 2017

In addition to the symposia noted in section 2, periodically the School hosts **major academic conferences** such as the 51<sup>st</sup> Academy of Marketing Annual Conference in July 2018 - circa 320 domestic and international delegates - and the International Co-operative Alliance Annual Research Conference - jointly organised with colleagues in the Faculty of Social Sciences - in June 2017.

Colleagues hold **editorship**, associate or senior editor roles for academic journals in each of our four disciplinary areas. In *Accounting & Finance* these include Accounting History; Cogent Economics and Finance and Cogent Business and Management; in *Economics*, The American Journal of Agricultural Economics; The BE Journal of Economic Analysis & Policy; the Journal of Environmental Economics and Policy and the Journal of Economic Surveys (2014-17); in *Management Work and Organization*, Gender in Management; Information Polity; Journal of Change Management; and Journal of Small Business & Entrepreneurship, and in *Marketing & Retailing*, the International Review of Retail Distribution & Consumer Research. Colleagues also act as book series editors for the Palgrave Management, Work and Organisation series, the Routledge Studies in Organizational Change and Development and Routledge Studies in Surveillance series

Additionally colleagues have **guest edited** or co-edited special issues on a range of contemporary topics such as sustainability - scaling sustainability (British Journal of Management 29(2) 2018), ecological accounting (Accounting Auditing and Accountability Journal, 30(7) 2017) and mechanism design for environmental policy (Environmental & Resource Economics, 63(4) 2016); on governance challenges - big data and surveillance: hype commercial logics and new intimate spheres (Big Data & Society, 7(1) 2020) and accounting control governance and anti-corruption (British Accounting Review 51(5) 2019), as well as specific disciplinary topics - language and translation in accounting (Accounting Auditing and Accountability Journal, 31(7) 2017 2018),



Marketing the Brave (Journal of Marketing Management 35(9-10), 2019) technology in retailing (Baltic Journal of Management, 13(2), 2018) and critical inquiry and practical applications (Journal of Business Ethics (forthcoming).

Involvement with the academic discipline through **editorial board memberships** are extensive (over 50 journals) and range from involvement with established journals to journals in emerging specialist sub-areas of the disciplines and emerging regional markets. Editorial board membership includes: in *Accountancy & Finance* - Accounting and Business Research; Accounting History; Journal of Applied Accounting Research; Journal of Asset Management; European Journal of Finance; and Sustainability Accounting Management & Policy Journal; in *Economics* – National Institute Economic Review; Journal of Agriculture and Applied Economics in *Management Work and Organisation* - International Small Business Journal; Journal of Management; Management Learning; New Technology, Work and Employment; Organization Studies; Public Money and Management; Work Employment & Society; and in *Marketing & Retailing* Arts & the Market; European Journal of Consumer Behaviour; Journal of Co-operative Organization & Management; and Service Industries Journal.

Several colleagues are **post holders** or have advisory group roles for **academic organisations**. Colleagues act as advisory group or executive council members for research centres at other UK Universities for example the Economics of Health and Social Care Research Unit (LSE\York), the ESRC Business and Local Government Data Research Centre (Essex) and the Centre for Social & Environmental Accounting Research (St Andrews); Within academic societies, internationally colleagues chair the European Association for Retail Distribution and Consumer Research and hold scientific committee membership of the European Association of Environment & Resource Economists, the International Association for Research in Economic Psychology and act as Steering Group Convenor for the annual International Labour Process Conference, and nationally are or have been chairs of special interest groups in academic associations for example BAM, Academy of Marketing, International Sociological Association

Colleagues are regularly called upon to act as **reviewers for grant applications**. Colleagues act as reviewers for UKRI Innovate UK and the multi-agency UK Prevention Research Partnership and have been members of the Peer Review Colleges for ESRC and NERC and ESRC. Several colleagues review grant applications for ESRC, EPSRC and the European Commission (Marie Curie, H2020, NORFACe), and have performed similar reviewing roles for national research councils in other countries during the period: For example the Foundation for Scientific Research Belgium; Cyprus Research Promotion Foundation; Hungarian National Research Development & Innovation Office; Greek National Science Association; Irish Research Council Laureate awards; Netherlands Organisation for Scientific Research; Norwegian Research Council; the National Science Centre Poland and Polish Research Council, and FOTRE (the Swedish Research Council for Health Working Life and Welfare)

Colleagues have routinely acted as **external examiners for PhDs** in other academic institutions. Domestically over the review period at least 20 colleagues have externally examined over 60 PhD candidates at UK institutions and performed a similar role at international institutions in Australia, Denmark, France, India, Malaysia, the Netherlands, Norway, South Africa and Sweden.