

Institution: Coventry University
Unit of Assessment: UoA17 Business and Management Studies
1. Unit context and structure, research and impact strategy

1.1 Context and Structure

Research in Business and Management at Coventry University (CU) has undergone a step change since REF2014. The 78 staff included in this submission are more than four times higher than the previous REF. Five times as many outputs were produced (167 to 832), with the proportion of those in the submission published in 3* and 4* ranked journals increasing from 40% to 92%. PhD completions have grown four-fold (22 to 88); while research income has more than doubled (£1.6 to £4.2 million).

This growth was achieved through a carefully specified Research Strategy of **focused excellence, delivered through two innovative and interdisciplinary Research Centres** that solve **real-world** research problems relating to business-societal interactions. In line with CU's Research Strategy (2015-2021), Business and Management research is located in Centres that sit alongside the four discipline-focused, teaching-led Schools in the Faculty of Business and Law. This strategic, targeted approach fosters a concentration of resources and talent in a collegiate, supportive and sustainable research environment. The **two Research Centres** are:

- The **Centre for Business in Society (CBiS)** seeks to understand the societal impact of organisations' activities, behaviours and policies, and to promote responsibility to achieve better outcomes for economies, societies and the individual. Research foci include privacy and security of data; sustainability and the circular economy; policies and practices for inclusive economic development; and responsible personal finance and sector studies.
- The **Centre for Financial and Corporate Integrity (CFCI)** integrates insights from economics, finance, accounting and law to better understand transformative events facing global corporations, including corporate responsibility and accountability; corporate fraud; and financial crime.

Research Centres are managed by Executive Directors who report monthly to the Faculty Research Leadership Team, quarterly to the Faculty Research Committee and annually on their performance against business plans, to the University Leadership Team, chaired by the Vice-Chancellor. On a day-to-day basis, Executive Directors are managed by the Associate Dean for Research, who focuses on delivering the Faculty's Research Strategy and achieving KPIs within the University's corporate plan. The bridge between the Research Centres and the Schools, supporting aspiring staff with their journey towards joining a Research Centre is provided by Associate Heads of School for Research who themselves are members of either CBiS or CFCI (Section 2).

1.2 Research and Impact: Vision, Strategy and Achievements

1.2.1 Research Vision

We aspire to be world-leading, delivering excellent quality research that impacts on the economy, business and society, creating better futures for all. Investment is focused on our Research Centres, through which we aim to attract, develop and retain the best talent, secure funding from prestigious funders, provide a stimulating and supportive research environment, and deliver a comprehensive programme of training and development for all our researchers, from PGR to professor.

1.2.2 Research Strategy 2014-2020

Prior to 2014, CU focussed on applied research at a modest level. A new Research Strategy launched in 2014, backed by significant investment, shifted the focus to one of '**Research Excellence with Impact**', recognising the need to improve research quality while maintaining real-world relevance and application (REF5a).

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At that time, Business and Management at CU was a small unit focused principally on applied research in two clusters: ‘trust and wellbeing’ and ‘sustainable business and communities’. These provided the foundations for ambitious plans in our REF2014 submission, supported by the new Research Strategy, to double the research staff and PGR headcount by 2021. Recognising both the base from which the strategy would build and the teaching-focused nature of the institution at that time, excellence would be achieved through focusing resources into a limited number of Research Centres, delivering high-quality original research focusing **on real-world problems linked to global challenges**. In Business and Management, CBiS was launched in 2015 to build upon the ‘sustainable business and communities’ cluster from REF2014. Subsequent investment has built critical mass in related areas of **focused excellence**. In 2017, CFCI was launched to provide a focus for emerging research in corporate governance, fraud and financial crime.

Since REF2014, investment of around £20m in Business and Management research has developed a vibrant and sustainable research environment (Section 3), through the following approaches:

- Adopt a team-focused approach and build a critical mass of researchers at all career stages within the areas of focused excellence.
- Recruit experienced research leaders and staff, carefully aligned with our core research themes, to develop existing staff and to help enrich the research environment.
- Support a sustainable research environment by establishing an Associate Membership scheme for research-active academic staff, which ringfences time for research; alongside an Academic Staff Development Programme in Research Excellence (ASPiRE), which develops early career staff to research independence (Section 2).
- Develop bespoke physical and technical infrastructure, supported by specialist professional services support within the Research Centres.
- Establish research drivers and a research DNA fundamental to all our activities and that characterises the type of research we undertake, the way that we operate and our research environment aspirations (Table 1).

Table 1: Our Research Drivers and Research DNA

1	Achieve a globally recognised reputation for real-world research excellence with impact that is theoretically grounded, relevant and ethically robust.
2	Sustain the intrinsically interdisciplinary and multidisciplinary approach that supports innovation, agility and adaptability in methods and engagement .
3	Pursue focused excellence , establishing critical research mass in a small number of thematic areas.
4	Support staff through an expert-led, developmental environment , building a balanced research portfolio of publications, doctoral completions, grant income and impact activity.
5	Create a vibrant, diverse and inclusive research environment .
6	Collaborative to co-produce research and impact with partners locally, nationally and internationally to increase research significance and reach.

1.2.3 Impact Strategy

Emphasis on real-world research excellence has been supported with an impact strategy focusing on collaboration and co-production, leveraging extensive public and private sector networks, using diverse platforms to generate wider and deeper impacts (Section 4). This is demonstrated by the international breadth of the Impact Case Studies, with their cross-cutting nature in the public and private sector. Because our research addresses real-world problems and is policy-focused, impact is fundamental to all that we do. Our impact strategy is implemented as follows:

- Staff are mentored and trained to build pathways to impact in their research design, supported by professional expertise.
- Our bidding quality assurance (QA) process includes assessing ways to leverage research impact.

Unit-level environment template (REF5b)

- Impact Leads within the Centres promote impact and share best practice informally when bidding and through staff training.
- An Accelerator Fund provides researchers with resources to support their impact generating activities.
- Staff have time allocated and are supported to facilitate the networks they need relating to impact.

Reflecting the different development stages of our two Centres, the Impact Case Studies in this submission relate to CBiS research activity. However, impact activities extend across all our projects, with future cases envisaged for both Centres (Section 1.4).

1.2.4 Ethics and Integrity

Our commitment to principles of **research ethics and integrity** shows excellence. These principles including: culture, honesty, rigour, integrity, co-operation, accountability, transparency, training and development and respect, underpin how our projects are designed, quality assured, managed and delivered. Each Centre has an Ethics Lead, ensuring that researchers are trained in ethics and integrity, and that projects are compliant with the highest standards of practice and behaviour through our online approval system. This rigour is essential given the focus, especially in CBiS, on qualitative research, paying particular attention to how we work with individuals, businesses and communities; and was evident in how we adapted practices and behaviours in response to COVID-19. Ethics Leads represent their Centres at the University Group Ethics Committee. Testament to our rigorous approach to ethics and integrity, this Committee has been Chaired by the Faculty's Associate Dean for Research (Berkeley) since 2019.

1.2.5 Key Achievements

This focused excellence strategy has delivered **notable achievements, significantly exceeding the targets in REF2014: a four-fold increase** in the number of staff submitted, delivering much stronger outputs, the size of the PGR population, and in the number of PhDs awarded. Outputs are high-quality, with just under 40% being published in the top 10% of journals (Source Normalised Impact per Paper) and a field-weighted citation index of 1.55 (Table 2).

Table 2: Key Performance Indicators

	RAE2008	REF2014	REF2021
FTE returned	7.2	16.6	77
PGRs enrolled	22	43	180
PhDs awarded	6	22	88
Research income	£0.03m	£1.6m	£4.2m
Total research outputs published	-	167	832 ¹
Total citations	-	-	7,522 ¹
Citations per FTE	-	-	96.4 ¹
Field-weighted citation index	-	-	1.55 ¹
Publications in top 10% journals (SNIP)	-	-	38.1% ¹
Publications co-authored internationally	-	-	54.6% ¹

¹Source: SciVal, Elsevier, accessed 08.01.21

1.3 Research Clusters and Drivers

In this vibrant and collegiate environment, seven **challenge-led** thematically focused research clusters have evolved (Table 3).

Table 3: Challenge-Led Research Clusters and Themes

Centre for Business in Society (CBiS)	
Cluster	Key Themes
Data, Organisations and Society	Maximising the benefits of big data and the digital economy, with appropriate ethical, privacy and data safeguards
Economic Development and Inclusive Economics	Generating economic growth during global economic uncertainty, working towards more socially inclusive workplaces and society
Sustainable Production and Consumption	Addressing challenges in creating a more sustainable future
Sector Studies	Addressing financial debt and assisting people to responsible management of personal finances
Centre for Financial and Corporate Integrity (CFCI)	
Cluster	Key Themes
Law, Risk and Compliance	Exploring the socio-political and socio-legal dynamics of financial crime for both private and public institutions/governments
Finance and Governance	Exploring links between good corporate governance mechanisms and the promotion of integrity in modern businesses
Applied Economics Analysis and Policy	Investigating key public policy issues in terms of economic sustainability

While each has its own unique research focus, clusters are linked through our common approach to research excellence. Our **research 'DNA'** drives everything that our clusters do (Table 1).

Research professors and readers in both Centres manage the strategic development of the clusters, focusing on the mentoring and career development of early and mid-career researchers (Section 2). Our approach to delivering research excellence, reflected in our DNA, is evidenced in the **research contribution and achievement** of the seven clusters:

1.3.1 Data, Organisations and Society

This cluster's intrinsically interdisciplinary research focusses on three problem-based themes that address the complex connections between 'big data' and organisational or societal actors. Nine FT research staff, six Associates and a cohort of PGRs create capacity and foster a vibrant environment for exploring these themes.

A key focus is on the use of personal **data in the digital economy** and its implications for organisations. Big data in fields like marketing, sustainability and strategy are key topics. Recently completed work includes *Innovate UK* (Dibb, Roby) and *EU KIC* projects on community energy and remanufacturing (Dibb, Roby, Ferreira J), involving many stakeholder partnerships; e.g. Tech Mahindra, Satellite Applications Catapult, local councils. Several projects highlight the importance of managerial and societal impacts on cybersecurity management for organisations, individuals and society (e.g. Garcia-Perez, Chinnaswamy, Iskoujina, Gharib). New insights have emerged into privacy issues around routine collection and storage of personal data by businesses in the transport sector (Garcia-Perez); in energy, low carbon and smart networks, future energy demand scenarios (Roby) and automotive manufacturing, Industry 4.0 and new business models (Meadows, Garcia-Perez). Our research has supported the European metals industries to securely adopt new information operational technologies in the implementation of Industry 4.0 principles. Through collaborations since 2014 with the Railway Safety and Standards Board and the UK railway industry, our research has informed the digital transformation strategies of the sector and supported the use of infrastructure data for improved safety and efficiency (Impact Case Study "*Using new data models*

Unit-level environment template (REF5b)

to deliver safer and more effective rail services”). The *H2020 New Business Models for Intelligent Transport Systems* project (Garcia-Perez, Chinnaswamy) built on these lessons, leading to policy recommendations on the development of Intelligent Transport Systems for the European Council.

Data and strategy concerns the use of big data and analytics as drivers of innovation, business strategy development and new business models. This builds on influential research on data-driven strategic decision-making and market segmentation (Dibb, Simkin, Quinn), customer relationship management (Meadows, Dibb, Simkin), and knowledge management (Garcia-Perez, visiting prof. Bedford). The cluster emphasises economically impactful real-world research with excellence, focussing recently on tensions in the data environment. Projects reveal the impact of digitalisation on governance and boardroom decision-making (Meadows, Dibb, Merendino, Quinn), and the role and status of marketing within organisations (Dibb, Simkin, visiting prof. Maklan). Outcomes place the cluster’s researchers at the centre of academic discourse and networks, including hosting cross-disciplinary conferences attracting international audiences, like *ECKM 2020* and the *2019 Data Tensions Conference*, linked to a special issue of *Technological Forecasting and Social Change*. Innovative working practices include co-creation with private sector firms, like Fujitsu, Horiba Mira and Echo Research, and business-focused symposia, involving business networks, policy organisations and SMEs.

Data and society addresses challenges around data, including privacy and trust. Projects have extended understanding of the perspective of the individual: life-logging and self-quantifying (Meadows); generating new theoretical insights into the public acceptability of surveillance technologies (Dibb, with visiting prof. Ball and visiting fellow Degli-Esposti); and digital and work-life balance (Roby); with the findings published in highly-rated journals such as the *British Journal of Management*, *Work Employment and Society*, and *Tourism Management*. Reflecting the inclusive, expert-led environment, a newer stream of projects involving ECRs, supported by experienced researchers, focuses at the community level: including on social media use in collective action (Azer); online communities, knowledge sharing and trust (Cao, Gharib, Babu, Iskoujina); technology adoption in developing countries (Babu); or at the societal level: data sharing between private firms and Government (visiting professor Ball, Dibb, Meadows); air pollution and health (Chinnaswamy). Demonstrating our commitment to developing innovative research methods among PGRs and ECRs, the cluster is co-organising three Workshops on Data Science and Analytics, funded by the *Society for the Advancement of Management Studies* (Meadows).

1.3.2 Economic Development and Inclusive Economies

This cluster brings interdisciplinary insights to four themes with important implications for real-world research problems. Comprising seven research staff and six Associates, including a number of ECRs, plus a cohort of PGRs, activities are characterised by close project team-working, mentoring and researcher development.

Inclusive economies brings together researchers at different career stages studying employment change, and new models and approaches to regional development. ESRC funded research on *Harnessing Growth Sectors for Poverty Reduction* (Sissons) generated important new insights into low-paid employment. With the results published in *Human Resource Management Journal* and *Work, Employment and Society*, the findings informed the design of a new *Health and Care Sector Work Academy* (Impact Case Study “*Improving employment and skills policies to support sustainable employment and in-work progression*”). The focus on job quality extends to research on temporary staffing (Ferreira J) and approaches to workplace health (Sawang, Ferreira J, Sissons). Research has also critically assessed new approaches to regional development (Ferreria C, visiting prof MacNeil, Ferreria J, Berkeley, Sissons, Broughton, Xia); including an international collaboration of academics and policymakers, providing new solutions through the Regional Strategies for Sustainable and Inclusive Territorial Development project (ESPON). The ESRC, the European Union, Joseph Rowntree Foundation, and the Midlands Engine have contributed funding.

Low carbon mobility analyses the consumer-producer policy drivers of change in transport, the transition to low carbon personal mobility and the impacts of future sustainable mobility practices.

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Research was supported by innovative funding, partnerships and co-production of research and impact; including collaborations with The Low Carbon Vehicles Partnership, the AA, HoribaMira, Advanced Propulsion Centre, Motorsport Industry Association, Siemens, Silverstone Technology Cluster and UKTI (Impact Case Study: “*Transitions in the automotive sector: challenges in delivering a low emission strategy*”). Projects have identified new accessibility and mobility solutions for peripheral areas in Europe (Begley, Berkeley, Jarvis, Jones); tested solutions for upgrading regional technology and transport infrastructure to support low carbon and smart cities developments (Jarvis, Henry, Jones), including interdisciplinary work with engineers in the Institute for Future Transport and Cities; and worked to co-produce post-COVID transport planning scenarios (Jarvis, Jones). Funders include the EU (ESPON) and National Government (BIS, Defra), Local Enterprise Partnerships and Local Government. Research was published in journals including *Transportation Research Part A*, and *Transportation Research Part D*.

A newer focus is on the role of the **creative and cultural industries** in economic development. Arts Council England (ACE) funded research established evidence to support the recognition of rural touring arts within the new 10-year ACE strategy (Henry, Broughton). Work on leadership in the cultural sector (Henry, Broughton, Barker) is embedded within the delivery and legacy development activities for Coventry’s 2021 City of Culture. New understandings of creative freelancer business models are being developed through research funded by AHRC/NESTA. Co-production of research was undertaken in partnership with policy and practice organisations.

Research on **community finance** generated important insights into relationships between finance, data and community development. This includes research on understanding the social investment market (Henry, Jarvis, Ferreira J) and assessing the Government’s voluntary framework for bank lending data disclosure (Henry, Sissons, Ferreria J), funded by Big Society Capital, Citi Bank, UnityTrust. Significant stakeholder interest included research recommendations being adopted by the trade and industry body, UK Finance, and presentations made in HM Treasury and the Houses of Parliament.

1.3.3 Sustainable Production and Consumption

Research is aligned to UN Sustainable Development Goal 12: ‘*Ensure sustainable consumption and production patterns*’. Tackling sustainability challenges requires an inherently interdisciplinary and holistic approach. The cluster brings together expertise from engineering, economic geography, sociology, marketing, law, agricultural economics, strategy and management. Four FT research staff, five Associates and a cohort of PGRs generate a dynamic environment for cutting-edge research. The strong publication record includes many highly cited articles in journals like: the *International Journal of Operations and Production Management*, *Production Planning and Control*, *International Journal of Production Economics*, the *International Journal of Production Research*, *Journal of Cleaner Production* and *Environment and Planning A*. The cluster has global reach with partners in Indonesia, South Africa, Kenya, Canada, China and Holland.

The **Circular Economy** (CE) emphasises efficiency in the utilisation of finite resources in the manufacture of products. The development of a *circular*, service-oriented business model (Tjahjono, Lim) is a significant outcome, catalysing changes in the role of supply chain players, especially in the areas of services, reverse logistics and remanufacturing, and recovery strategy management. Shared expertise in this field enabled the creation of a joint research institute with China’s Chongqing University (Lim), supporting early career researchers in international publications, guest editing special issues (Cao, Hu). The FaçadeRelog project funded by EIT RawMaterials (European Institute of Innovation and Technology) integrates reverse logistics into the development of circular business models in the façade industry, supporting strategies for reusing materials and increasing their recovery rate in the EU (Tjahjono, Bashiri). Through GCRF Academy of Medical Sciences funding, a collaborative network with partners in South East Asia explored how to maximise agri-food circulation from production to consumption using CE principles (Tjahjono, Bek, Lazell), resulting in the integration of circularity indicators into future regulations and policies by Government agencies in partner countries. Our team is applying a social innovation approach in an ESRC funded project

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(ES/T015195/1) to demonstrate how bio-based packaging innovations can be brought to market (Tjahjono, Bek, Lazell).

Research in **evaluating sustainability practices within horticultural supply chains** takes a whole supply chain approach, focusing upon commodities and sectors, including cut-flowers, fruit, wine and coffee. Exposure to sustainability risks is a major topic, covering water footprints, carbon footprints, climate change, waste management and the role of certification systems (Bek, Timms, Ferreira J). Research on sustainable cut-flowers (Bek, Timms) has achieved high levels of global engagement and impact, leading to increased market access for Kenyan Fairtrade flowers within UK retailers, and the promotion of locally produced flowers with low carbon footprints (Impact Case Study "*Promoting sustainability within horticultural supply chains*"). The research resulted in a step-change in approaches to sustainability in the global wildflower harvesting industry, through engagement with world leading cut-flower trading companies, including the Dutch Flower Group. This included the development of an influential online E-learning course, 'Sustainable practices makes sustainable businesses', with partners including Tesco and WWF-SA. Our research promoting sustainability in horticulture won a Commendation at the national Green Gown Awards (2019) as a leading example of Research with Impact. Research has thrived due to its deep multi-stakeholder engagement with a wide range of internationally-based organisations, including MM-UK, Fleurametz, Fairtrade Foundation, Women Working Worldwide, British Floristry Association, Floriculture Sustainability Initiative, Cape Flora South Africa and the Sustainability Initiative South Africa.

1.3.4 Sector Studies

Sector Studies is a transdisciplinary group of five full-time researchers, three Associates and a cohort of PGRs. A balance between staff ensures a sustainable legacy of scholarship. The cluster focuses on macroeconomics and finance; personal and community finance; and the sport, tourism and hospitality sectors.

Macroeconomics and international finance has produced influential contributions in high-quality journals on theoretically-charged and policy-relevant debates, like the public debt-economic growth nexus (De Vita) and the role of exchange rates on economic variables ranging from growth and oil price to tourism and FDI flows (De Vita). Trends in inward/outward FDI in/by developing economies and their link to institutional differences and intellectual property rights were investigated (Appleyard, De Vita), alongside aspects of the impacts of financial liberalisation/openness, financial crises and the association of these macro phenomena to sectoral issues like bank productivity and efficiency (De Vita).

Personal and community finance focuses on responsible lending and borrowing, subprime credit markets and payday loans, financial capability, long-term financial planning, consumer engagement, trust in financial services, and financial inclusion. With funding from AHRC, Barrow Cadbury and Carnegie UK this research has provided novel insights into the lived experiences of individuals' finances and helped clarify causes of financial vulnerability, and the role of responsible lending in increasing financial resilience (Appleyard). Research led to a joint project with The Open University, funded by the Money Advice Service (2017-2018) providing budgeting and savings tools supporting the financial wellbeing of individuals in households 'just about managing' (Dibb, Appleyard). A key spin-off from this research was development of the *MoneySkills* app (Section 4 and Impact Case Study "*Reducing the public's financial vulnerability*"). Financial services in retail banking are also explored from a service marketing perspective, with a critical emphasis on the concepts of fairness, trustworthiness and trust (Kharouf, Sekhon). Aided by a HEIF award, commercialisation is embodied in an innovative spin-off platform (www.CreditU.co.uk) aimed at improving financial resilience, introducing people to affordable loans and savings from their local Credit Union (Sekhon, Appleyard).

A third theme interrogates the **economic and social impacts relating to the sport, tourism and hospitality sectors**. Disability sport is examined with a particular focus on the legacy of the Paralympic Games (Britain) and the role of sport in the lives of disabled people (Impact Case Study "*Paralympic history and development and its impact on the lives of disabled people in the wider*

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society”). Research projects have multi-partner international consortia in Brazil, Canada, Germany, Japan, South Africa, Sweden and the USA, supporting staff exchanges, research fellowships and PGR summer schools (Brittain, Biscaia). Projects have drawn on funding from the EU (FP7 Marie Curie International Incoming Fellowship; H2020 Marie Curie IRSES, RISE) and UKRI (ESRC-AHRC UK-Japan SSH Connections Grant). Research has involved co-creation with world-leading organisations (e.g. the Invictus Games Foundation) and hosting international conferences (22nd European Association for Sport Management Conference). The tourism and hospitality industry is an important context in which to explore a variety of economic and social variables, relationships and theoretical constructs, including exchange rates and the link between tourism specialisation, absorptive capacity and growth (De Vita), and the nature of liminality as a conceptual tool to better understand tourist experiences (Senaux). Outputs are published in top-rated journals in the field (*Annals of Tourism Research*, *Journal of Travel Research*, *Tourism Management*).

1.3.5 Law, Risk and Compliance (LRC)

Researchers engage with, and produce multidisciplinary research for, a range of end-users, including international organisations, like the EU, NATO and Council of Europe, and Law Enforcement Agencies (LEAs), banks, Government agencies, the judiciary and legal practitioners. The research agenda is inherently designed for societal impact, including:

- (i) theoretical work on the causes **of corporate and governmental corruption** and its impact on societal welfare.
- (ii) applied research, developing and proposing new methods for countering such behaviour at the organisational and governmental level.

Presently, it is the only academic unit in the world researching and co-creating (collaboratively with its end-user stakeholders) practical solutions to counter **tax crimes** effectively. The EU H2020 project “PROTAX” focuses on designing collaboratively with several LEAs, ministries and other end-user stakeholders, new policy guidelines and practical toolkits for the harmonisation of the prosecution of tax crimes in the EU. This includes the development of new information-sharing channels across European jurisdictions (Turksen, Grasso, with research assistants Abukari, Vossa). Research also informs public policy via:

- (i) the EU-funded project, VIRTEU, “*VAT fraud: Interdisciplinary Research on Tax crimes in the European Union*” (Grasso, Pasculli, Turksen).
- (ii) a series of research dissemination events for businesses on bribery, financial corruption and anti-corruption law-making under the ESRC/UKRI’s Festival of Social Sciences scheme (Pasculli).

Research on assessing the Government’s response to additional fraud risks arising during the COVID-19 crisis was accepted as written evidence by the UK’s House of Commons’ Treasury Committee (Pasculli).

LRC comprises four core researchers (including two ECRs), four Associates, three visiting professors and PGRs collaborating on research in: corporate crime (Tilahun, Pasculli, visiting prof. Ryder); financial regulation and insider trading (Lin, visiting prof. Adams); the role of Government in tackling financial crime (Turksen, Grasso); the use of tax heavens in harbouring proceeds from financial crime (MacLennan, visiting prof. Unger); the role of whistleblowers in countering financial crime and the need for their protection (Grasso, Pasculli), and the use of artificial intelligence for countering fraud (Turksen, Grasso, Pasculli). Since 2014, LRC members have published articles in prestigious law journals like the *Journal of Business Law* (Lin, Grasso); *British Tax Review* (McLennan); *European Law Review* (McLennan); *International Energy Law Review* (Turksen); *Journal of Financial Crime* (Pasculli), *Erasmus Law Review* (Tilahun) and a series of monographs with established publishing houses (Springer, Lexington Books US, Routledge). ECRs and PGRs actively engage in research within the cluster involving the production and dissemination of research outputs, joint research bidding activities and the organisation of international conferences and workshops. Members of the cluster are also invited to deliver keynote speeches in prestigious research institutions, like the Finnish Institute of International Affairs (Turksen).

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1.3.6 Finance and Governance (FG)

This cluster delivers interdisciplinary research on the link between good corporate governance mechanisms and financial integrity in corporations and governmental institutions. It comprises two interrelated streams, Corporate Finance and Governance (CFG) and Financial Markets, Intermediation and Ethical Finance (FMIEF). The cluster enjoys a vibrant research environment consisting of six core members, ten Associates and a cohort of PGRs. 30% of its research output is published in the top 10% of journals in the field, with 55.7% co-authored with international collaborators (source: Scival-Scopus).

CFG researchers carry out theoretical and empirical research with a strong interdisciplinary focus on corporate governance. Research addresses issues like identifying and tackling manipulation of corporate earnings (Owusu, Wang), developing alternative corporate ownership structures to enhance organisational governance (Alhababsah, Da Teng, Wang) and/or using financial derivatives as an indirect form of a corporate monitoring mechanism (Joseph). Research makes an important contribution in terms of governance in the energy sector, and the detrimental impact of its activities for local communities (Ambituuni, Owusu). This research has received international media exposure (*BBC World News: Africa Eye*). Research in the emerging area of crowdfunding (Nguyen, ECR) is gaining a fast-growing reputation with outputs published in the *Journal of Corporate Finance*, *British Journal of Management* and *European Journal of Operations Research*.

Financial Markets, Intermediation and Ethical Finance (FMIEF) investigates the efficiency of the financial intermediation process and how this affects economic and financial sustainability. This includes research on new approaches for assessing bankruptcy risk for SMEs (Andrikopoulos). Research on improving internal financing mechanisms for sustainable credit lines (liquidity management), easing the need for conventional bank lending (Guney) was published in the *Journal of Corporate Finance*. FMIEF also delivers theoretical and empirical research on the impact of psychology and cognitive biases in financial decision-making (Andrikopoulos, Santamaria), the role of environmental conditions on the performance of mutual funds (El-Masry), financial contagion and volatility spillovers (Joseph, Park, Santamaria, Tanna), and new pricing models for Islamic financial assets (Kabir). An emerging, highly innovative research area is pricing of catastrophe risk fixed-income securities (Shao), with findings published in prestigious mathematical journals (e.g. *Applied Mathematics and Computation*).

The cluster has hosted cross-disciplinary conferences, attracting international audiences from academic and professional backgrounds (Section 4).

1.3.7 Applied Economic Analysis and Policy (AEAP)

AEAP is a new cluster, incubating research on economic public policy. Staff collaborate with (and some are returned under) different UoAs (Murshed, Lis, UoA19). The most promising research investigates the link between human behaviour and cybersecurity (Cartwright), focusing on improving cybersecurity for SMEs and Charities via the introduction of change behaviour mechanisms (Cartwright, Andrikopoulos). Important insights were generated through two funded projects:

- (i) *Connecting Delayed Pre-Commitment with Cyber Awareness to Address the Perception Gap and Present Bias* funded by the UK Home Office (Cartwright, Andrikopoulos).
- (ii) the EPSRC funded project, *EconoMical, PsychologicAI and Societal ImpactS of Ransomware – EMPHASIS* (Cartwright).

Both projects explored the economic implications of ransomware for individuals and organisations, receiving significant interest from UK Government departments and LEAs (UK Home Office, Kent Police and the National Cyber Security Centre). Findings were published in reputable journals (e.g. *Journal of Cybersecurity*).

1.4 Research and Impact Strategy for the Next Five Years

Our vision to be **world-leading, delivering high-quality research that impacts on the economy, business and society, creating better futures for all** continues to guide our strategy. The step-change since 2014 has firmly established the infrastructure and behaviours needed to sustain high-quality research. The Centres are an attractive proposition for recruiting excellent researchers and PGRs, as well as project collaborators. The COVID-19 pandemic brought into sharp focus the relevance of our research and is yielding new opportunities in the research we undertake, in the methods we use and in how we inform policy and practice. To deliver this exciting future requires continued strategic focus, supporting our clusters in executing their plans, recognising the following strategic priorities:

- **Increasing focus on high-quality outputs.** Building on the transformational shift in the proportion of outputs in 3* and 4* ranked journals, further incentivise and support staff in publishing a higher proportion of outputs in 4* publications.
- **Scaling-up multidisciplinary and interdisciplinary working.** Addressing the greater complexity of real-world problems requires novel insights and innovative approaches to combine different disciplinary perspectives. We will build on existing strengths by increasing opportunities for multidisciplinary and interdisciplinary working, leading to more collaborative bids and better networks with other institutions. From 2021 Research Centres will sit under a new umbrella, *Research Coventry* (REF5a), designed to foster collaborations across disciplines.
- **Strengthen further our emphasis on staff development, retention and enhancement.** Ensuring sustainability, we continue to support staff professional development, finding new ways to empower them to undertake societally valuable research and become research leaders. The innovative *Research Futures* programme is designed to equip our researchers to undertake effective research during and beyond the pandemic. We will provide more opportunities for staff to join our Centres. Through our pioneering pre-Centre probationary programme (Section 2), we are committed to ensuring a pipeline of new talent, trained, developed and able to grow our Research Centres.
- **Enabling and supporting impact through all areas of our research.** We prioritise research with impact and support staff in their impact activities (Section 2). Researchers have established themselves in impressive national and international networks (Section 4). By leveraging these networks and building on established practice in CBiS, we will extend our policy and practice impact reach through projects in **both** Centres; e.g. through the PROTAX and TRACE projects on financial fraud in CFCI.
- **Building on the success of our PGR programme.** We will sustain our performance, recruiting new candidates as others graduate, and build on the initial success of our DBA (Section 2). An early initiative is to directly co-locate PGRs with Research Centres (Section 3). We aspire for Doctoral Training Centre status, building on our successful engagement in the Doctoral Training Alliance run by the University Alliance.

2. People

2.1 Introduction

Essential in the step change in Business and Management research at CU was a team-focused approach to investment in people, aimed at promoting the vitality and sustainability of clusters, developing and recruiting talent across multiple career stages.

A total of 25 academic staff in the submission were externally recruited into the Centres as core researchers since 2014: 11 professors, one associate professor, five assistant professors, five research fellows and three research assistants. Alongside core researchers retained from 2014 and 45 staff seconded as Associate Members (2.2), gives a total of 84; 78 of which are eligible to be returned to REF2021 (Table 4).

Table 4: Research Population by Career Stage

Grade	No	% Total	% of REF Submission
Research assistants	6	7	-
Research fellows	9	11	12
Assistant professors	30	36	38
Associate professors	20	24	26
Professors	19	23	24

Professional services support infrastructure is essential for a quality research environment. CU has invested in a Research Services team that provides our Centres with bespoke support, with a combined resource of 14FTE posts, covering operations management; business development; commercial partnerships; administration; legal services; pre- and post-award project costing and delivery; research impact; and marketing and communications.

The significant growth in staffing, particularly in senior researcher and support staff, enabled sustainable growth in the PGR programme, while maintaining quality (2.3).

Key features that holistically create the space for research to thrive are:

- Discipline-targeted, expert-led strategy to recruit and retain full-time 'core' research staff, alongside Associate Members seconded on a fractional basis.
- Vibrant research culture that is inclusive and diverse.
- Targeting resources in specialist Research Centres, enabling researchers to maximise potential.
- Investing in and developing leadership.
- Innovative and embedded support for postgraduate and early career researchers.

2.2 Staffing Strategy and Staff Development

The staff development strategy is driven by the Research Centres' business plans, providing clear objectives to **create vibrant, interdisciplinary, inclusive and supportive research environments**. Staff are supported to establish critical mass targeted on core themes, delivering leading edge, robust and impactful research, underpinned by innovative methodological approaches, rooted in user engagement and co-creation. Our objectives are achieved in a number of ways:

A discipline-targeted, expert-led strategy to recruit and retain a team of full-time 'core' research staff, alongside Associates seconded on a fractional basis.

The development of this 'core' team underpins the success of the strategy. Typically, their time allocation is research 80%; teaching and citizenship, 20%. Recruitment supports our focused excellence strategy, seeking staff whose expertise complements and adds value to research themes.

Unit-level environment template (REF5b)

Staff should be leaders, with evidenced commitment to supporting, mentoring and developing staff and creating a team-based culture embracing diversity and interdisciplinarity.

A key focus was the recruitment of a team of research leaders to support the creation, management and delivery of the strategy. Eleven professors were recruited externally: Simkin (Henley, 2015) De Vita (Oxford Brookes, 2015), Dibb (OU, 2016), Meadows (OU, 2016), Lim (Derby, 2016), Tjahjono (Cranfield), Quinn (Manchester, 2018), Turksen (Kingston), El-Masry (Plymouth, 2019), Guney (Hull, 2020), Joseph (Aston, 2020). These appointments are **diverse and multidisciplinary**: marketing, consumer behaviour, supply chain, strategy, law, CFG; and international in scope, increasing the reach of our research, generating new research collaborations and opportunities; e.g. in China (joint Research Centres in Chongqing, Gaungzhou), Vietnam, Indonesia, Egypt, Spain and Australia (Section 4).

Recruitment of professors was supported by a diverse and international team of well-regarded and engaged visiting professors: Bailey (Birmingham), Ball (St Andrews), Cook (Open), Gordon (Queensland), Jenkins and Maklan (Cranfield), Unger (Utrecht), Adams (Western Sydney), Ryder and Tucker (UWE), Petmezaz (Surrey). The approach was strategic and focused, to support the growth and development of research clusters. Visiting professors have added considerable value; e.g. in co-creating our clusters' strategies; providing external benchmarking in recruitment of senior posts and sense checking business plans; mentoring and supporting staff development; delivering seminars; working collaboratively on projects and providing wider access to networks.

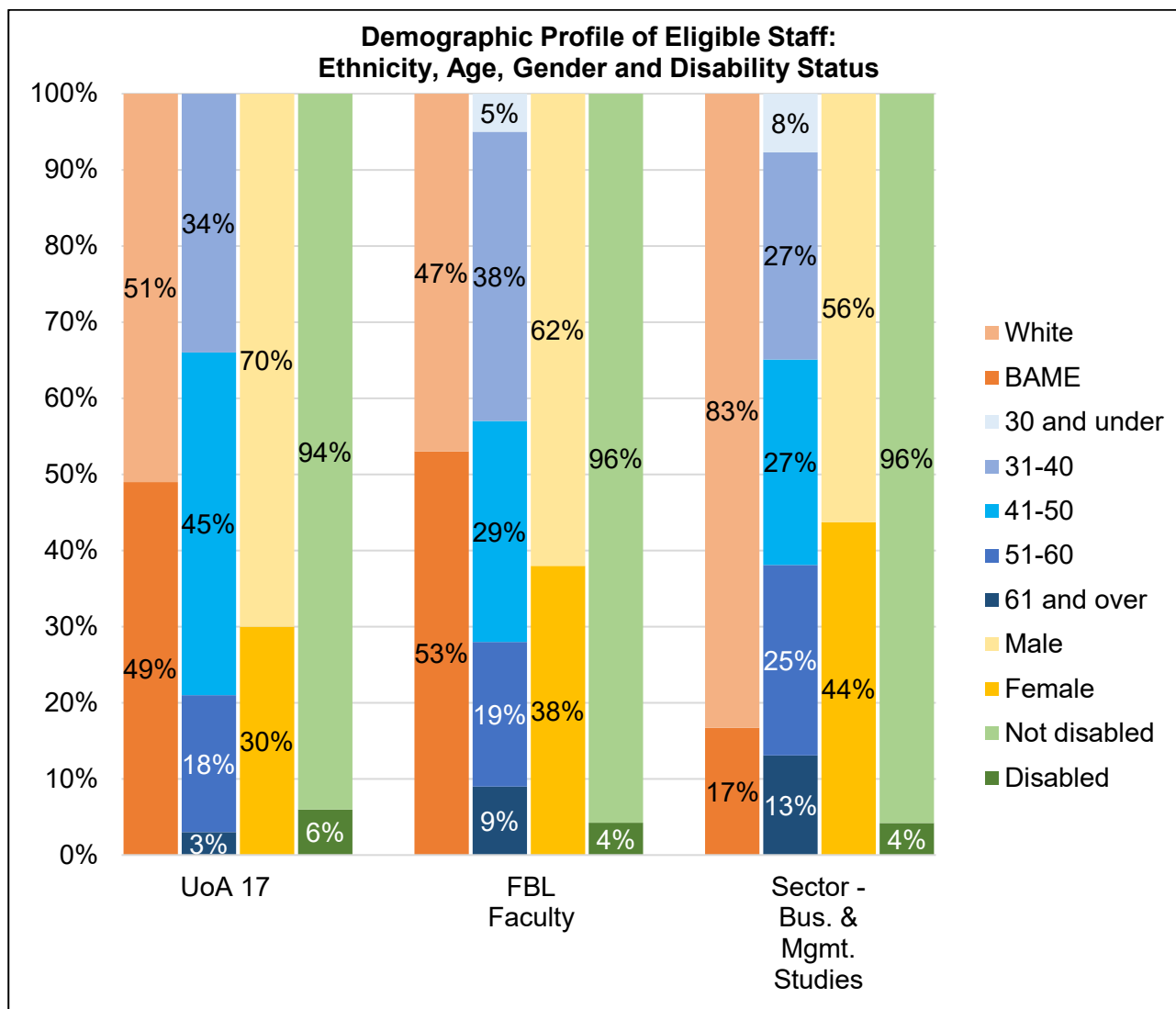
Our approach was replicated in the recruitment of 14 full-time early and middle career core researchers since 2014, and 45 staff have joined our Research Centres as Associate Members on a seconded fractional basis.

The **Associate Membership scheme** provides the opportunity for established researchers, based in Schools on teaching-focused contracts, to be seconded to a Centre part-time through a formalised application process, which confirms that they are independent researchers in their own right. Applications, supported by the applicant's line manager, Associate Head of School for Research and Head of School, are considered formally by the Faculty's Research Leadership team. Unsuccessful applicants have feedback, and the opportunity to re-present their case, and/or are signposted to a more relevant Centre for their research. This inclusive scheme adds to the critical mass of research, as well as providing Associate Members with the time (40% of workload), space, resources and responsibility to focus their research in the vibrant, supportive and diverse environment provided by the Research Centres. The formal contract as Associate Members provide flexibility for staff for a three-year term that is renewable, subject to meeting performance targets.

The recruitment strategy has two notable outcomes:

- (i) The development of critical mass in clusters, with strong leadership, sustainability and succession. Resources are focused on the strongest areas, maximising opportunities for collaboration, research funding, journal publications, impact and PGR recruitment. Capacity and expertise enable every researcher to be allocated a senior researcher as their mentor, supporting individual development requirements facilitated by a comprehensive training, resourcing and support package.
- (ii) The diverse team of researchers becomes self-reinforcing as applicants witness and want to join our inclusive, supportive environment. There is diversity in the make-up of recruitment and selection panels, provision of personal feedback to candidates from the Panel Chair, and for professorial posts, external professor and DVC research validation. As Figure 1 shows the proportion of REF eligible staff from BAME backgrounds, or with a disability, is higher than the sector average.

Figure 1: Diversity and Inclusion, Demographic Profile of Eligible Staff



Source: CU UoA17 data, Coventry University People Team, July 2020; Sector data, Advance HE, 2017/18

Recruitment across multiple career stages gives diversity to staff by age, giving a younger age profile to underpin our research sustainability.

Our researchers benefit from an innovative **professional development strategy** to nurture, grow and advance their careers:

- Creating a vibrant inclusive research culture** enables the collegiate expert-led developmental environment for staff to thrive. A vibrant, unique and bespoke programme of development activities for the Centres’ researchers (Table 5) is available to all Centres’ researchers, core and Associate Members, and across all career stages. It draws upon the expertise of the senior researchers, provides career guidance and develops capabilities, facilitates the creation of projects or bids for research funding, enhances researchers’ ability to produce high-quality outputs, understands impact, and facilitates effective dissemination. An example is the **Review, Revise and Resubmit Clinic**, which began in 2017, following best practice support for writing with tailored development activities to improve the quality of outputs, and supporting the development of our researchers, particularly in responding to critical feedback in a positive way. The focus is on papers in near final draft state, helping polish papers to make them submission ready before they enter the journal review process. This rigorous approach to outputs is mirrored

in the multi-stage **QA** process developed to take bids from an initial concept to a highly polished proposal.

Table 5: Programme of Development Activities

<p>Applying for Research Funding</p> <ul style="list-style-type: none"> • Bid development processes • Bid writing workshops and training • Provision of external peer bid reviewing • Rigorous multi-stage QA bid review process • Post-award project management 	<p>Dissemination, Profile and Marketing</p> <ul style="list-style-type: none"> • Dissemination training and support • Impact training, mapping and support • Marketing and communications for profile building and dissemination • Networking • Social media training
<p>Output Writing Support</p> <ul style="list-style-type: none"> • Paper writing workshops and training • Access to databases and software • Review, Revise and Resubmit Clinic • Writing buddying • Writing retreats 	<p>Networking and Information Sharing</p> <ul style="list-style-type: none"> • Reading groups • Seminar programme • Milestone events and conferences hosted by the Faculty’s Centres • International mobilities and exchanges
<p>Career Planning and Mentoring</p> <ul style="list-style-type: none"> • Bespoke, supported career development plans for every researcher • Leadership and mentoring training for research leaders • ECR, MCR training • PhD supervision training and ongoing mentoring • Internal teaming and sharing of best practices 	

- The focused excellence Research Strategy ensures staff have **access to an extensive package of targeted resources**, supporting their research. This represents investment of over £20m, providing staff with the resources to deliver high-quality outputs, research bids and doctoral level supervision (Section 3). **Financial resources** include support for conference attendance; database subscriptions; competitive access to pump-priming funds, impact accelerator funds and equipment grants; and access to PhD studentships. **Human resources** include exclusive access to the professional Research Services team (2.1). Researchers benefit from supportive line managers and cluster leaders willing to share their advice and experience. Supportive HR and IT policies encourage flexible and remote working, including access to secure hardware and infrastructure. On campus, staff have access to shared, dedicated and flexible working spaces. **Time resources** are also critical. In addition to investment in full-time core research posts, our 45 Associate Members are the equivalent of a further 18 full-time posts; overall a substantial time investment of 50 FTE posts.
- **Investing in leadership** opportunities was a strategic priority to support promotion and retention, and time developing team capacity. The majority of full-time research staff in assistant/associate professor roles have taken on leadership roles, including PGR counselling, ECR support, ethics, representation on appropriate internal Committees, seminar programme management, editing of newsletters and web site content, and managing PGR reading groups. Staff have also stepped up to lead the PGR programme, research clusters or staff development framework. The success of this approach shows in the number of internal promotions among core staff, to professor (2), associate professor (4), assistant professor (1). Annual promotion opportunities are available to staff who meet the progression criteria of the University’s Academic Progression Framework (research, plus a combination of leadership, teaching and enterprise). To ensure fairness, transparency and inclusivity, recommendations on cases are reviewed and moderated at Centre, Faculty and University levels. Cases for promotion to professor are considered annually by the University’s Professorial Conferment Committee, subject to review and conferment by four external reviewers. The approach to investment in staff contributes to a stable research

Unit-level environment template (REF5b)

environment, with a high staff retention rate. Just six core researchers have left since 2014 (Carrigan, Berlan, Moraes, Perchard, Wong, Yekini). Many former staff maintain an ongoing relationship, working on joint research outputs, projects and supervising research students.

- **Specialist support for developing the next generation of independent researchers.** In addition to the holistic support package for full-time and Associate researchers, the **Academic Support Programme in Research Excellence (ASPiRE)** invests in the research potential of early career academics, predominantly teaching focused and based in our Schools. **This unique and highly innovative probationary programme** is designed for staff who do not yet have research independence, can demonstrate significant promise and are undertaking research aligned with a Research Centre. After development in CBiS, it was adopted across the University. ASPiRE ensures the continued vitality and sustainability of research, providing Centres with a pipeline of home-grown talent. The cohort-based programme, provides ASPiRE fellows with a structured research development pathway towards achieving research independence, meeting the criteria for Associate Membership of a Research Centre upon completion (normally within two years):
 - (i) researcher development time ring-fenced at 40% of workload (Faculty norm is 20% for scholarly activity).
 - (ii) bespoke mentoring support, ensuring a tailored, funded programme of research and career development.
 - (iii) cross-cohort workshops, focussing on high-quality in outputs and funding proposals, delivered by professors and other senior researchers.
 - (iv) probationary access to the Research Centre environment.

ASPiRE is competitive, with applications considered by the Faculty Research Leadership Team for annual cohorts of up to 30 starting each September.

2.3 Research Students

2.3.1 PhD Programme

During this REF period, enrolment on the PhD programme has increased by more than three-fold, to a cohort of 160 in July 2020. Growth at this scale was made possible and sustainable by our staffing investment. Candidates come from different backgrounds and ages, reflecting the cultural diversity of our staff (Table 6).

Table 6: Diversity of Our Research Student Population

	CU UoA17 ¹	Sector ²
Proportion of research students from BAME background	50%	30%
Proportion aged under 35	50%	61%
Proportion aged 36 and over	50%	39%
Proportion female	46%	46%
Proportion with disability	5%	5%

¹Data from CU Doctoral College (2020); ²Data from Advance HE 2017/18 (latest data)

Since 2013/14, **88 PGRs have successfully completed**, a four-fold increase on REF2014 (Table 7).

Table 7: PhD Completions REF2014 and REF2021

2008/09	2009/10	2010/11	2011/12	2012/13	Total		
1	3	4	6	8	22		
2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Total
9	7	12	8	13	18	21	88

Unit-level environment template (REF5b)

The success of the programme is underpinned by key features that ensure a high-quality and sustainable doctoral training school experience can be delivered at scale:

Embedding and supporting PGRs in a vibrant inclusive research environment is essential in sustaining a vibrant and multi-cultural research environment. PGRs benefit directly from participation in the life of their Centre, and contribute fresh ideas, energy, enthusiasm and diversity. In this supportive environment PGRs:

- (i) are active members of clusters, participating in meetings, co-creating plans and projects, and delivering research seminars.
- (ii) have access to £1,100 to present at conferences, access data, software or hardware; alongside up to £1,500 for fieldwork and data collection.
- (iii) have opportunities to expand their cultural horizons, networking and learning. PGRs were supported to participate in summer schools run by relevant Associations (e.g. Academy of Marketing), co-created international summer schools linking with PGRs with their international counterparts (in South Africa and USA, funded by EU IRSES projects), multidisciplinary PhDs with other Research Centres (King, funded by Doctoral Training Alliance), and dual-award PhDs with international partners (e.g. Deakin and Cartagena).
- (iv) co-author journal articles with supervisors.
- (v) participate in projects as research assistants, or support the Faculty's teaching.

Effective performance management and supervision. There is a rigorous approach to performance management:

- (i) A team-based, apprentice model approach to supervision, typically bringing together an experienced lead supervisor and method's expert with an early career researcher.
- (ii) Annual Progress Review Panels (PRPs), where PGRs' quality of work and progress on their programme is assessed by an independent expert, and that they must pass in order to re-enrol. PRPs effectively run as a mini-Viva, preparing and training PGRs to defend their research.
- (iii) A mandatory modular programme of training undertaken before being authorised to supervise, alongside regular refresher training.
- (iv) PGR leads and tutors in each Centre provide dedicated points of contact for independent advice and pastoral support outside their supervisory team.

A targeted recruitment strategy. PGRs are recruited to grow research in the Centres' clusters. Research themes are advertised on the Centres' websites, enabling applicants to be matched with staff expertise. To ensure transparency, PGR Leads and potential supervisors review applications, and Centre Directors and the Associate Dean sign off the process. Shortlisted applicants are interviewed by an expert panel. All unsuccessful applicants are provided feedback.

Expert-led skills development and training. Research training is a critical component of a culture to develop skills and take PGRs forward in their chosen career, with a holistic programme of training and development:

- (i) research seminar series they co-create and deliver.
- (ii) bespoke research methods training run through workshops and summer schools.
- (iii) workshops, including writing skills, networking, dissemination and profile raising; and career planning.
- (iv) thesis boot camps and writing retreats.
- (v) Viva preparation workshops and mocks.
- (vi) an annual cross-University PGR conference, Three Minute Thesis (3MT) competition and PGR of the Year award.
- (vii) an annual faculty poster competition.

PGRs are trained to participate in the Peer Review College for University Pump-Priming awards, access teaching opportunities in the Schools, and represent their peers on relevant University Committees.

Unit-level environment template (REF5b)

Enhancing employability. The holistic doctoral programme increases the employability of our graduates. They leave with skills for an academic career and transferable skills for an alternative pathway. Many of our PhD graduates have academic positions at Coventry, elsewhere in the UK (Loughborough, Durham, Southampton, Newcastle, Manchester), at overseas Universities (Wellington, Luxembourg, Petra, Munster); or have research positions outside academia (KPMG, Defra, BEIS).

2.3.2 DBA Programme

During the REF period we have added to our rich PGR community with a professional doctorate, launched in May 2017. The DBA, with three cohorts of business leaders, managers and executives by July 2020, delivers research with real-world impact, demonstrating our commitment to expanding our research horizons. In addition to bespoke programme training and development, and peer learning through the cohort delivery model, DBA candidates have access to the same Research Centre environment, and take part in the same seminars, events and competitions as the PhDs, providing a unique programme experience.

3. Income, infrastructure and facilities

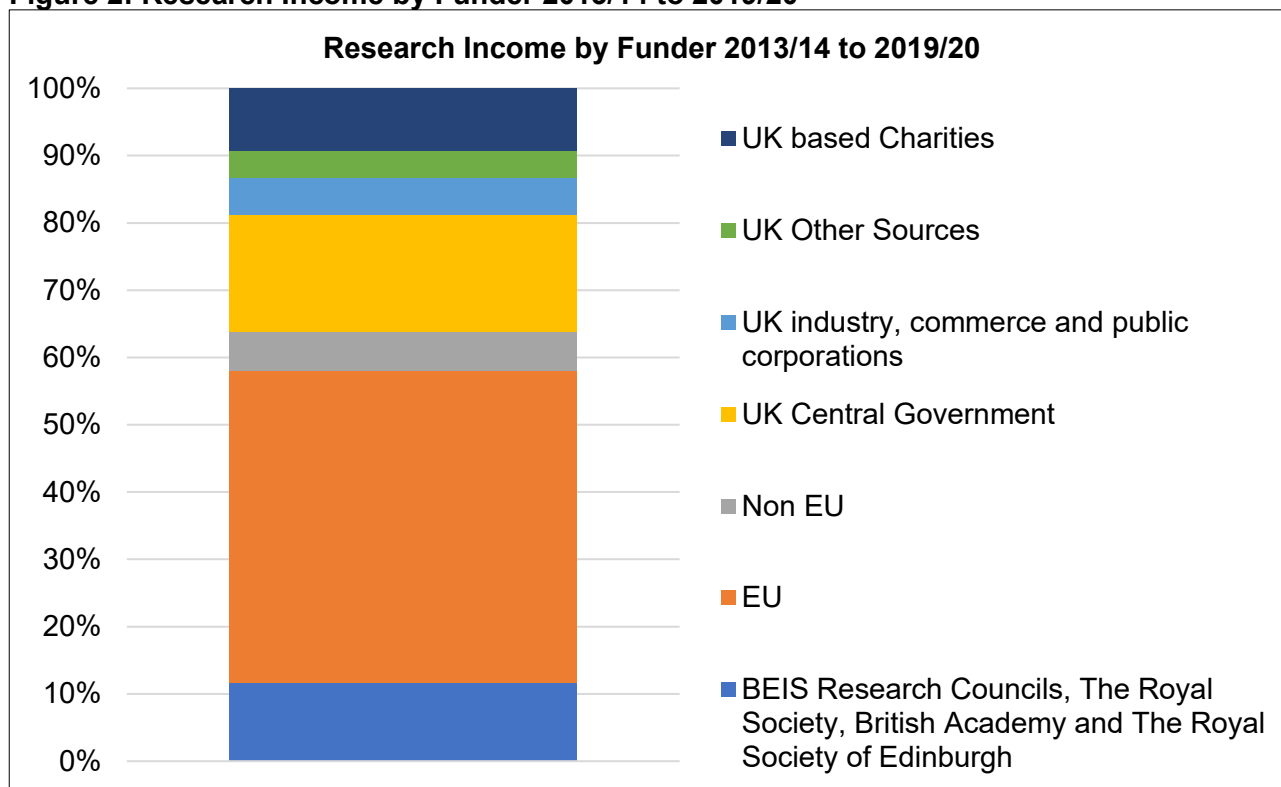
3.1 Income

External funding is a vital component of a successful research environment. Grant capture is important to enhance culture and sustain impactful research, but is also vital in the career development of staff. **CU Research Services** (3.2) provides Centres with bespoke support at pre-/post-award stage. This includes Research Development Executives, signposting opportunities and providing researchers with support on appropriate funders and preparing applications. Within Centres, dedicated professorial-led **QA teams** ensure that principal investigators are subject to a rigorous multi-stage peer review process, so bids are of the highest quality possible. This environment has facilitated a high volume of research proposals. Between August 2018 and July 2020, 106 research proposals were submitted, of which 29 (27%) were funded.

3.1.1 External Funding

During this REF period, external research income totalled £4.2m (£1.6m in REF2014). The majority came from the European Union (47%), UK Government (18%), UK Research Councils/British Academy (12%) and UK based research Charities (9%) (Figure 2). CU is consistently placed in the top 25% of Business Schools for total research income generated per year (*Research Income for Business and Management: Analysis of HESA data 2012/13 to 2018/19, CABS, 2020*).

Figure 2: Research Income by Funder 2013/14 to 2019/20



Source: HEFCE data

Large scale research projects were funded by the EU’s flagship programmes and Research Councils, including the ESRC, EPSRC and AHRC; as well as from Charitable Trusts like the Joseph Rowntree Foundation, the Barrow Cadbury Trust, the Oak Foundation, and the Money Advice Service; and from industry partners like Network Rail. The funding profile illustrates the currency, real-world value and quality of our research across all clusters. Researchers collaborate and co-produce with academic, industry, public, third sector partners (Section 4), and employ traditional, innovative and digital methods, generating high-quality outputs and impact (Section 1.2). Table 8 highlights those projects earning CU income of over £25,000 (26 projects, average £110,000).

Our research environment encourages a team culture, within and between clusters. An impressive 25 of our REF eligible staff were successful as PIs. This approach means that many more staff were exposed to delivering multi-partner, multidisciplinary projects, supporting career development in aspects like design, analysis, project leadership, as well as dissemination and impact through public and policy engagement.

In addition to external grants, income from fee paying UK, EU and International PhD and DBA researchers was substantial. During 2019/2020 fee income totalled £776,000.

Table 8: External Project Income in period by Funder (over £25,000 rounded)

Funder	Project	Funding to CU (£)	PI	Cluster
EU H2020	PROTAX: Tackling tax crimes across the EU	461,000	Turksen	LRC
EU H2020	MSCA incoming fellowship: LONTOR	245,000	Brittain	SS
EU H2020	MSCA incoming fellowship: LONRIO	245,000	Brittain	SS
EU ESPON	RESSI: Sustainable and inclusive development	222,000	Ferreira C	EDIE
EU ESPON	URRUC: Urban-rural connections	215,000	Begley	EDIE
EPSRC	Resilience and robustness of dynamic manufacturing supply networks	211,000	Petrovic	SPC
EU H2020	IRSES CARNIVAL – Impact of mega events	202,000	Brittain	SS
Money Advice Service	What Works: Managing my money for the just about managing	133,000	Dibb	SS
CW LEP	iVMS – Smart technologies	106,000	Henry	EDIE
EU H2020	NEWBITS – Intelligent transport systems	102,000	Garcia-Perez	DOS
EU FP7	MIRRIS – better exploitation of participation in EU research programmes	89,000	Jarvis	EDIE
Oak Foundation	Scaling affordable lending	78,000	Henry	EDIE
ESRC	What Works: Reducing poverty through sustainable employment	64,000	Sissons	EDIE
British Council	UK India education and research: Post conflict tourism	56,000	Reddy	SS
Network Rail	Railway data and safety	50,000	Garcia-Perez	DOS
Creative United	PROSPER: Business support for creative organisations	49,000	Henry	EDIE
Barrow Cadbury Trust	Payday loans	47,000	Appleyard	EDIE
ESRC-AHRC	Building Japanese research capacity around disability studies and sport	41,000	Brittain	SS
Technology Strategy Board	KTP Telmar	38,000	Garcia-Perez	DOS
Joseph Rowntree Foundation	Jobs, skills and poverty in UK cities	35,000	Sissons	EDIE
EU KIC	REMANPATH	34,000	Roby	DOS
EU H2020	RISE EVENTS RIGHTS: Inequality and diversity in sporting mega events	33,000	Brittain	SS
Rail Research UK	Railway data and safety	30,000	Garcia-Perez	DOS

Unit-level environment template (REF5b)

Home Office	Cyber awareness	27,000	Cartwright	AEAP
AHRC	Lending and borrowing	27,000	Appleyard	EDIE
Carnegie UK Trust	Payday futures: Scotland	25,000	Appleyard	EDIE

External funding enabled the sustainability of a vibrant research environment; through the recruitment and development of a team of post-doctoral research assistants, including several from Coventry PhD programmes (e.g. Luo, Tornari, Beech, Brewis), who have progressed their careers within CU (e.g. Ferreira C to assistant professor) or beyond (e.g. Luo, Southampton). EU-funded projects have recruited research assistants (e.g. Voza, Abukari, PROTAX), PGRs (e.g. Carter, CARNIVAL); supported the development of international researchers on fellowship programmes (e.g. Le Clair, Canada); and enabled cohorts of PGRs and staff to participate in international research exchange activities and doctoral summer schools (e.g. South Africa, USA and Japan). Funding also supports conference attendance, software and databases; and visiting professors. PGR fee income facilitates investment in postgraduate research, providing candidates with access to funding for conferences, external training, summer schools, software, data collection and transcription. It has also supported the match funding of new PhD scholarships.

3.1.2 Internal Funding

In addition to external resources, CU has invested over £20m in business and management research, illustrating a clear commitment to longer term sustainability and growth (Table 9). Funding for core research posts in both Centres, taken with the 40% workload allocation for Associates and dedicated Research Services staff, represents a substantial investment in people of £15m over the REF period. QR funding from REF2014 worth £384,000 supported research, providing ECRs with funds for pump-priming their research (18 projects, average £8,000) and purchasing new research equipment. It has also supported impact and policy shaping activities through the strategic priorities fund (9 projects) and accelerating impact in two case studies, e.g. supporting the app development in *“Reducing the Public’s Financial Vulnerability”* (Section 4). QR funding worth £2.3m has fully funded 37 PhD studentships and 19 fee bursaries. In addition, £3m supported researchers in their data collection, analysis and dissemination activities; £148,000 per year supported staff attending national and international conferences; whilst £2 million ensures researchers have sustained access to a range of accounting and financial research databases; e.g. Thomson’s Datastream, Thomson’s Eikon, Bloomberg, Bureau van Dijk’s FAME, Fitch Bankscope, Fitch Connect and Bordex; and software like STATA, Eviews, Oxmetrics, Diction and Matlab. Staff have the equipment for Clicker research, citizens’ lab observations and interview capture, alongside software for online surveys (JISC, Qualtrics) and data analysis (SPSS, NVivo).

Table 9: Internal Funding 2014-2020 – Investing in the Business and Management Research Environment

Core staffing	11,350,490
Associates @ 40% workload (18FTE)	c.1,500,000
Research Services support staff (14FTE)	c.2,300,000
PhD studentships (QR funding)	2,363,508
Pump-prime funding (QR funding)	139,033
Impact accelerator funding (QR funding)	36,427
Research equipment (QR funding)	50,744
Strategic priorities fund (QR funding)	158,325
Conference attendance and travel	1,036,228
Software and databases	1,910,000
Total	£20,844,755

3.2 Infrastructure and Facilities

Researchers have bespoke infrastructure and embedded administrative support. Dedicated facilities bring researchers, PGRs and professional services colleagues together in a flexible, open and modern environment, covering 720m².

Centres benefit from purposively configured space, creating an environment that facilitates collaborative research. CBiS is located in the Jaguar Building, alongside the School of Marketing and Management, around the central atrium, which is ideal for informal meetings and hosting visitors. Alongside is a dedicated, recently refurbished, open-plan suite for the Centre's PGRs. CFCI is located in the adjacent William Morris Building, with the School of Economics, Finance and Accounting. Rooms contain the latest IT, communication and presentation equipment, with access to databases and software. Staff have tablets, phones and a laptop or PC, utilising Microsoft 365, enabling flexible, secure, paper-free collaborative working. PGRs have access to a dedicated laptop loan scheme, alongside generic and discipline specific software, cloud storage and web facilities. Staff and PGRs also have access to a secure data room.

Supporting both Centres, a **Research Office** is headed by an Operations Manager and a Research Support Manager. The office administrates research ethics and integrity, PGR infrastructure and support, while also providing administrative support to the Centres' leadership team and researchers, and managing seminars, conferences and other events. The Research Office team is managed by CU Research Services with dotted line reporting to the Associate Dean Research.

The University's commitment to business and management research is evidenced by the £660,000 investment in 2021 to bring both Research Centres, their staff and PGRs together, acquiring additional space in the Jaguar atrium area (net +550m²). This will add to the vibrancy of the research environment and promote further cross-Centre working.

CU Research Services provide each Research Centre with bespoke professional services to deliver and sustain excellent research. This support includes: business development, pre- and post-award project costing and delivery, research impact, and marketing and communications (2.1). These posts are co-located with the Centres' researchers and Research Office staff, enabling a uniquely holistic, co-created approach to project creation and delivery. Significantly during this REF cycle, Research Services have invested in a team of Impact Officers and Communications & Engagement Officers.

Unit-level environment template (REF5b)

This enabled researchers and Centres to have day-to-day access to professional support, shaping their impact, communications and profile-raising activities.

Open Access. Working closely with CU Research Services, the CU Library supports our staff with output repository (PURE) and **open access**. Making our research openly available shows our commitment to academic and societal impact. Since 2016, CU has developed a comprehensive open access strategy, with a minimum standard of green Open Access being a baseline for all our outputs. Staff are required to deposit their outputs in PURE, benefiting from associated training.

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

Our Research Strategy from 2014, 'Excellence with Impact', focused on high-quality research which benefits society, business and policy makers. This has a strategic focus on research that is challenge-led, informing and shaping agendas with governments, policy makers and industry. Impactful research does not happen by chance, but is the result of careful planning, undertaking research that is a collaborative, co-created effort, drawing on networks, partnerships and relationships with users and beneficiaries. This is central to the way in which research in both Centres is conducted, changing attitudes and behaviours and influencing policy, practice and debates.

Translating our research findings into a range of media, making them **open and accessible** to different audiences is a key component. Researchers use videos, blogs, social media, white papers and brochures to disseminate findings in plain language and visual format. Public engagement is another key element of **open research**. Our social media and communication strategy seeks to ensure that the public can readily access our research.

4.1 Collaborations, Networks and Partnerships

4.1.1 Academic Partnerships, Networks and Collaborations with Users

Researchers are engaged in extensive academic networks and partnerships, with international reach. Partners are based in North and South America, Africa, Asia and Australasia, as well as Europe. Partnerships are strategic and collaborative: co-creating and delivering large scale national and international multidisciplinary research projects funded by the EU, UKRI and Charitable Trusts (Section 3); delivering dual-award PGR programmes (Deakin and Cartagena), co-hosting conferences and summer schools; providing mentoring and development; as well as co-authoring publications, 55% of publications since 2014 were internationally co-authored.

Tjahjono leads CU's membership of the **Anglo-Indonesia Consortium for Interdisciplinary Sciences**, launched in 2020, also involving Nottingham and Warwick Universities alongside leading Indonesian Universities ITB, IPB and Gadjah Mada. The alliance shares research and expertise to build global resilience against environmental shocks, including pandemics, climate emergency and natural hazards. Initial funding from the Indonesian Government is to look at sustainable supply chains for EV batteries and electric motor propulsion.

Lim established CU2 in 2018, a joint international research institute linking Coventry and **Chongqing** Universities, with the aim of exploiting shared strengths in supply chain management and the CE. CU2 delivers researcher exchanges, joint PhD programmes, funding applications, projects, journal articles and conferences. Visiting scholars to Coventry lead to joint publications, a 2020 special issue of *Resources, Conservation and Recycling* on the 'Sharing Economy' (Hu, Lim), and co-created bids in supply chain and CE.

In addition to formally conferred visiting professors supporting our research clusters, a number of international academics have visited on an informal basis to engage with us. These arrangements provide great benefit, enhancing our environment and culture. Examples include professors from Japan (Tokyo University), China (Jiangxi University of Finance and Economics, Guangdong University, Shanghai Lixin), Australia (Deakin University, Adelaide, Queensland UoT, Flinders University of Australia), Indonesia (Tanjungpura University), South Korea (Yonsei University), USA (North Carolina and Louisiana State Universities), South America (Centro Universitário De Maringá – Unicesumar and Universidade Federal do Parana in Brazil), and Europe (Universities of Padua and Cartagena in Spain; Della Campania Luigi Vanvitelli and Università Degli Studi Di Milano-Bicocca in Italy; and the MUS Alparslan University in Turkey).

Unit-level environment template (REF5b)

4.1.2 Industry Collaborations

Extensive long-term advisory and research relationships with corporates show the challenge-led nature of our research. Impactful research with corporates has influenced strategy and behaviours: **Network Rail** for cyber and data security (Garcia-Perez), **Woolworths SA** and **Tesco SA** for supply chain sustainability (Bek, Timms), **Toyota** and its supply chain (Lim), strategy creation and market trends with **Fujitsu** and **Horiba Mira** (Simkin), **Creative United** (Henry), mapping supply chains with **Motorsport Innovation** and **Formula E** (Henry), collaborations with many legal firms (Turksen) and projects for PGRs with **Unipart** (Meadows).

CBiS is a founding member of the **Emergent Alliance**, a new industry-led (**Rolls-Royce, Microsoft, Google, IBM**) response to COVID-19, seeking to drive a green socio-economic industrial recovery through data-driven initiatives on key challenges, including the demand for goods and services, the labour market, globalisation and localisation, sustainability and mobility (Garcia-Perez).

Researchers have established effective collaborations with policy-making bodies; for instance, with:

- (i) **Transparency International** and other NGOs, producing NATO SPS research bid on corruption in NATO operations.
- (ii) the **Royal United Services Institute**, defining a research agenda on economic crime, and funding bids to bridge academia and policy in financial crime prevention (Turksen; Pasculli)
- (iii) Westminster-based **Policy Connect**, the cross-party think tank collaborating with Government and Parliament through its APPGs (Dibb).

CBiS is managing **Britain's Most Admired Companies** with reputation experts Echo Research, published annually in *Management Today*, shaping ethical and responsible business practices in the FTSE 250 (Dibb, Meadows and Simkin).

CFCI has launched the **Global Integrity Research Network** providing a tool to:

- (i) disseminate research findings.
- (ii) share knowledge with fellow academics and Research Centres.
- (iii) connect with business and legal practitioners across the globe.

CFCI's research is informing real-world practice. For example, with the **City of London Police** (Turksen, MacLennan), creating a bespoke training programme on fraud investigation enhancing skills in London's LEAs. Research on identifying and countering fraud within the financial sector has underpinned a programme in Fraud and Financial Crime, in collaboration with **Cifas**, that provides bespoke training for finance and legal professionals. (Grasso, Lin, Pasculli, MacLennan). The **PROTAX** projects brings together researchers, LEAs and national tax authorities from UK, Austria, Malta, Estonia and Portugal to generate policy and toolkits to harmonise the treatment of tax crime and enhance information sharing across European jurisdictions.

4.2 Contributions to the Research Base, Economy and Society

4.2.1 Informing Policy Nationally and Internationally

A key feature of our research is its real-world relevance to contemporary debates in Government, nationally and internationally. Informing and influencing policy and debates are central to several of our Impact Case Studies, including:

- (i) *"Improving employment and skills policies to support sustainable employment and in-work progression"*.
- (ii) *"Transitions in the automotive sector: challenges in delivering a low emission strategy"*.
- (iii) *"Promoting the value of sustainable practices in global cut-flower supply chains"*.

This can be viewed in particular through presentation of evidence and contributions to Government committees, agencies and think-tanks:

Unit-level environment template (REF5b)

Informing Policy Nationally

For example:

- (i) **National Assembly for Wales** Equality, Local Government and Communities Committee *'Making the economy work for people on low incomes'* inquiry (Sissons).
- (ii) **House of Lords Roundtables** *'Bank lending data disclosure: Three years on, what have we learnt?'* (Henry), the *'EV and autonomous vehicles bill'* (Jarvis, Jones, Berkeley), *'Business, human rights and modern slavery'* (Timms); **House of Commons Treasury Committee** COVID-19 and fraud risks (Pasculli); the Government's review of the *grocery code adjudicator* (Bek/Timms); the House of Commons Committee stage of the Agriculture Bill (Bek/Timms); **BEIS Select Committees** *'The future world of work and rights of workers'* (Ferreira J), *'Electric vehicles: driving the transition'* (Jarvis, Jones); **All Party Parliamentary Groups** on *'Whistleblowing: the personal cost of doing it right and the cost to society of ignoring it'* (Pasculli, drafting its first report); and *'the future of capitalism, corporate purpose and value-creation'* (Timms); **Environmental Audit Committee** *'Coffee cups and plastic bottles - disposable packaging'* inquiry (Ferreira J); **House of Lords Select Committee** on *'food, poverty, health and the environment'* (Smith).

The Managing My Money project (Dibb, Appleyard), funded by the **Money Advice Service**, provided access to budgeting tools to improve the financial wellbeing of households that are 'just about managing'. Over 4,000 individuals took part, improving their capability to make good financial decisions, while at a policy level, findings informed the priorities for the **Money and Pensions Service**. A CU Impact Accelerator funded project (Section 3) created a free-to-use personal finance app called **MoneySkills**, to help individuals manage their finances on the go (Impact Case Study: "Reducing the Public's Financial Vulnerability").

Informing Policy Internationally

For example:

- (i) **NATO's** Centre of Excellence-Defence against Terrorism (Turksen).
- (ii) Internal codes of conducts for the **European Union Agency for Law Enforcement Training (CEPOL)**, where CFCI's members act as international experts (Turksen, Grasso).
- (iii) roundtable on *'Private Actors in the Frontline: Clashing Legal Landscapes of Security and Privacy'* with bank officials, EU Commission, Europol, European Data Protection Supervisor, and European Parliamentary Research Service (Tilahun).
- (iv) **Europol** on policy gaps and risks in tax eco-systems (Turksen).
- (v) long-term engagement with regulators and trade bodies in **South Africa** has resulted in more sustainable practices being implemented by cut-flower, fruit and wine producers who supply UK and global markets (Bek).
- (vi) working with the **Indonesian Government** sustainable supply chain practices in the globally important Indonesian coffee industry were transformed. Attention has turned to that country's plans for electric vehicles (Tjahjono).
- (vii) providing advice to the Government in Brazil for securing legacy and economic development post Olympics and Paralympic Games in Rio (Brittain).

4.2.2 Influential Roles

Because of our contemporary and high-quality research, our expertise is increasingly used on boards/committees, in editorship roles in leading journals in the field, and editing special issues of respected journals.

Researchers were appointed to prestigious bodies, including the advisory boards of the **New Economics Foundation** (Duignan), **Aluminium Association** (Garcia-Perez); Associate of the **Work Foundation** (Sissons); sitting on **Community Investment** and the **Big Society Capital Community Investment Steering Groups** (Henry); executive committee member of the **International Association for Knowledge Management** (Garcia-Perez); Heritage Advisor for the **International Wheelchair and Amputee Sports Federation** (Brittain); Director of **CreditU** (Appleyard).

Dibb was appointed as **Deputy Panel Chair** for Business and Management Studies **REF2021**, served on the Economic-Administrative Panel for the Norwegian Research Council's REF, was a Trustee of Alcohol Research UK, is a member of the Research Committee for the National Trust, and was the invited academic chair of the 2019 World Social Marketing Conference.

Meadows is Vice-Chair of the **British Academy of Management**.

Henry was invited by the Department for Culture, Media and Sport to become a member of the Birmingham 2022 **Commonwealth Games Evaluation Advisory Group**.

Andrikopoulos was an advisory board member of the **BAFA's** Financial Markets and Institutions Group and is a fellow of the **Global Labour Organisation**.

Tjahjono holds the prestigious status of International Fellow of the **Japan Society for the Promotion of Science** and the **Ministry of Research and Higher Education Indonesia**.

Grasso was an international expert in the area of corruption and good governance for the **Council of Europe's** Directorate General on Human Rights and Rule of Law, and anti-corruption international expert for **Transparency International**.

Pasculli is a fellow of the **Royal Society of Arts**.

Turksen is a member of the **Innovation Caucus**, UK.

4.2.3 Journal Editing Roles and Prizes

Sissons is an editor of **Work, Employment and Society**; Henry is editor-in-chief of **European Urban and Regional Studies**; Joseph is joint-editor of **British Accounting Review**; Lim is co-editor-in-chief of **International Journal of Logistics Research and Applications**.

Many of our researchers are also Associate editors and sit on editorial boards. Our researchers were invited to guest edit a number of **special issues**, including recently:

Table 10: Guest Editing Special Issues

Technological Forecasting and Social Change	Tensions in the Data Environment: Can Organisations Meet the Challenge?	Meadows
Journal of Sustainable Tourism	Sustainability Knowledge Management and Organisational Learning	Garcia-Perez
Journal of Marketing Management	A Critical Social Marketing Research Agenda	Dibb
European Urban and Regional Studies	Urban Europe, Precarious Futures	Jarvis, Sissons, Ferreira J
Journal of Property, Planning and Environmental Law	Rethinking Property Approaches in Resources for the Circular Economy	Steenmans
European Urban and Regional Studies	Europe and/or the UK: Post-Brexit Urban and Regional Development Futures	Henry

International Journal of Lean Six Sigma	How Does Lean Six Sigma Improve Organisational Resilience Post the COVID-19 Pandemic?	Tjahjono
Sustainability	Practice-Based Models of Circular Economy	Bek, Tjahjono
Resources, Conservation and Recycling	The Sharing Economy and its Implications for Sustainable Value Chains	Lim, Hu

Environment and Planning A's editors awarded an Ashby Prize for the 'most innovative papers published in the journal in 2015' to Bek's paper 'Postcolonial perspectives on global production networks: Insights from Flower Valley in South Africa'. Zarei's 'To greener pastures: An action research study on the environmental sustainability of humanitarian supply chains' in the **International Journal of Operations & Production Management** led Emerald's 2020 "Together for Sustainable Supply" campaign.

4.2.4 Hosting and Delivering Events

Each cluster within our Centres has a programme of dissemination events, hosted either in Coventry or in partnership with key academic and industry collaborators. These have attracted large numbers of international academics, practitioners and beneficiaries, engaging with our researchers and projects, and helping to drive profile, outputs and impact. They also provide important platforms for developing the profiles and careers of our highly engaged ECRs and PGRs, e.g. as presenters, session chairs, and as members of organising committees. Table 11 provides just a few examples, including delivery of very successful online conferences during the pandemic. Conferences typically are in conjunction with eminent organisations or leading journals. Our researchers have also hosted several successful hackathons.

Table 11: Conferences Hosted in the Last Three Years

Conferences
<ul style="list-style-type: none"> • <i>International Conference on Tourism Crisis and Disasters: Responses, Recovery and Resilience</i> (March, 2021) • <i>Urban Europe, Precarious Futures?</i> online with <i>European Urban and Regional Studies</i> (December, 2020) • <i>21st European Conference on Knowledge Management</i> (December, 2020) • <i>12th Chinese Economic Association European Conference</i> (December, 2020) • <i>Cybersecurity in the Aluminium Sector</i>, with the Future Aluminium Forum (February, 2020) • <i>Education Pathways for Remanufacturing</i> (February, 2020) • <i>Electric Vehicle Transition: A Watershed Moment?</i> with Silverstone Technology Cluster (November, 2019) • <i>British Accounting and Finance Association North Area Group Annual Conference</i> (September, 2019) • <i>International Symposium on Data, Information and Knowledge Management Research</i> (June, 2019) • <i>Rethinking Property Approaches in Resources for the Circular Economy Conference</i> (June, 2019)

- *International Conference on Whistle-Blowers' Protection* (May, 2019)
- *28th Eurasian Business and Economics Society (EBES) Annual Conference* (May, 2019)
- *Driving Sustainability in the Global Cut-Flower Industry* (April, 2019)
- *Tensions in the Data Environment: Can Organisations Meet the Challenge?* (November, 2018)
- *Disability Sport: Promoting Human Rights, Diversity and Inclusion* (September, 2018)
- *International Conference in Applied Economics* (July, 2018)