

Institution: University of Glasgow
Unit of Assessment: 17 Business and Management Studies
<p>1. Unit context and structure, research and impact strategy</p> <p>The University of Glasgow has a distinguished history of business and management research, beginning with the Chair in Moral Philosophy established in 1727. This position, held by Adam Smith from 1752-1764, marked the birth of Political Economy at Glasgow. Today, the Adam Smith Business School is research-led, professionally-focused, and triple-accredited. We build on our history through our civic, national and international roles. We focus on the study of the production of goods and services and their relations with law and government, and the creation of personal and collective well-being.</p> <p>Context and structure</p> <p>The current School was created in 2010 when the departments of Accounting & Finance, Economics, and Management Studies were brought together to respond to the growing complexity of 21st century business education. Since then, our objectives have been to consolidate departmental integration, expand the scale and scope of research, teaching, and connections with practice, and to enhance student and staff experience. These objectives contribute directly to the University's aim "To bring inspiring people together and create a world-class environment for learning and research, empowering staff and students to discover and share knowledge that can change the world".</p> <p>Our achievements have been significant and sustained. The School is now a triple-accredited provider of undergraduate and postgraduate business education and a centre of excellence in research and impact.</p> <p>Together these achievements have increased the attractiveness of teaching programmes to students (1,657 UG, 1,995 PGT in 2019/20) and made the School a stimulating and prestigious community for doctoral students (193 PGR) and academic staff (197). The comparable numbers for 2012/13 were as follows: 1,428 UG students; 1,462 PGT students; 98 doctoral students; 114 academic staff.</p> <p>The School realises its research and teaching strategies through the separate and collaborative engagements of a matrix of subject groups and research clusters. The former (Accounting & Finance, Economics, Management) manage teaching programmes and academic staff, freeing the latter to focus on research, development and impact. Our commitment to a research-led curriculum provides distinctive research drivers not only of specialist electives taught by leading scholars, but also core modules informed by the latest knowledge.</p> <p>Research strategy 2014-2020</p> <p>Our research objectives since 2014 have been to continue to develop the research establishment, increase the scope and quality of outputs, intensify the impact on communities of policy and practice, diversify income and expand the postgraduate research community. Our strategies and structures have been focused on developing our governance to provide a supportive high-achieving research culture for staff and doctoral students that makes the School a rewarding community to be part of.</p>

Again the achievements have been sustained since 2014. As the following sections testify, REF-eligible staff have increased from 93 to 134, the portfolio of outputs, as measured by publication in internationally recognised journals, has expanded, impact on policy and practice now has extensive reach and significance (well beyond the nine submitted Impact Case Studies), research income has increased in volume and sources, and the doctoral student community has increased from 98 to 193.

Research governance. Our research strategy is founded on the role of **research clusters** in developing a research community and enhancing funding, quality, dissemination and impact. We have also strengthened the coordinating role of the School's **Research, Scholarship and Knowledge Exchange Committee (RSKE)** and links with the College of Social Sciences' **College Assessment Panel** (the REF oversight and governance group).

Research impact. The strategic prominence of impact on policy and practice reflects our commitment to improving the civic, national and international communities in which we live and our responsibility to achieve impact in return for public funding. We thus appointed Impact Champions from the start of the REF period, and through workload allocation allowances, annual performance reviews and promotion criteria (see Section 2) we also incentivise engagement with research users and communities of practice. Most experienced research staff had already developed strategies of engagement with their relevant practice communities; others, especially Early Career Researchers, are encouraged to draw on this experience, as well as being advised by Cluster Leads and research support staff in order to realise their impact. The REF2021 Impact Case Studies have been developed through the School's research leadership to exemplify impact across the range of specialisms and policy and practice communities that have benefited from our research.

Research resources. Our strategy for building these resources has included providing explicit incentives for securing external grant income, concentrating appointments in areas of research strength and providing dedicated administrative support for research clusters. Although more teaching-only appointments would release more time for research, the proportion of academic staff on such contracts has increased only modestly since 2014, with the current level (approximately one-fifth) reflecting our strategic view of the optimal research and teaching balance in a research-led business school.

Research governance through research clusters

To promote a vital and sustainable research culture, research clusters operate within the framework set by the RSKE Committee, which advises the School's Executive Committee on research-related issues in the School's strategy. Cluster Leads are *ex officio* members of the RSKE Committee which also serves as a forum for information sharing.

The cluster model itself was adopted during the REF2014 period when eight clusters comprised the two submissions (Economics; Business and Management Studies). The three additional clusters in REF2021 (Applied Economics, Entrepreneurship Development & Political Economy, and Services & Operations Management) reflect the School's expansion and integration.

The clusters share research values that emphasise inclusion, collaboration, internationalisation, external engagement and impact. All academic staff are members of one cluster, regardless of their contractual status. By this means, clusters help staff on Learning, Teaching & Scholarship

(LT&S) contracts to fulfil their scholarship obligations (essential for research-led teaching) and keep open the possibility of future contract change to include research if desired. Doctoral students are also members, which helps their integration into the research community. Staff and research students often attend events organised by other clusters, reflecting and facilitating the inherent interdisciplinarity of individual and team research in Business and Management Studies.

Through workshops and individual advice, the clusters support their members to secure external funding, produce high-quality outputs, carry out editorial and reviewing roles at leading journals, collaborate with other institutions, and forge international and national impacts in the public, private and charitable sectors (see Section 2). Clusters run collective events, such as academic seminars with external visitors, paper development workshops, meet-the-editor sessions, internal staff presentations of work-in-progress and training sessions.

One organisational benefit of the cluster model in a large business school is shared research leadership. Each cluster has a Lead and Alternate (Senior Lecturer-level and above), with administrative support provided by the School. Clusters smooth research management and maximise success in internal grant applications (e.g. Impact Acceleration Account Awards, Knowledge Exchange Grants and Charitable Trusts) and external funding bids. Decisions by the Head of School and the College Dean of Research on which applications to support rely considerably on the prior work of Cluster Leads.

The School is not prescriptive about research topics, but the clusters have developed their own distinctive strategic fields, research portfolios and communities of practice with which they interact and to which they contribute knowledge and practice.

ACCOUNTING conducts research on statutory, regulatory and policy-related topics, including in relation to the accounting profession, corporate governance, corporate insolvency, financial reporting, and public sector accounting. Critical and interpretative approaches to research are strongly represented. The Adam Smith Observatory of Corporate Reporting Practices was established in 2020 as a research hub on global practices. Two UoA17 Impact Case Studies (David Heald and Catriona Paisey) come from this cluster.

APPLIED ECONOMICS concentrates on generating societal impact by influencing business and public policy interventions based on rigorous evidence. It addresses issues such as poverty, inequality, migration, climate change and crime, and develops thinking in labour, development, health and financial and behavioural economics. Research crosses conventional disciplinary and methodological boundaries to engage with related disciplines, such as sociology, law, history, psychology, politics and health studies. One of UoA17's Impact Case Studies comes from this cluster (Sayantan Ghosal and Theodore Koutmeridis).

ENTREPRENEURSHIP, DEVELOPMENT & POLITICAL ECONOMY investigates how wealth is created and used for society, and how and why people, charities, businesses, and governments create new ventures. Working with such groups, cluster members seek to understand what these activities mean for people and society in order to create better outcomes. Their research is funded by governments, charities and private business, enabling them to make connections across the whole of society. Two UoA17 Impact Case Studies (Andrew Cumbers and Colin Mason) come from this cluster.

FINANCE aims to promote world-leading research on corporate finance, quantitative finance, banking, asset pricing, and behavioural and household finance. The research seeks to impact on the way policymakers and financial institutions operate. The cluster engages strongly with financial institutions in the European Union and with central banks, including the European Central Bank, the Bank of England and the Bank of Portugal.

HUMAN RESOURCE MANAGEMENT & ORGANISATIONAL BEHAVIOUR explores the different needs and priorities of multiple stakeholders in and around the workplace. Cluster members draw on different levels of analysis in exploring current theory, policy and practice-driven issues. Researchers work closely with companies, government agencies, employers and charities to contribute to debates on diversity and inclusion, organisational trust, leadership, the workers' voice, and the regulation of work and employment.

INTERNATIONAL BUSINESS & ENTERPRISE engages with and meets the needs of practitioners of internationalisation in Scotland and beyond through interdisciplinary research and allied teaching programmes. It has extensive international links with researchers, small and medium-sized enterprises (SMEs), multinational corporations and policymakers. The cluster is active in the management of the Academy of International Business UK and Ireland Chapter with three cluster members serving on its Executive Board (Pavlos Dimitratos, Margaret Fletcher, Rose Narooz).

MACROECONOMICS studies issues of interest to society within Scotland, the UK and internationally. With links to policymakers, the cluster has explored responses to rising income inequality, business cycles, the financial crisis and the ongoing pandemic. Researchers have developed analyses of international taxation, economic development, asset markets and financial frictions, and the national and international coordination of monetary, fiscal and macro-prudential policy. They also study issues in macroeconomic forecasting, modelling, and big data. Two UoA17 Impact Case Studies (Céline Azémar; Campbell Leith and Charles Nolan) come from this cluster.

MARKETING produces high quality research in the areas of marketing management, consumption and markets, and technology and analytics. More specifically, researchers explore topics such as branding, consumer behaviour, ethics and sustainability, and the digital transformation of marketing practice. Cluster members work in collaboration with policy and professional groups across government, NGOs and business to translate research into knowledge exchange and impact on practice. One of UoA17's Impact Case Studies (Deirdre Shaw *et al*) is led from this cluster.

MICROECONOMICS focuses on theoretical formal modelling, with expertise in decision theory, game theory, mechanism design, implementation and bargaining. Members study market failures arising from asymmetric information, default and miscoordination of expectations, as well as non-traditional markets such as electronic commerce, or markets without money such as reputation systems on the internet and the assignment of students to schools. They apply their methodology to the empirical analysis of oligopolistic markets, behavioural poverty traps, disease prevalence, crime and copyright. The cluster is a member of the Coalition Theory Network.

SERVICES & OPERATIONS MANAGEMENT seeks to understand how to manage change, innovate and create value within operations and organisational systems. It aims to add value to systems that transform resources, driving innovation in science, technology, engineering and management. It conducts interdisciplinary research in manufacturing, telecommunications, healthcare, and the financial and third sectors using archival research, modelling, testing and application-based

tools. Members collaborate with other leading researchers, policymakers and professionals, as well as industry, commerce, government and the third sector.

STRATEGY & TECHNOLOGY MANAGEMENT focuses on the development of strategy within a technologically-grounded context. Cluster members research business models; systems and strategy; risk, resilience and environmental management; managing adverse events in healthcare; storytelling and strategy; cybersecurity, insider threats and information security; and strategy and organisation in SMEs and creative industries. The cluster has developed links with the chemical industry, high-tech firms and local government partnerships. One of UoA17's Impact Case Studies (Denis Fischbacher-Smith) comes from this cluster.

Support for interdisciplinary research

Our clusters empower scholars to develop research portfolios that respond not only to the requirements of their own disciplines, but also the interdisciplinarity of the wider business and management environment. They support research with members of other clusters, with colleagues from other Schools in the University, and with researchers in universities across the UK and the world.

Some of our research is inherently interdisciplinary where the topics cut across the disciplinary boundaries within Business and Management: e.g. Nuran Acur and Stephan von Delft on digital transformation in firms; Denis Fischbacher-Smith on risk and resilience; David Heald on fiscal transparency; Yvonne Joyce on accounting and legal interaction in insolvency regulation; Yingru Li and John McKernan on the philosophical foundations of accounting and human rights; and Deirdre Shaw, Andrew Cumbers and Robert McMaster on sustainable food production and distribution in economically deprived areas.

Other interdisciplinary research collaborates with other University of Glasgow Schools: e.g. Nuran Acur with Muhammad Imran (Engineering) on COVID-19 mobile testing in Glasgow; Thomas Anker with Sara MacDonald and colleagues (Health and Wellbeing) on media representations of cancer risk factors; Konstantinos Angelopoulos with Rebecca Mancy (Health and Wellbeing) on the impact of COVID-19 on income and health inequality; Denis Fischbacher-Smith with Alan Jardine (Medicine) on haemodialysis vascular access provision in Scotland; Alvis Favotto with Kelly Kollman (Politics) on corporate social responsibility; Sayantan Ghosal and Theodore Koutmeridis with Michele Schweisfurth (Education) on disadvantage and participation in accountability processes; David Heald with Tom Mullen (Law) on the effects of Brexit on UK devolution; and Yee Kwan Tang with Chong Li (Engineering) on combating energy poverty in Bangladesh.

Support for impact

All research-active colleagues are expected to adopt sustainable and collaborative models of engaged scholarship with communities of policy and practice. Thus, 'Knowledge Exchange and Impact' is one of the five dimensions used for the annual staff Performance & Development Reviews; promotion criteria give parity to outputs and impact; and workload model allocations have also been given to those staff closest to impact.

The College of Social Sciences has administered ESRC **Impact Acceleration Account block-grant awards**, which have been awarded to 21 UoA17 researchers during the REF period. This has resulted in work aimed at improving the quality of youth employment, facilitating machine

learning for financial technology, discovering future biotech business models, and improving trust in digital services, to name but a few. The projects have also facilitated relationships with companies such as ArrayStream Technologies and Arnold Clark Automobiles. The Business School runs impact workshops, and the College Impact Officer provides bespoke advice on pathways to impact, particularly in the context of external grant applications. Through their research clusters, impact-seeking staff can access the experience of colleagues and research support staff. Impact-generating activities are recorded in each cluster's annual report, informing Business School priority-setting, and they constitute documents of record for internal and external assessment processes.

These arrangements have supported not only the development of Impact Case Studies (of which the School is submitting nine) but also the broad programme for achieving impact from collaborative research with communities of practice (see Section 4). The reach and significance of impact extends beyond the submitted case studies in business enterprise and management, the professions, public policy, governance and finance, and community sustainability to others including:

- **Jeanette Findlay's** research has influenced policy debates on the provision and financing of lifeline ferry services in Scotland
- **Alan McGregor's** research for the European Commission underpinned the evaluation of the €75 billion 2007-14 European Social Fund programme across all EU-28 member states and thereby influenced the design of the 2015-2022 programme
- **Ioana Moldovan's** research influenced IMF policy in Botswana and Haiti
- **Emmanuel Murlon-Druol's** historical analysis has influenced policy debates on the future of the Eurozone
- **Georgios Panos' EU-wide** research on financial literacy has increased policymakers' awareness of social disadvantage
- **Georgios Sermpinis and Charalampos Stasinakis' research** on hybrid trading models has enhanced financial trading performance
- **Sabina Siebert's** study of the relationship between space and function has contributed to the parliamentary decision-making process on the restoration of the Palace of Westminster.

Research integrity and open research

The School has enthusiastically embraced the research integrity and open research agendas. We have appointed a School Integrity Champion and a School Integrity Adviser, both available to all staff to discuss ethical issues and concerns over research integrity. Training in this area is required for all PGRs and participants in the Early Career Development Programme (see Section 2).

Our open research strategy supports impact objectives, seeking full compliance with REF2021 requirements and going beyond in relation to output types not currently subject to them. The University of Glasgow has invested in Library staffing for this purpose, using the package 'Enlighten' (based on Eprints open source) which directly feeds into academic staff pages and other University research systems. During this REF period, UoA17 has increased Open Access for articles from 24% (2014) to 96% (2020). The comparable figures for all outputs are 14% and 87%. In addition, 100% of REF-eligible staff have an ORCID which is also displayed on their staff web page.

Moving to the next phase

The School provides a stimulating and supportive environment for a community of scholarship that has grown (to 134 REF-eligible staff in July 2020 from 93 in October 2013, of whom 68 were submitted in REF2014), is more internationally diverse (25 nationalities) and has an improved gender balance (48 females and 86 males, see also Section 2). We have increased the breadth and depth of our research and development portfolio, our research income and the doctoral student community, and enhanced our impact on civic, national and global communities of practice. All these goals have been consistent with our traditions and the requirements of the business environment.

In the next phase we intend to consolidate this progress and extend it through planned capacity increases in operations and strategic management. In this we have to respond to two sets of factors. The first is the new University Research Strategy, whose message - that “we will succeed both as individuals and as a university by working in teams, building on each other’s ideas, and supporting the careers of those around us” - is centred on “collaboration, creativity, and careers” to value the quality of what we do over its quantity and recognise different contributions to research. The second is the changing business and management research environment that includes the effects of the COVID-19 pandemic on the global economy and international postgraduate student markets.

Our abilities to adapt and respond quickly to emerging community needs and to research opportunities have been demonstrated throughout the COVID crisis:

- **Paul Ahn** is researching the COVID-19 response of the South Korean Centre for Disease Control and Prevention
- **Konstantinos Angelopoulos** is assessing the impact of COVID-19 on income and health inequality
- **Alena Kostyk** is leading a project on the use of virtual reality to support the economic recovery of the Scottish tourism sector
- **Yingru Li** is co-investigating the Chinese government’s containment measures and their societal impacts
- **Ronald MacDonald** has devised an ambitious programme for the post-COVID-19 recovery of the Scottish and UK economies
- **Alan McGregor** is undertaking action research to support the post-COVID-19 economic strategies of Glasgow City Council and Scotland’s Enterprise and Skills Strategic Board.

As part of our wider response to COVID-19 as a civic business school committed to contributing to economic and social resilience in Glasgow and Scotland, we have developed a webinar series on the importance of sustainability and responsibility in the way business and the economy respond to the pandemic. The series aims to bring together specialists from academia, industry and professional bodies via live webinars.

Broader strategic considerations include securing grant income by reviewing the changing sources of funding suited to our specialist areas, building ever closer relationships with other disciplines and communities of practice, and emphasising more applied research and impact as intrinsic to research and development. We have already gained advanced signatory status for the United Nations’ Principles for Responsible Management Education (PRME) initiative in 2020, and have

thus joined a global community of business schools committed to supporting and enacting social and environmental change through our teaching, research, and practice. We also plan to make more use of Professors in Practice, honorary appointments, stakeholder advisory groups and co-producers from policy and practice communities. Sustaining the School as a research-led institution will thus involve building on our engaged scholarship with civic, national and international partners.

2. People

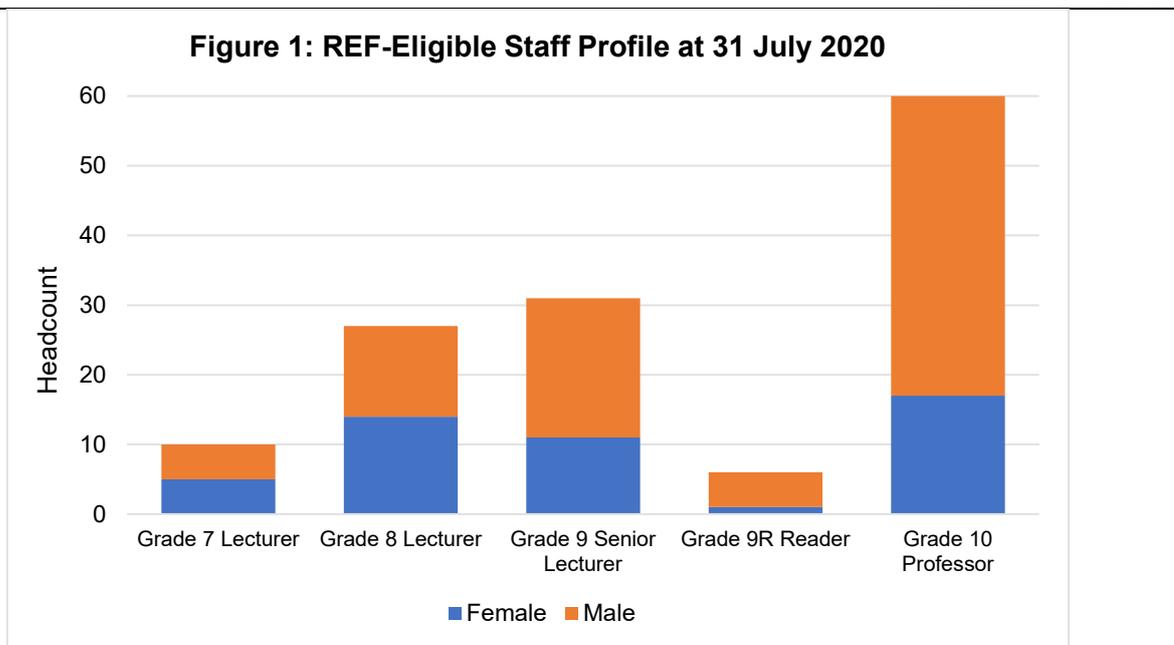
The School is committed to developing and sustaining a diverse and dynamic research community. Our commitment encompasses the personal and professional development of all staff and research students, the promotion of inclusiveness, equality and diversity in articulating differing perspectives that challenge the status quo, and the nurturing of teaching and research links with national and international communities of scholars, government, the voluntary sector and professional and corporate bodies. In applying the University's comprehensive staff development policies and practices, we have adopted a multi-faceted approach supporting equality and diversity, staff development, research staff support, and the development of postgraduate researchers. Our objective has been to enhance research agility and secure research sustainability and impact through retention and support. Our achievements during this REF period confirm that investment in people and cultural processes brings individual and collective rewards.

Our academic staff

Figure 1 shows the staffing profile at the REF2021 census date. The head count of 134 results from the dual strategy of retention and capability development (most staff recruited late in the REF2014 period have stayed) and vigorous external hiring in line with our objectives. Outstanding researchers support interdisciplinary collaboration within the School, across the University and with external partners, helping to increase external grant income and have an impact on policy and practice.

Reflecting the demands of being a multi-purpose business school, the proportion of REF-eligible staff in promoted posts (Senior Lecturer and above) is high, at 72%, while professors constitute 45% of the head count. Significant progress has been made on gender balance and action (described below) has been taken to address the imbalance at Senior Lecturer/Reader and Professor grades. At the REF2021 census date, 28% of submitted professors are female, in comparison with 19% at REF2014.

Of the 134 REF2021-eligible staff, 50 were submitted to REF2014, the continuity percentage of all REF2014 submittees to REF2021 being 74%. Of the 20 continuing staff not already at professorial level, 14 have since been promoted, including 6 to professorships. In total, of the 87 promotion applications considered during the REF period, 66 were successful (76% success rate). These numbers confirm the dual strategy of developing the research capabilities of current staff, in addition to judicious external hiring to deliver the School's strategy. There are 25 nationalities, with 38% of staff having UK nationality, 31% having an EU nationality, and 31% a nationality from another part of the world. Females constitute 36% of staff; 26.1% of staff are declared to be Black and Minority Ethnic; and 1.5% declared a disability.



Building on the precedent of part-time Research-Only appointments during the REF2014 period (Craig Burnside and Patrick Verwijmeren in Finance; Trevor Buck in International Business and Enterprise; and Robert Chia in Strategy and Technology Management), a similar appointment has been made in Accounting (Lee Parker). Their contributions help to raise publishing aspirations and provide invaluable mentoring advice, supporting their cluster leadership.

During the REF period, the Business School has systematically recruited seven new staff to achieve critical mass in the strategically important field of Applied Economics: three Lecturers (Michele Battisti, Anwen Zhang, Tanya Wilson), one Senior Lecturer (Theodore Koutmerides), one Reader (Dimitris Christelis) and two Professors (Eugenio Proto, Alex Trew). These new appointments expand expertise in health and education economics (Zhang), migration and labour markets (Battisti), family and labour economics (Wilson), inequality and crime (Koutmerides), uncertainty and household finance (Christelis), economic geography and economic history (Trew), and economic development and experimental economics (Proto). They enhance the potential for interdisciplinary collaboration, gaining research resources, and impacting on policy.

The Business School has also invested in areas of research strength through major external recruitment and internal promotions at all career stages. External recruitment has been made to Chairs in Accounting (Chandana Alawattage, David Heald), Finance (Cathy Chen), Human Resource Management and Organisational Behaviour (Kathleen Riach, Rosalind Searle and Melanie Simms), International Business and Enterprise (Mehdi Boussebaa), Marketing (Ozlem Sandikci Turkdogan) and Strategy and Technology Management (John Crawford).

Promotions of Business School staff to Chair have been made in Accounting (Ioannis Tsalavoutas), Finance (Georgios Sermpinis, Serafeim Tsoukas and Dimitri Vinogradov), Human Resource Management and Organisational Behaviour (Sarah Robinson and Sabina Siebert), International Business and Enterprise (Emmanuel Murlon-Druol), Macroeconomics (John Tsoukalas), Marketing (Anna Morgan-Thomas and Cleopatra Veloutsou), and Services and Operations Management (Nuran Acur). Such appointments and promotions and those of others at different stages of their careers demonstrate the Business School's success in strengthening and rewarding its research capability.

Equality and diversity

Our staffing strategy is designed to forge an inclusive community of scholars by attracting, recruiting and developing researchers from a wide range of backgrounds. While the School does not identify or define individuals according to their protected characteristics, we provide support for academics at all ages and stages in their career, recognising that they have a wide range of different needs. Examples of this support include menopause awareness sessions, support for preparations for retirement, promotion of the LGBT+ Network (founded in 2007 as one of the first in Higher Education in Scotland), and promotion of the Disability Service (for those with physical disabilities, learning difficulties and other medical conditions).

As well as the increasing international diversity of the School, the most significant progress has been in gender equality, recognised when we received Athena SWAN Charter (bronze). While the School benefits from staff undertaking internationally recognised research in gender and diversity in organisations, female entrepreneurship, gender discrimination in labour markets, and women's experience of leadership in various education systems, working towards the Athena SWAN award has highlighted the ways in which we can improve our culture, environment for research and scholarship, student diversity, recruitment, and retention and promotion of female colleagues. Specific internal gender-related changes include:

- Increased female proportion of REF-submitted staff from 25% in October 2013 to 36% in July 2020
- Widened choices in parental leave available to staff when planning for the birth or adoption of a child, or when requiring time off to support their children
- Increased female membership of the External Strategic Advisory Board from 27% in 2017-18 to 43% in 2020.

Notwithstanding this progress, we recognise that challenges remain, and we have enacted changes to improve equality and diversity more generally, including:

- Creating a School Staffing Committee consisting of Head of School, Head of Subject Groups, Head of Professional Services, College HR adviser and a member of the University recruitment team
- Strengthening equality statements in recruitment material, highlighting the School as an inclusive environment for career development, and including diverse staff profiles to encourage under-represented groups to apply (a particular issue at Senior Lecturer/Reader and above)
- Challenging internal search committees to identify lists of potential candidates from under-represented groups and actively encourage applications
- Highlighting the School as an inclusive environment for career development and progression, and including diverse staff profiles in recruitment material
- Organising annual promotion workshops on criteria and processes
- Developing the Performance & Development Review to address equality and diversity in progression planning
- Establishing the alternate system for school committees, enabling early career staff to gain leadership and committee experience
- Enhancing transparency and inclusion in all appointments to internal leadership positions through open advertisements and encouragement of applications, including among colleagues acting as alternates, with a formal interview and selection process.

Throughout our preparations for REF2021 we have embraced the equality and diversity requirements of the University's Code of REF Practice, including:

- Distancing the REF leadership team from line management responsibilities so that REF decisions have no impact on career progression
- Scoring outputs in minuted formal meetings of the UoA17 Outputs Scoring Committee, which has nineteen members (ten males and nine females), all of whom are researchers of high standing
- Making final decisions on submitted outputs at minuted meetings of the UoA17 Outputs Selection Committee (three males and two females)
- Making final decisions on submitted Impact Case Studies at a minuted meeting of a panel including Head of College, College Dean of Research, and UoA17 Impact and Deputy Impact Champions (three females, one male).

Staffing strategy and staff development

The School is integrated into a well-developed University staffing strategy that, commensurate with a leading research-intensive institution, provides high professional standards in recruitment, induction, performance development and review, and promotion to support all staff. Through our staff programmes and general communications colleagues are aware of existing and emergent strategic priorities and the funding opportunities for staff development in the recurrent annual budget.

A development from the Athena SWAN action plan has been a new three-week staff induction programme for academic staff which began in 2020. All new staff meet their Head of School, Head of Professional Services and Head of Subject, in addition to key members of professional services. They are also allocated a 'buddy' (distinct from the mentor for Early Career Researchers) and complete a questionnaire at the end of the induction programme, so that further improvements can be made.

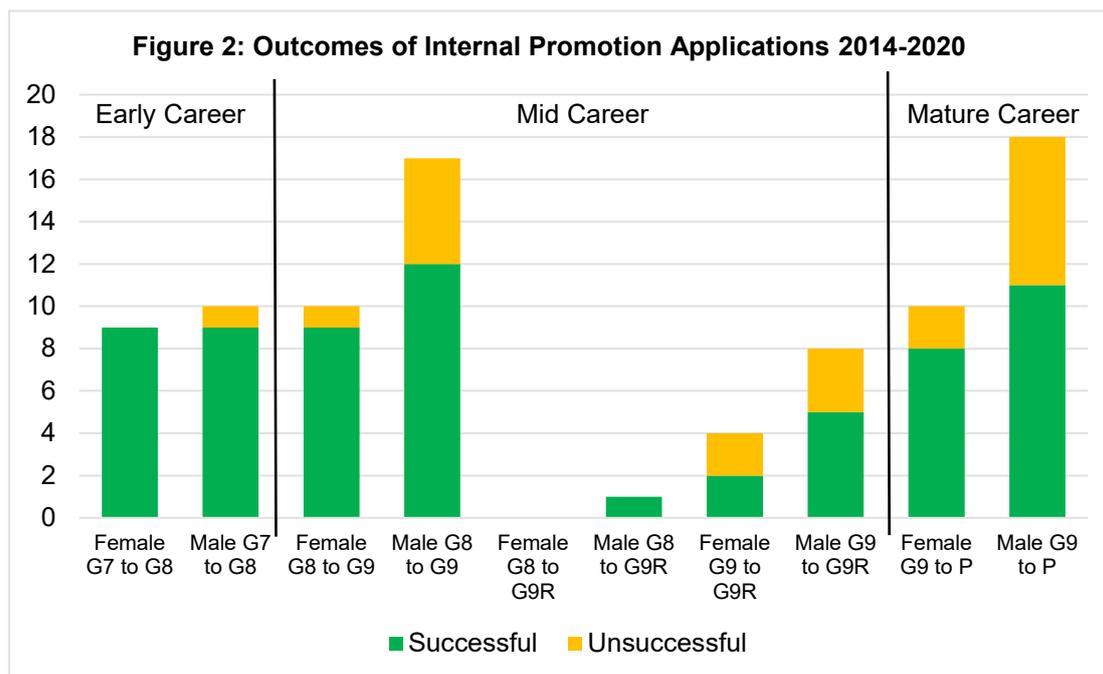
The strategy and accountability for staff development operates principally through the University's annual **Performance & Development Review (P&DR)**. Academic staff self-assess their own performance on the five dimensions of Research and Scholarship; Knowledge Exchange and Impact; Learning and Teaching; Leadership, Management and Citizenship; and Esteem. Staff are then graded, normally on an agreed basis but with the possibility of appeal, with final scores determined at University level. Thus, the P&DR provides the assessment of overall performance while the research clusters support staff research and impact creativity.

In 2013 the University introduced a comprehensive **Early Career Development Programme (ECDP)** for newly appointed academic staff which supports them in developing their skills and careers. Learning and development opportunities in research, teaching and other aspects of the academic role are provided; a mentor to provide support and advice is allocated; annual objectives are set, enabling academics to develop the abilities and achievements evidenced at their appointment, with a view to meeting the criteria for promotion within a defined timescale. Cluster meetings and seminars with distinguished external speakers provide staff development opportunities, for example in presenting draft papers and responding to those of established researchers. Of the 134 REF-eligible staff, 36 have been on the ECDP during the REF period, with 11 enrolled at the census date.

Promotion is determined through well-defined University criteria. Staff at all levels who meet those criteria are promoted on merit; there are no quotas on grade proportions. In Figure 2 the outcomes of the internal promotion procedures during the period 2014-20 are summarised. Grades 7 and 8 are Lecturer grades, Grade 9 denotes Senior Lecturer, 9R is Reader, and P is Professor. On the basis of anonymised data which include reapplications, 76% of applications were successful, of which 70% of male and 85% of female applications were successful.

The vertical lines in Figure 2 separate the promotion application results into Early Career, Mid-Career and Mature Career. Recruiting Early Career Researchers with high potential is then followed by systematic mentoring to progress them from Lecturer Grade 7 to Grade 8. The aim is that all staff successfully make this transition. Mid-career promotions from Lecturer to Senior Lecturer (G9) and Reader (G9R) depend on performance against appropriate well-specified criteria. Success rates for such applications are unsurprisingly lower, but success can come later on re-application. Figure 2 shows that female staff have out-performed males at most of the higher promotion steps.

Mature-career promotions to Professor depend on achievement against appropriately demanding benchmarks. The nineteen such promotions recorded in Figure 2 demonstrate the internal promotion route in use. Internal staff can also be candidates for externally advertised posts.



The Business School has also drawn on the University’s Lord Kelvin Adam Smith (LKAS) Fellowship scheme, designed to accelerate the careers of future research leaders. For example, after working as a Research Associate in Economic and Social History on an ESRC-financed project on international banking regulation, Emmanuel Murlon-Druol won an LKAS Fellowship (2013-16) in the Business School, then secured a Lectureship (2016) and Senior Lectureship (2017), before appointment as Professor of International Economic History (2019). This example demonstrates how University and Business School structures and culture nurture and reward exceptional achievement.

Combined with a well-developed **Workload Allocation Model** that promotes research and impact, the transparency to all academic staff of this annual Model provides reassurance of equitable treatment and seeks to identify problems at an early stage. The Model reflects University norms and expectations in allocating one-third of time to research, which can be increased through buy-outs from overhead-bearing external funding.

For research staff, study leave, travel and output support is provided. Although not an entitlement, the expectation is that staff will successfully apply for study leave on the basis of one semester within three years or two semesters within six years. Cluster Leads are usually involved in the preparation of applications based on a programme of work, outputs and impacts that will benefit both the individual and the School. Of the 134 staff submitted to UoA17, 47 have taken study leave during the REF period or have approvals for future study leave. Some colleagues defer their study leave because of managerial responsibilities, family commitments or until entitled to a full year's leave. Conferences and research travel have been supported by generous annual funding entitlements for staff, up to £5,000 in a financial year to supplement external grant funds. Writing retreats provide quiet, dedicated time for a small number of academic staff and PhD students to work on their current papers. Copy-editing, funded by the School, speeds up and increases the chances of success of journal submission.

The Business School supports multiple weekly seminar series, as well as meet-the-editor events and hands-on workshop opportunities. We hosted 124 research seminars in 2017/18, 109 in 2018/19 and 67 in 2019/20. Cancellations due to industrial action and COVID-19 impacted our most recent seminar schedule. However, taking events online facilitated participation from outside Glasgow. Some seminars are held jointly with Law and Economic & Social History, enabling interdisciplinary collaborations.

Our successes in developing staff throughout their careers are attributable partly to University-level structures and partly to the commitment of clusters, especially leadership teams, to mentor, guide and encourage. In a large business school, pro-active decentralised support within well-defined Human Resources systems helps colleagues to fit into communities of scholarship, enhance their capabilities, obtain promotion and develop leadership skills.

Postgraduate research students

Postgraduate research is driven by the eleven research clusters, and the recruitment process, which includes outreach activities addressed at UG and PGT populations as well as online activities, directs potential applicants to specific clusters and personal academic websites. We encourage potential supervisors to engage with applicants by providing feedback on applications, assessing candidates and project quality, and interviewing candidates. Each PhD researcher is allocated a minimum of two supervisors. Once accepted, PhD researchers join a cluster and engage in its training opportunities, seminars, and workshops. The PhD programmes are managed by the Director of Postgraduate Research (Anna Morgan-Thomas) and six subject convenors with administrative support.

The School supports PhD activity through investment in staff, infrastructure and facilities. The Workload Model allows 100 hours per year for each FTE PhD, shared between two supervisors. Since PhD supervision is recorded in teaching, supervisors can receive a discount in their teaching allocation of up to 300 hours a year, thus encouraging staff to contribute to formal PhD development.

In line with ESRC requirements, the formal training programme addresses subject-specific knowledge, research methods and broader skills development. Development funding of £2,000 per student supports external training which includes conference participation. Separate funds support primary research (up to £3,000 per award) and employability (up to £500 per student). Students have extensive access to secondary data through paid subscriptions with major providers. The many job opportunities include internships and Graduate Teaching Assistants for whom training is dedicated. The quality of our PGR environment permits the School to host ESRC PhD studentships, 27 having been won during the REF period. Further externally funded scholarships include the China Scholarship Fund, Cairncross and CREATE.

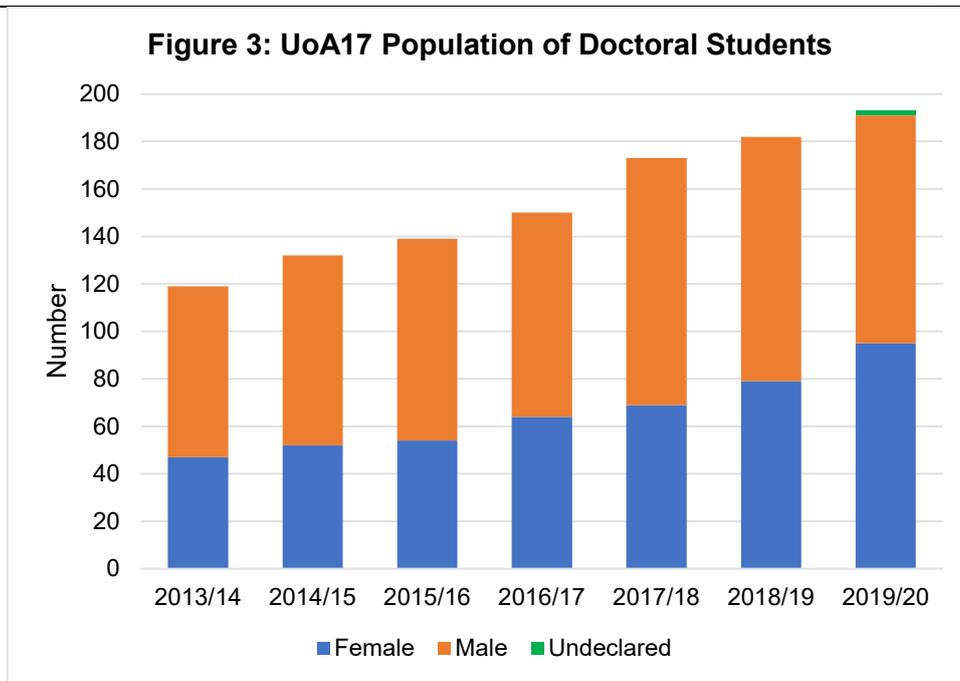
Individual scholars in home disciplines initiate collaboration, but we also encourage the development of a culture of collaboration and co-production in the postgraduate research student community and in the professional training in which the School is involved. We are a member of the Scottish ESRC Doctoral Training Centre/Partnership (Scottish Graduate School of Social Science), a formal collaborative programme for research training. Research clusters contribute to collaborative training activities across Scotland including summer schools, subject conferences and advanced training courses.

Training includes two MRes degrees (in Management and Economics), specialised Masters courses (in all subjects) as well as advanced PGR courses. The 1-year MRes in Management is able to accommodate 1+3 ESRC scholarship holders, while the University offers a number of full scholarships for the 2-year MRes in Economics programme. An annual budget of £33,000 funds external scholars to deliver in-house training for PGRs. PhD researchers access training in generic research skills and broader researcher development opportunities provided centrally by the University. The School promotes all such opportunities through a yearly PGR brochure, the latest edition of which covers over 120 courses.

Admissions and progress

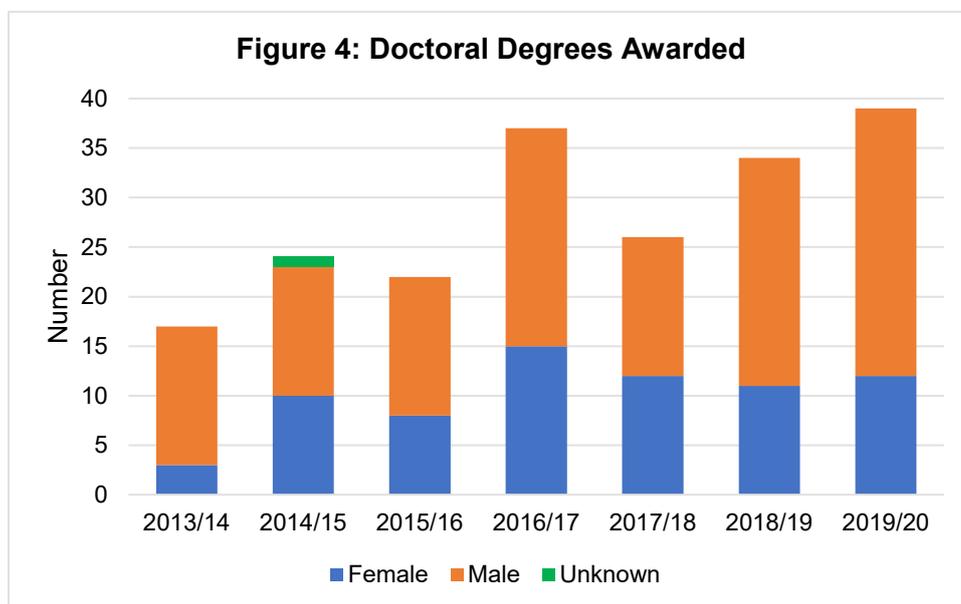
The sustained emphasis on quality is also reflected in figures concerning PhD admissions and completions. Figure 3 shows the strong growth of doctoral student numbers from 119 (2013-14) to 193 (2019-20). This growth reflects not only our strategy of growing the doctoral student population but also the greater supervisory capacity that is now available. As a result, the School has a large, expanding and internationally diverse doctoral programme. Over the REF period doctoral students came from 66 countries. In 2019-20, 27.5% come from China, 15.0% from other parts of Asia, 19.7% from the European Union, 18.1% from the UK, 6.7% from the Americas, 4.7% from the Middle East and 4.1% from the former Soviet Union. The gender balance has improved, with 49.2% female in 2019-20, compared with 39.5% in 2013-14.

Student progress is monitored by the School's Director of Postgraduate Research and the PhD convenors. All doctoral researchers are required to attend an annual progress review (APR) within their research clusters that scrutinises their progress and provides impartial assessment and feedback. Participation in training is integral to the progress review. The APR itself evaluates the researcher's work through a meeting with a committee including the supervisor(s). A satisfactory evaluation is necessary for progress to the next year of study.



Awards

During the REF period there were 199 graduands, as shown by academic year in Figure 4. Of those, 36% were female and 64% were male. The number of graduations has increased strongly during the REF period, doubling between the first and the final year. They came from 57 countries. In terms of nationality analysed by region, 25% came from China, 19% the rest of Asia, 16% EU, 13% the UK, 12% the Middle East, 9% Africa, 5% Americas and 1% Australasia.



The Business School expects that doctoral students will complete within the prescribed period (four years for full-time and six years for part-time) but there are some students who do not achieve this. A problem with a large proportion of non-UK students is that funding and visas expire, so that the final stages sometimes have to be completed away from Glasgow and are complicated by the return to full-time employment.

Of students enrolling in 2011-12, 82.8% have achieved their doctoral award. The figures for following years are 88.6% of 2012-13 entrants; 82.1% of 2013-14 entrants; 82.5% of 2014-15 entrants; 69.7% of 2015-16 entrants; and 58.3% of 2016-17 entrants. The percentages for the later years will increase over time.

Although most of our doctoral students are full-time, we have a small number of part-time students. The ability of local students to study part-time contributes to achieving the University's civic responsibilities to Glasgow and Scotland and to the School's diversity objectives. The School actively encourages applications from older, mature students who tend to bring industry-relevant experience. These applicants are typically in employment, have sustained careers in industry and have significant family commitments. All the above increase the likelihood of drop-out and non-completion. These risks are mitigated by offering remote training opportunities, providing access to community-building events (trips, dinners, social activities, student conferences etc) and giving robust support. Providing the opportunity for further study for this under-represented population widens access and diversity; this is more important than the metric of completion rates.

The School encourages doctoral researchers to publish their work at any point of their PhD and has adopted an optional journal article thesis format to encourage publications while safeguarding timely doctorate submissions. Co-publication with supervisors is similarly encouraged as an important component of collegiality and capacity development. Staff members who have published with their PhD students include Mario Cerrato, Pavlos Dimitratos, Adina Dudau, Anna Morgan-Thomas, Sabina Siebert and Cleopatra Veloutsou. This approach enhances student publishing skills and increases their employability.

Another strength of the PhD programme is our graduates' successful record of subsequent employment. They find employment in government, academia, or industry within a short period of time, with notable destinations including the European Central Bank, the Central Banks of Mexico, Hong Kong, Ireland, and Saudi Arabia, the IMF and UN country offices, and many prestigious universities in the UK and abroad.

The increase in student numbers and improvement in completion rates reflect the way doctoral researchers are fully integrated into the research community and the approach taken to recruitment, supervisor development, PGR training, PhD formats and progress reviews.

Responses to COVID-19

The School recognises that strategies for development will need to address the differential impacts of COVID-19 on working methods and facilities, and the changed circumstances in which staff and students work both on University premises and at home.

COVID-19 affects PhD activity both directly and indirectly. Direct impacts on research activity include academic discontinuity, disruption and the loss of productivity caused by the pandemic and lockdowns. Indirect effects include wider implications for individuals such as physical and mental health, additional care needs, financial and non-financial hardship.

The resulting disruption is expected to have an impact on timelines for doctoral projects and in some cases may necessitate a change of research focus or scope. Mitigation measures have been put in place, including:

Unit-level environment template (REF5b)

- Timely assessment of disruption for individuals through Annual Progress Reviews which were conducted virtually in April-May 2020
- Online training on alternative methods of data collection and alternative thesis formats
- Financial support including immediate access to hardship funds
- Unfunded short-term extensions of studies of up to 6 months (from March 2020 onwards)
- Fully-funded scholarship extension available to all doctoral students in their third year of study (F/T or part-time equivalent) who experienced a disruption to their studies (from August 2020 paid retrospectively).

The effectiveness of these measures will be closely monitored until the pandemic is over.

As will be shown in the following section, the Business School's commitments to, and investments in, staff and postgraduates are supported by the development of the infrastructural environment in which they work.

3. Income, infrastructure and facilities

Realising the strategy and structure set out in Section 1 through the people described in Section 2 requires an infrastructure that supports research staff to produce high-value civic, national and international outcomes. The Business School objective has been to enhance research income and other resources.

Income generation

During the REF period, Business School staff submitted 513 external research funding applications for £60,066,384, of which 188 (37%) were awarded a total of £8,138,663. The spend in the REF period ("HESA Income") was £5,843,659. This achievement is the result of a strategy since REF2014 by the University, the College of Social Sciences and the School that has included encouragement of ECRs and mid-career staff to bid for grants and enhanced staffing of College Research Project Coordinators. The latter support applicants including with grant application workshops that take them through the stages from initial conceptualisation to submission.

Within the School our strategy has also enhanced the role of cluster leadership in stimulating and submitting applications for external funding. In addition, reflecting strategic agility, we have specifically sought to overcome the difficulties faced by Business and Management Studies in accessing UK Research Council funding by successfully diversifying our income sources including from the EU, charitable foundations and professional institutes. Applying for external funding is one of the pillars of annual Performance & Development Review and one of the criteria for internal promotion (see Section 2). Our new procedures are more hard-headed about chances of success, given that applications consume resources and repeated failures, even in highly competitive bids, are demoralising.

Figure 5 shows the distribution of external grant applications by value and main category of funder. During the REF2021 period, the main targets for grant income by value have been the BEIS Research Councils, the European Union and UK-based charities. The arrangements described above, together with strong recruitment, have facilitated a larger number of grant applications by more staff.

Of the 513 external grant applications, 34% of applications (55% by value) were made to BEIS Research Councils and Royal Academies. Applications for EU funding accounted for 8% of applications and 26% by value. Applications to UK-based charities have been large in number (21%), usually for smaller application amounts (11%) than for Research Councils or the EU. Where applications have been unsuccessful, the policy, where practical, has been to seek alternative sources of external funding.

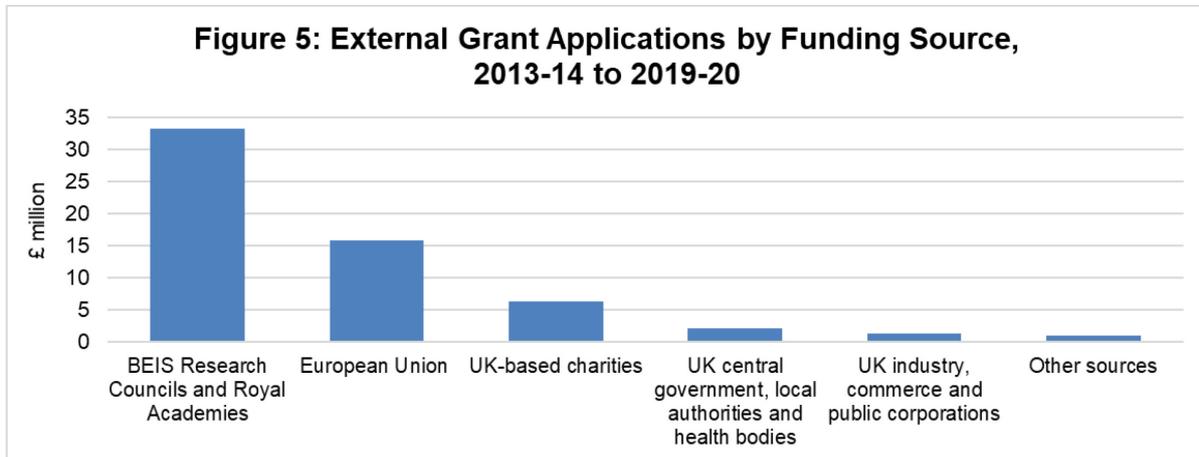


Figure 6 shows UoA17 awards by value for each of the years of the REF period. After a disappointing first three years, performance in the second half of the period was much stronger. The success of large applications to the EU was an important factor, followed by awards received from BEIS Research Councils.

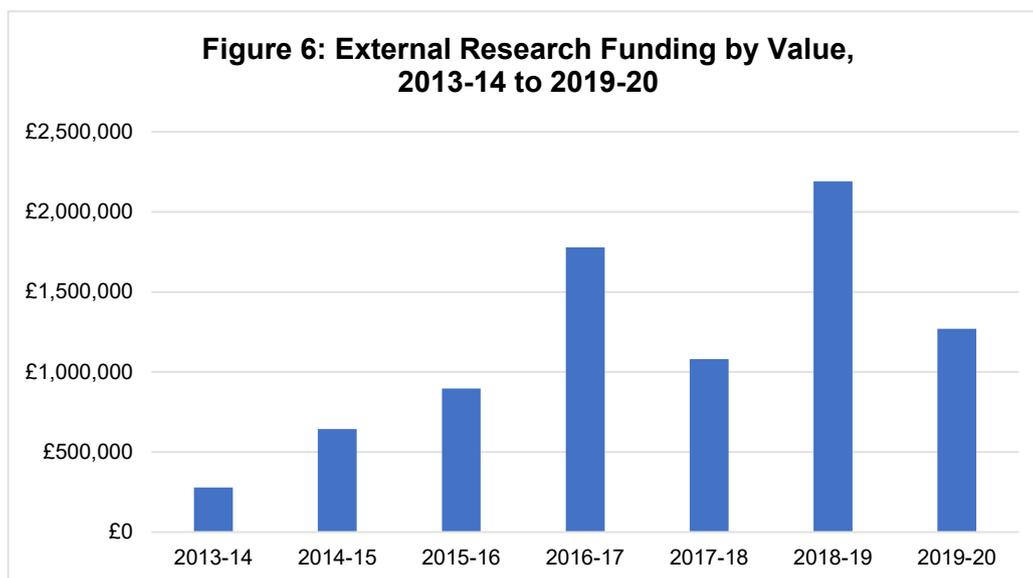
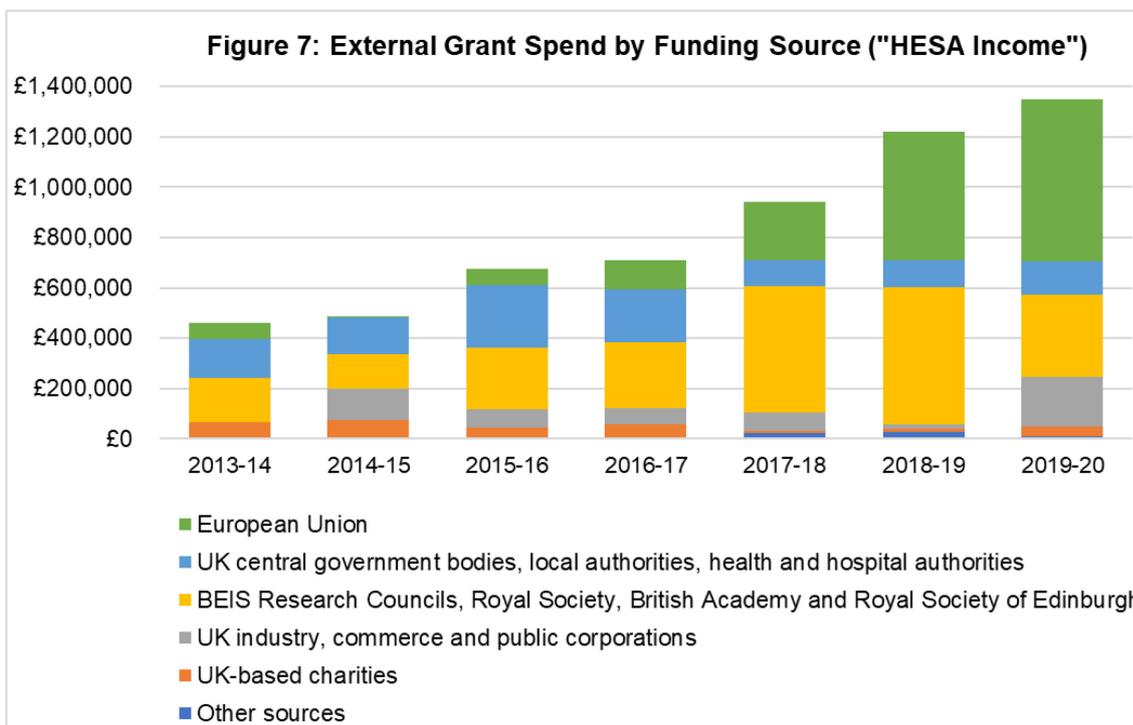


Figure 7 demonstrates the steady growth of external funding over the REF period, and its year-by-year composition. Total spend over that time was £5,843,659 (“HESA Income”), with 37.5% coming from BEIS Research Councils and Royal Academies, and 28.0% from EU sources.

Spend on EU-financed projects has grown impressively, while Research Council funding has fluctuated but is substantially higher at the end of the period than at the beginning. The School’s strategy of exploiting access to EU programmes, bolstered by its interests in policy-oriented research and the strong representation within the School of non-UK EU researchers, has been very successful. The continued access to EU funds is welcome but post-Brexit uncertainty will

require future efforts to focus on Research Councils, UK government and industry. Moreover, the experience of application procedures and of successful applications for small grants (for example from UK-based charities and professional bodies), together with recruitment of researchers with track records of grant awards, has strengthened our competitiveness.



These achievements are not just about financial numbers but, as the following sketches of prestigious awards demonstrate, constitute exciting research on high priority commissions conducted by highly regarded researchers.

European Union funding

Driverless Cars: Nuran Acur, Stephan von Delft and Robbie Paton joined the European Space Agency, the UK Space Agency and O2 to develop the next generation technology for driverless cars. Working with the University of Oxford, satellite operator Hispasat and start-ups, the Business School team will complement the development and research of new business models, technology management and policies needed to successfully commercialise this new technology. Glasgow researchers have received £440,640 as part of the large-scale 'DARWIN' project.

Global Remunicipalisation: Andrew Cumbers received a European Research Council Advanced Grant totalling £1,564,971 for research on cities taking formerly privatised assets, infrastructure and services back into public ownership. He was also awarded £257,875 by the European Commission's Horizon 2020 programme for the mPower project, which explores new forms of municipal ownership and citizen participation in moving from carbon-based energy to renewables. mPower comprises the University of Glasgow, Platform (UK), Transnational Institute (Netherlands), Energy Cities (EU-wide), Institute for Political Ecology (Croatia), University of the Basque Country (Spain) and Carbon Co-op (UK).

EU Agenda for Change: Niall Mackenzie, Dominic Chalmers and Jillian Gordon won a European Horizon 2020 Marie Skłodowska-Curie Innovative Training Network grant for 'Legitimation of Newness and Its Impact on EU Agenda for Change'. This European Training

Network combines new legitimisation perspectives, theories, approaches and methods to learn how best to interpret and respond to newness, committing to and ensuring a positive social impact. The total value of this partnership project with three European universities (Aalborg, Denmark; Oulu, Finland; Halmstad, Sweden) is £3.9 million, with Glasgow's share £727,083 over four years from January 2020.

Origins of EU Instability: Emmanuel Mourlon-Druol received a European Research Council grant of £1,195,005 for his EURECON project that looks at the origins of the issues that are currently troubling the EU by investigating the period between the creation of the European Economic Community in 1957 and the decision in 1992 to create a European single currency.

Financial Literacy: Georgios Panos received £186,885 from the European Commission for his PROFIT project on promoting financial awareness and stability. The project's goal is the promotion of more responsible and prudent personal financial behaviour.

Community Food Hub: Deirdre Shaw and Andrew Cumbers received £161,482 from the European Social Fund for their Community Food Hub project to investigate issues of sustainability management through the development of community gardens and local food spaces as ways of contributing to more sustainable forms of production and consumption in urban areas.

UK Research Councils and equivalent

Economic Democracy: Andrew Cumbers and Robert McMaster received £191,658 from the ESRC for their 'Transforming Public Policy through Economic Democracy' project. Its aim was to explore the relationship between levels of economic democracy and key public policy goals in promoting sustainable economic development and social justice. The research led to the creation of an Economic Democracy Index to test several critical relationships between economic democracy and key public policy goals.

Land Reform: Aldo Elizalde was awarded a British Academy Post-Doctoral Fellowship of £254,234 for 'Land Reforms, Ethnic Groups, and Long-Run Development in Latin America: A Case Study of Mexico'. This project aimed to challenge prevailing wisdom regarding the institutional capacities of Indigenous groups in influencing policy locally and, through this, development outcomes.

Accountability through Participation: Sayantan Ghosal and Theodore Koutmeridis received £518,842 from the ESRC for work on 'Disadvantage and Participation Accountability Processes: Theory and Evidence from School Development and Management Committees in Karnataka, India'. The project aims to develop a conceptual framework to examine how poverty, marginalisation and exclusion impact on the beliefs and agency of parents and to assess the impact of a pro-poor accountability framework.

Historical Origins of International Economic Relations: Emmanuel Mourlon-Druol received £219,727 for 'The Uses of the Past in International Economic Relations' project. The Humanities in the European Research Area (HERA) partnership awarded €1,193,318 to this project, with the UK portion originating from the Arts and Humanities Research Council. The overall project is led by Catherine Schenk (University of Oxford) and international partners are from Sweden (Uppsala University), Switzerland (Université de Genève), and Spain (University Carlos III Madrid).

Mexican SMEs: Rose Narooz and Pavlos Dimitratos were awarded £95,552 by Newton Fund Institutional Links/British Council for research on 'Networking, Innovation and Internationalisation of Mexican SMEs'. The project aims to gain new insights into the barriers to internationalisation for SMEs in Mexico and includes collaboration with Tecnológico de Monterrey and EGADE Business School.

Ethics in Consumption: Deirdre Shaw received £30,053 from the ESRC for the Ethics in Consumption Seminar Series. She collaborated with colleagues from Royal Holloway, the University of Leicester and the University of Melbourne to host eleven interdisciplinary seminars at institutions and third-sector organisations across the UK and Peru on the subject of consumption ethics and sustainability.

Examples from other funders

Tele-Medicine in Indonesia: Nuran Acur and Stephan von Delft's project, 'Targeting Non-communicable Diseases through Interactive Health Ecosystems in Indonesia', received £48,483 from the British Council. Bringing together expertise in medicine, management studies, social sciences and information and communication technologies from organisations in Indonesia, it seeks to improve healthcare in rural areas by combining healthcare and data analytics in a novel way to develop an interactive digital health ecosystem for the screening and management of non-communicable diseases such as diabetes.

Corporate Responsibility: Alvis Favotto received £54,305 from the Leverhulme Trust for research into 'Responsible Lobbyists? Corporate Social Responsibility and Public Policy' with Kelly Kollman (PI, School of Social and Political Sciences). The project seeks to assess if there is a link between firms' investment in corporate social responsibility (CSR) activities and their access to policymakers in the British political system.

Skills Development: Alan McGregor was awarded a total of £101,355 from Skills Development Scotland for research projects related to employment and training, including modern apprenticeships and regional skills strategies for Glasgow and the Clyde Valley, Aberdeen City and Shire, Edinburgh and South East Scotland, and West Lothian.

Trust in Biomedical Science: Sabina Siebert was awarded a British Academy Mid-Career Fellowship in 2016-17 (£124,531), to work on trust in biomedical science. This addressed whether there has been a decline in trust in scientists, and if so, what can be done about it.

Glasgow-Warsaw Dekaban-Liddle Foundation (University of Glasgow Chair: **Sabina Siebert**) is a collaboration between UofG, the University of Warsaw and Piast Institute (USA). The Foundation funds (up to a maximum of £11,000) exchange visits by Polish and Glasgow scholars to gain wider experience of economic theory and practice. This has resulted in research collaborations with colleagues at Gdańsk University of Technology, Opole University of Technology and University of Warsaw.

Charitable Trusts specifically supporting the Business School

James Cusator Wards Trust funds visiting academics and small research projects in the Accounting and Finance clusters (£303,446 in REF period). The MacFie Bequest named after Alexander MacFie, the Adam Smith Professor of Political Economy (1945-1958), contributes £10,000 annually towards the funding of the Bonar MacFie Chair in Economics and has enabled

distinguished speakers from Economics and Management to visit the Business School and share their research.

Physical infrastructure

Towards a purpose-built Business School building

The School is currently located in the iconic 19th century Gilbert Scott Building which dominates the West End of Glasgow. The School premises comprise high-quality academic offices and research seminar rooms. The School also has a range of dedicated PhD rooms with individual workstations. The University has imaginatively renovated and made available additional space within the building. However, the existing building is no longer large enough to accommodate the growth of the Business School's staff and students.

A dedicated new purpose-built home for the School has therefore recently been approved adjacent to the main campus, with entry planned in autumn 2023. The new building aims to enhance the learning experience of taught postgraduates with classroom and support facilities consistent with the School's learning and teaching strategy and worthy of a world top-100 University; to provide a welcoming environment for corporate and policy connections to support learning and teaching programmes, learning experience, and collaboration in research; and to provide a stimulating environment for research and scholarship for the faculty.

Organisational infrastructure

The operational support mechanisms for research are provided by College, School and Cluster within University-wide frameworks established by Research & Innovation.

College

The Research Support Office of the College of Social Sciences, created in 2016, provides support for researchers from project inception to completion, dealing with online applications and project and financial management. The Office also offers integrated impact support, including planning and training. Its creation, reporting to the College Head of Professional Services with academic leadership from the College Dean of Research, has simplified and accelerated the internal approval processes, and increased the chances of success for individual applications.

Business School

Our 'Connect Team' of 18.6 FTE within the Business School's Professional Services staff strengthens the research environment by providing support for research, accreditations, rankings, marketing, communications and events. Research specialists service the work of the clusters, including their regular meetings and seminars, and provide in-house knowledge and advice to researchers. The Research Cluster Coordinator manages all aspects of research support within the School, assisted by a Research Cluster Assistant and an Administrative Assistant. The team works closely with counterparts in the College Research Support Office and the Enlighten/Open Access Team in the University Library. In addition, researchers are supported by events staff who manage large events held in the School (including conferences), as well as finance staff who book travel and arrange conference attendance.

Data management is a key strategic priority for the School and has improved thanks to the support provided by the Research Team and its use of ACADEM accreditations software. Each cluster is responsible for submitting an annual report based on its members' activities during the past year (e.g. outputs, presentations, professional memberships, etc). The Research Team supports this task by recording research activity throughout the course of the year. It also provides research data to support our School accreditations.

The Research Team manages our research social media platforms, including a Twitter account (@ASBSresearch). These forums publicise research activities and staff achievements and allow staff to share their work with both members of the public and other researchers, potentially leading to future collaborations. The Research Team also manages the Business School's working paper series which facilitates early dissemination of research results. In addition, the School's Communications Officer publicises news stories on the real-world impact of staff research as well as noteworthy individual achievements. This support widens the reach of colleagues' work.

Facilities

Through the University Library, that provides excellent facilities for staff and research students, we have access to IT and library database facilities such as Amadeus, Bloomberg, Business Source Premier, Croner-iLibrary, Eikon, Datastream, EconLit, Emerald, Fame, FT.com, JSTOR, S&P Global Market Intelligence, MarketLine Advantage, Statista, Passport (Euromonitor), OECD iLibrary, OECD Statistics, ScienceDirect, Scopus, SAGE Business Cases, SAGE Research Methods, UK Data Service and Web of Science. In recent years there has been significant investment in the fabric of the Library buildings and in audio-visual and IT equipment to ensure they meet a high specification. The University is part of a Scotland-wide purchasing consortium (SHEDL) that provides timely access to all major e-journals and e-book collections. Additionally, there is a wide range of software to ensure that quantitative (e.g. Qualtrics) and qualitative (e.g. NVivo) methods are accommodated. The Library hosts the Scottish Business Archive which contains valuable collections used for research by accounting and business historians.

These infrastructural facilities are integrated with staffing support (see Sections 1 and 2) to realise the Adam Smith Business School's research strategies (see Section 1). As Section 4 sets out below, they have combined to make possible significant achievements, including distinctive collaborative contributions to the research base, our economy and society, and the way we live.

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

Research distinctiveness in the widest Glasgow tradition of Political Economy is referenced in contributions to the stock of knowledge on the economy and society. Nuran Acur's work on the Connected Digital Health Innovation System for COVID-19 (CODIS) and that of Mehdi Boussebaa on internationalisation strategies and practices of professional service firms contribute to knowledge on the production of goods and services; David Heald's work on the transparency of public finances and that of Andrew Cumbers on alternative forms of public ownership add to what we know about relations between law and government; Colin Mason's work on the development of high-growth firms and that of Denis Fischbacher-Smith on risk management contribute to the creation and protection of personal and collective well-being.

The School's research also helps improve the well-being of its communities at various levels, including the civic (for example, Deirdre Shaw et al's work on Glasgow community gardens), the

national (for example, Campbell Leith and Charles Nolan's work in establishing the Scottish Fiscal Commission) and the international (for example, Emmanuel Murlon-Druol's work on historical economic analysis of the future of the Eurozone).

In all these, staff strive for enlightened research that questions traditional and perceived orthodoxies and searches for contemporary understanding while endeavouring to establish new meaning and collaborative solutions to the challenges of an increasingly complex socio-economic environment.

Engaged scholarship: A culture of discipline, collaboration and co-production

The public conception of researcher has often been expressed as the singleton scholar. However romantic that image may be, it rarely depicts the reality of today's search for understanding of the complexities of business and management. Our approach is engaged scholarship, the hallmarks of which are discipline, collaboration and co-production, specifically:

- Individual disciplinary scholarship and constructive enterprise
- Engagement with the academic community of business and management through journal editorships and learned society leadership
- Collaboration with other disciplines and subdisciplines
- Engagement with communities of policy and practice both as a source of knowledge and reciprocally as a means to improve the way we live.

Our research expresses both the Business School's commitments and the aspirations of the University in:

- Contributing to the vitality and sustainability of Business and Management Studies through our culture of engaged scholarship, and our staffing strategy that recruits into and socialises this culture (see Sections 1 and 2)
- Providing opportunities to disseminate research findings to policymakers, professional bodies and managers, and increase the potential for research impact
- Ensuring that the principles of research co-production are integral to the ways in which research is supported
- Developing and sustaining networks of research support that bring practitioners into contact with the research community.

Collaborative academic research

Building this collaborative research base has involved active engagement with a wide range of institutions of higher education, civic, national and international research users and networks, and professional and learned societies. The following paragraphs provide some examples.

In addition to collaborations within the School and across the University, we have extensive staff collaboration with colleagues in higher education institutions across the world. The following examples illustrate its breadth and depth: Australia (Robert McMaster with Sydney and Kathleen Riach with Melbourne); Canada (Katherine Duffy with Toronto); Denmark (Rob Dekkers with Aarhus); Finland (Mehdi Boussebaa with Hanken School of Economics, Helsinki); France (Danture Wickramasinghe with Paris Dauphine); Germany (Cathy Chen with Humboldt); Ireland (Martin Beirne with Trinity College Dublin); Italy (Adina Dudau with Bocconi); Netherlands

(Stephan von Delft with Amsterdam); New Zealand (Trevor Buck with Victoria University Wellington); Russia (Constantine Sorokin with New Economics School, Moscow); Sri Lanka (Sonja Gallhofer with Colombo); Sweden (Colin Mason with Lund); Switzerland (Eugenio Proto with ETH Zurich); and USA (Céline Azémar with Columbia, Dimitris Christelis with Stanford, Takashi Hayashi with Georgetown and Hervé Moulin with Harvard).

These links are reinforced by distinguished visiting speakers. During the REF period, the Adam Smith Distinguished Speaker Series included Daniel Hamermesh (IZA Institute of Labor Economics), Charles Manski (Northwestern) and Adam Posen (Petersen Institute for International Economics). External presenters at cluster seminars included Francis Bloch (Paris School of Economics), Stephen Broadberry (Oxford), Judy Brown (Victoria University of Wellington), Frank Eich (Bank of England), Yves Gendron (Laval), Bill Megginson (Oklahoma), Katharina Pistor (Columbia), Roy Suddaby (Liverpool and Victoria), and Douglas Sutherland (OECD). 'Meet the Editor' sessions included Gloria Barczak (Northeastern University), V. Kumar (Georgia State) and Linda Price (Oregon).

Learned societies

As part of the development of a collaborative research base, staff are or have been leading members of learned societies, including:

- **Anna Bogomolnaia:** Member, Council of the Game Theory Society (2019 – present)
- **Sara Carter:** Convenor, D3 Sectional Committee on Private Sector Leadership, Royal Society of Edinburgh (2019 – present)
- **John Crawford:** Member, A3 Sectional Committee on Organismal and Environmental Biology, Royal Society of Edinburgh (2016 – present)
- **Richard Dennis:** Member, Executive Committee of the Society for Nonlinear Dynamics and Econometrics (2014 – 2017)
- **Pavlos Dimitratos:** Chair, Academy of International Business (UK & Ireland) (2017 – present); Track Chair on 'International Business', British Academy of Management (2014 – 2016)
- **Theodore Koutmeridis:** Member, Royal Society of Edinburgh's Young Academy of Scotland (2014 – 2019)
- **Colin Mason:** Member of the Nominations Committee, Academy of Social Sciences (2009 – 2015)
- **Hervé Moulin:** President, Game Theory Society (2018 – 2020)
- **Sarah Robinson:** Co-Chair, British Academy of Management's Critical Management Studies track (2016 – present)
- **Rosalind Searle:** Lead Convener, European Group for Organizational Studies (EGOS) standing working group (SWG) on Organizational Trust (2011 – 2016)
- **Sabina Siebert:** Trustee and Deputy Chair, Society for the Advancement of Management Studies (2017 – present)
- **Ioannis Tsalavoutas:** Treasurer, Financial Accounting and Reporting Special Interest Group of the British Accounting and Finance Association (2009 – 2019).

Grant-awarding bodies

Colleagues also contribute to Business and Management research as members of grant-awarding bodies:

- **Sara Carter:** Leverhulme Trust Research Awards Advisory Committee (2011 – 2018)
- **Christian Ewald:** Grant Assessment Panel of Australian Research Council (2016 – 2019); Grant Assessment Panel of Carnegie Trust (2014 – 2017)
- **Sayantana Ghosal:** ESRC Capability Committee (2015 – 2018) and its replacement ESRC Strategic Advisory Network (2018 – present); ESRC Peer Review College (2010 – present); Advisory Board of the Campaign for Social Science in Scotland (2016 – present)
- **Campbell Leith:** ESRC Grant Assessment Panel (2014 – 2018)
- **Sabina Siebert:** ESRC Grant Assessment Panel (2018 – present); Independent Research Fund Denmark Assessment Panel (2018 – 2019)
- **Arjunan Subramanian:** ESRC Peer Review College (2011 – present); EPSRC Peer Review College (2011 – present).

Journal editorships

In addition to all staff undertaking journal reviews and most being members of editorial boards, key editorships of leading journals include:

- **Thomas Anker:** Editor-in-Chief, *European Management Journal* (2016 – 2018)
- **Craig Burnside:** Member of the Editorial Board, *American Economic Review* (2011 – 2020)
- **Andrew Cumbers:** Managing Editor, *Urban Studies* (2005 – present)
- **Christian Ewald:** Managing Editor, *Quantitative Finance* (2015 – present)
- **Colin Mason:** Founder and Co-editor, *Venture Capital: An International Journal of Entrepreneurial Finance* (1999 – present)
- **Hervé Moulin:** Co-editor, *Economic Theory* (2015 – present)
- **Lee Parker:** Joint founding Editor of *Accounting, Auditing & Accountability Journal* (1987 – present)
- **Georgios Sermpinis:** Senior Editor, *Decision Support Systems* (2014 – present)
- **Deirdre Shaw:** Section Editor (Consumer Ethics), *Journal of Business Ethics* (2017 – present)
- **Sabina Siebert:** Editor-in-Chief, *European Management Journal* (2015 – 2017)
- **Melanie Simms:** Editor-in-Chief, *Work, Employment and Society* (2015 – 2017)
- **Cleopatra Veloutsou:** Joint Editor-in-Chief, *Journal of Product and Brand Management* (2013 – present).

Collaborative international conferences

Complementing regular academic seminars held by the clusters that attract distinguished speakers from the UK, Europe and across the world, the School has hosted collaborative international conferences including:

- European Workshop on General Equilibrium Theory, 16-18 June 2016
- 22nd Coalition Theory Network Workshop, 11-12 May 2017
- International Research Society for Public Management Workshop, 6-7 November 2018
- 75th Congress of the International Institute of Public Finance, 20-23 August 2019
- Bourdieu Symposium on Organisation and Management, 29-30 August 2019

- 47th Academy of International Business UK & Ireland Chapter Conference, 2-4 April 2020 (postponed to 6-9 April 2022 due to COVID-19)
- British Accounting & Finance Association (BAFA) Accounting Education Special Interest Group (SIG) Annual Conference, 20-22 May 2020 (postponed to 19-21 May 2021 due to COVID-19)
- European Academy for Standardisation Conference, 10-12 June 2020 (postponed until June 2022 due to COVID-19).

Collaborative postgraduate research and professional training

The School has also developed collaborative arrangements for postgraduate research and professional training which include the following (see also Section 2):

- Scottish Graduate School of Social Science pathways
- ESRC Scotland Doctoral Training Partnership, Scottish Graduate School of Social Science
- Tests of Professional Expertise and Relevant Expertise Examination Panels of the Institute of Chartered Accountants of Scotland, through which Accounting researchers contribute to the quality of professional training.

Collaborative relationships with communities of practice

As research user communities have their own requirements, colleagues are encouraged to engage with practice and acquire professional memberships in order to validate their standing within practitioner networks and their ability to identify real-world problems and opportunities. This has not only stimulated invitations to deliver keynote presentations but also led to co-produced research and support for grant applications.

Staff have strong links with professional practice, including professional bodies, corporates and public sector organisations. The outputs of this research are influencing policy at the highest levels at home and abroad and have had impact on the fiscal architecture of Scotland and the UK. Researchers have also provided tailored technical assistance to central banks around the world and to the private sector, and are shaping policies that will affect the lives of some of the most disadvantaged citizens of the developing world.

Staff are proactively ensuring that research has impact by embedding Knowledge Exchange (KE) across the entire portfolio and into strategic decision-making processes. The School has supported the development of several research networks that offer the potential for Knowledge Exchange and Impact. These include activities around finance, economic and regional development, human resource development, risk and resilience, security management, healthcare and international business. KE and Impact is an integral part of the annual appraisal process, promotion criteria, and the professorial zoning process, which is a clear indication of its importance (see Section 2).

Staff have further enhanced and invested in professionalising external engagement and marketing functions, the aim being to leverage corporate connectivity by better deploying the existing and emerging knowledge transfer and policy guidance capabilities. In addition, staff are networking with alumni in exploring civic, national and international relationships in an effort to develop more impactful relationships through existing and emerging stakeholder networks.

The communities of collaboration and co-production that these engagements have developed include a wide range of private and public actors. The submitted Impact Case Studies illustrate some of the successful long-term relationships developed by colleagues with these communities of practice. Along with related collaborations, they include:

- **Andrew Cumbers** on the Board of the Jimmy Reid Foundation
- **Denis Fischbacher-Smith** with the Security Awareness Special Interest Group on risk management
- **David Heald** as a witness to the House of Commons Procedure Committee and the Scottish Parliament Finance and Constitution Committee, and as member of HM Treasury User Preparer Advisory Group on government financial reporting
- **Colin Mason** with the OECD and European national governments on high-growth firms
- **Catriona Paisey** with the Institute of Chartered Accountants of Scotland (on whose Council she has sat since 2014) on professional ethics and education, and as a witness on the gender pay gap at the Scottish Parliament's Gender, Jobs and Fair Work Committee
- **Rosalind Searle's** contributions to the British Psychological Society's policy response to UK government consultations on sexual harassment and misconduct.

The Business School is home to the Adam Smith Observatory of Corporate Reporting Practices. The research hub's primary objective is to generate and promote innovative, practice-oriented, and academically rigorous research on contemporary issues and challenges facing corporate entities, professional bodies and policymakers. The Observatory currently works with the Association of Chartered Certified Accountants and the Institute of Chartered Accountants of Scotland.

The School has partnered with the National Institute for Economic and Social Research (NIESR). The collaboration will strengthen the School's visibility, presence and access in the most senior policy circles and drive the impact agenda in applied economics and policymaking. Together we will jointly produce, publish and disseminate the Quarterly Forecast for the Scottish economy from 2021, and contribute to the NIESR UK and Global forecasts. The School will be able to use the custom-made NIESR global economic model for research, Knowledge Exchange, and learning activities within the University and with external stakeholders.

The Business School is a partner in the £32m Productivity Institute which will be headquartered at Alliance Manchester Business School. Our economic and business specialists will join forces with leading experts from a range of disciplines and backgrounds across the UK to work directly with policymakers and businesses to better understand, measure, and enable improvements in productivity across the UK. The project is being funded by £26m from the Economic and Social Research Council (ESRC) as part of its largest single investment into social sciences research, and £6m from nine partner institutions for five years, from 1 September 2020.

Knowledge Transfer Partnerships (KTPs) have provided a significant proportion of the £567,969 received from industry sources during the REF period. These have included John Finch's awards with Scottish Water (with Robbie Paton and Adina Dudau) and CCRS Brokers (with Jillian Gordon and Stephan von Delft). The Scottish Water project focused on improving inter-organisational collaboration through effective knowledge management systems. The CCRS Brokers project centred on discovering and implementing a new peer-to-peer insurance business model. Innovate UK funding supports the KTPs.

Other examples of collaborations with communities of policy and practice include:

Government policy

- **Konstantinos Angelopoulos** with the Turkana communities in rural Kenya on the topics of insurance and inequality (2018 – 2020)
- **Sara Carter** on the Council of Economic Advisers to the First Minister of Scotland (2015 – present), Enterprise & Skills Strategic Board (2017 – present) and South of Scotland Enterprise (2020 – present)
- **Dominic Chalmers** as a member of the Skills and Knowledge Working Group contributing to the Scottish Government's Artificial Intelligence Strategy (2020 – present)
- **Sayantani Ghosal** and **Theodore Koutmeridis** with the National Health Service in Scotland on fraud prevention (2016 – present)
- **Alan McGregor** with Skills Development Scotland on research to support the development of the Glasgow and Clyde Valley Skills Investment Plan; Vice Chair, North Ayrshire Economic Development and Regeneration Board (2015 – present); Member, Glasgow City Region Economic Growth Commission (2015 – present); Member, Ayrshire Regional Economic Partnership (2019 – present)
- **Sabina Siebert** with 'Restoration and Renewal' project for the Palace of Westminster (2018 – 2019).

Public finances and the economy

- **Céline Azémar** with the Asian Development Bank and IMF Fiscal Affairs Department (2015)
- **Dimitris Christelis** with the European Central Bank on micro-data surveys (2014) and Bank of Greece on a micro-data household survey (2015 – 2016; 2018 – 2019)
- **Richard Dennis** with the National Bank of Belgium (2015 – 2016) and the Bank of Japan's Institute for Monetary and Economic Studies (2014); Research Associate, the Globalization Institute of the Federal Reserve Bank of Dallas (2012 – present)
- **David Heald** as Chair of the Royal Society of Edinburgh's short-life committee (2020) which responded to the consultation on the Scottish budget, also representing the Society at a Round Table held by the Cabinet Secretary for Finance
- **Dimitris Korobilis** with Deutsche Bundesbank (2019) and the European Central Bank (2017; 2020) to provide advice and expertise on high dimensional econometrics methods
- **Ronald MacDonald** with World Bank (2017 – 2018), Scottish Future Growth Council (2017 – 2020), Our Scottish Future Think Tank (2019 – present), Scottish Business UK (2019 – present) and Bank of England's Roundtable of notable economists (2008 – present)
- **Ioana Moldovan** with the IMF on the management of volatile external resources for developing countries (2015 – 2016)
- **Georgios Panos** with the World Bank's Development Economics Research Group: Finance & Private Sector Development Unit (2015)
- **Serafeim Tsoukas** with Bank for International Settlements (2018 – present) and the Bank of Portugal (2016 – 2020)
- **Danture Wickramasinghe** with World Bank's Sri Lankan Office on social auditing project (2016 – 2019).

Professional bodies

- **Yvonne Joyce** with the Professional Insolvency Committee of the Institute of Chartered Accountants of Scotland (2015 – present)
- **Catriona Paisey** with the Institute of Chartered Accountants of Scotland Council (2014 – present)
- **Rosalind Searle** as Chair of the British Psychological Society (BPS) Division of Occupational Psychology's Board Effectiveness Working Group (2013 – 2018) and Secretary-General of the Alliance for Organizational Psychology (2014 – 2018)
- **Sabina Siebert** as a member of the Chartered Institute of Personnel and Development's Knowledge into Practice Working Group (2015 – 2019)
- **Ioannis Tsalavoutas** with the Accounting Standards Committee of the Institute of Chartered Accountants of Scotland (2015 – 2018) and Chair of European Financial Reporting Network (2016 – present).

Business

- **Sara Carter** as Founder and Non-Executive Director of Women's Enterprise Scotland (2012 – present) and Co-chair, British Bankers' Association Diversity & Inclusion Council (2014 – 2017)
- **John Crawford** with Bayer on the development and delivery of global strategy in digital agriculture (2017 – 2018) and with BASF on the development of the global sustainability strategy (2018 – present)
- **Kirsten Kininmonth** as External Member of the Paisley Centre for Business and Industrial History (2017 – present) and contributing to Paisley's bid to be UK City of Culture in 2021
- **Yee Kwan Tang** as a Technical Adviser to ATDF Entrepreneurship Hub on 'Expanding business opportunities for African youth in agricultural value chains in Southern Africa' (2015 – 2017)
- **Stephan von Delft** with a consortium of academic partners for the German Chemical Industry Association (VCI), a chemicals and pharmaceuticals industry cluster, and the management consultancy PwC (2014 – 2015).

Political parties and interest groups

- **Andrew Cumbers** as adviser to the Labour Party on new forms of public ownership (2016 – present)
- **Melanie Simms** as Member of the Advisory Board for the European Foundation for the Improvement of Living and Working Conditions (2019 – present)
- **John Tsoukalas** as ad-hoc adviser to the Greek conservative party, New Democracy (2017 – present) and to the Chief Economist in the Greek Ministry of Finance (2019 – present).

The links of academia into practice are also strengthened by two mechanisms. First are the Business School's Honorary Professors who relate to the School as a whole and to the work of relevant clusters. Examples are James Baird (Audit Committee Chair of Macfarlane Group plc), James Barbour (Institute of Chartered Accountants of Scotland), Benny Higgins (formerly Chief Executive Officer of Tesco Bank and Chair of the Scottish Government's business-led committee on post-COVID-19 economic recovery); Lord John McFall (formerly Chair of the Treasury

Committee of the House of Commons); and Anastasia Sideri (Communications Director, Central and Eastern Europe, The Coca-Cola Company). Second is the Strategic Advisory Board which provides an advisory, ambassadorial and philanthropic function for the Business School. It is chaired by Jim McColl (Clyde Blowers Capital) and its external members include Carolyn Currie (Women's Enterprise Scotland), Nick Kuenssberg (Horizon Co-invest) and Petra Wetzel (West Brewery).

External recognition for contributions to the knowledge base, economy and society

The valued contributions of staff engaged in these collaborations have been recognised by fellowships and awards. The most notable during the REF2021 period include:

Fellowships and honours awarded during 2014-2020

- **Denis Fischbacher-Smith:** Fellow, British Academy of Management (2017 – present); Fellow, Chartered Institute of Ergonomics and Human Factors (2014 – present); Principal Fellow, Higher Education Academy (2014 – present)
- **David Heald:** Fellow, Academy of Social Sciences (2014 – present) and the Royal Society of Edinburgh (2016 – present)
- **Campbell Leith:** Fellow, Royal Society of Edinburgh (2014 – present)
- **Hervé Moulin:** Fellow, British Academy (2018 – present); the Royal Society of Edinburgh (2015 – present); and Member of Academia Europaea (2018 – present)
- **Emmanuel Mourlon-Druol:** Non-Resident Fellow of Bruegel (2015 – present)
- **Ronald MacDonald:** OBE in Queen's 2015 birthday honours for services to economic policy
- **Charles Nolan:** Fellow, Royal Society of Edinburgh (2015 – present); President-Elect (2017 – 2020) and President of the Scottish Economic Society (2020 – present)
- **Sarah Robinson:** Academic Fellow, Chartered Institute of Personnel and Development (2016 – present)
- **Rosalind Searle:** Fellow, Royal Society of Arts (2015 – present); Fellow, British Psychological Society (2018 – present)
- **Sabina Siebert:** Academic Fellow, UK Parliament (2018 – 2019); Academic Fellowship of the Scottish Parliament (2019 – 2020)
- **Melanie Simms:** Academic Fellowship of the Scottish Parliament (2019 - 2021); Fellow, Royal Society of Arts (2016 – present)
- **Fiona Wilson:** Fellow, British Academy of Management (2015 – present); Academic Fellow, Chartered Institute of Personnel and Development (2016 – present).

Awards

Staff members have received many prizes and awards, of which the following are especially noteworthy:

- **Nuran Acur:** EURAM Conference 'Award for Most Inspirational Conference Paper' (2016) and BAM conference Best Development Paper Award (2015) in the Performance Measurement Track
- **Stephanie Anderson, Andrew Cumbers, Robert McMaster and Deirdre Shaw:** Best Community or Public Engagement Initiative Winner, University of Glasgow's Knowledge

Exchange & Public Engagement Awards 2020 for their work with the Baltic Street Adventure Playground

- **Trevor Buck:** Silver Medal for Scholarship from *Journal of International Business Studies*, 2019
- **Andrew Cumbers:** 2015 Gunnar Myrdal prize for Evolutionary Political Economy for his book *Reclaiming Public Ownership – Making Space for Economic Democracy*
- **Pavlos Dimitratos and Rose Narooz:** Best paper in the 'International Business and International Management' track at the 32nd British Academy of Management Conference, 2018
- **Aldo Elizalde:** Sir Alec Cairncross Prize for best paper, 2020 Scottish Economic Society Conference
- **Denis Fischbacher-Smith:** Best Paper Award in the Public Management and Governance Track, British Academy of Management, 2018
- **Takashi Hayashi:** Japanese Economic Association Nakahara Prize, 2019
- **Alena Kostyk:** Most Innovative Research Paper, 14th Global Brand Conference, 2019
- **Theodore Koutmeridis:** 2018 RSE/Henry Duncan Medal, Royal Society of Edinburgh, UK, for his outstanding work in the field of economics
- **Colin Mason:** Winner of the 2015 ESRC Outstanding Impact in Business Award (with Richard Harrison, Edinburgh) for 25 years of research on business angels; and Entrepreneurship Practice Award 2018, Academy of Management Entrepreneurship Division (with Richard Harrison, Edinburgh)
- **Georgios Panos:** Poets&Quants 2020 Best 40 Under 40 Professors
- **Kathleen Riach:** 2020 Imaginative Educator Award from the Scottish Institute for Enterprise.

The School values these individual recognitions as validating colleagues personally. But even more, they are valued for their combined testimony of appreciation of the collegial, collaborative community of engaged research and scholarship that has been and is continuing to be forged by the School. By these means, we contribute to the research base for civic, national and international society.