

Institution: ASTON UNIVERSITY
Unit of Assessment: 19 BUSINESS AND MANAGEMENT STUDIES
<p>a. Overview</p> <p>Aston Business School (ABS) at Aston University (AU) is a triple-accredited business school (AMBA, EQUIS and AACSB), and is ranked in the top 10 in the UK in the Eduniversal rankings for the 3rd year running in 2013. ABS works in collaboration with industry, governments and the academic community to produce new research initiatives, with a particular focus on applied research that contributes to sustainable economic growth and development. Our research delivers on four key strengths:</p> <ul style="list-style-type: none"> • Strategic HR, high-performance teamwork and authentic, globally relevant leadership • International investment, finance and innovation • Entrepreneurship and sustainability • The practice of strategy, change management and performance management <p>Research is organised into Academic Groups and Research Centres. Academic Groups are defined by research discipline and tasked with maintaining excellence in the discipline. The Groups are Economics & Strategy, Finance & Accounting, Marketing, Operations & Information Management and Work & Organisational Psychology. All academic staff and doctoral researchers are located in one of the five Academic Groups.</p> <p>ABS also has six interdisciplinary Research Centres. Five of these were initiated with Aston funding, having grown out of cross-school multidisciplinary themes that were outlined in our RAE 2008 submission: Aston Centre for Human Resources (ACHR, led by Butler and Woods, S.); Aston Centre for Research into International Business (ACRIB, led by Driffield); Aston Centre for Research into Safety and Security (CRISIS, led by Brewster); Aston Centre for Servitization Research and Practice (ACSRP, led by Baines); and Aston India Foundation for Applied Research (AIFAR - a cross-School Centre, led by Budhwar). The Enterprise Research Centre (ERC - joint with Warwick (led by Hart) is funded by ESRC, Department for Business, Innovation and Skills (BIS), Technology Strategy Board (TSB) and the British Bankers' Association.</p> <p>The Research Centres are designed to enable researchers from different Academic Groups to develop joint projects and funding bids, creating an interdisciplinary, collaborative research environment. Membership of the Centres is flexible, ensuring that researchers can participate in collaborative work alongside their individual research interests.</p> <p>Research at ABS is encompassed within the Aston Academy for Research into Management (AARM) as the lead administrative and coordinating office at ABS, overseen by the Associate Dean Research (ADR). AARM actively promotes and sustains an active research culture and uses the School Research Committee to develop and monitor research strategy; the School Research Committee reports to the ABS Senior Management Team and the University Research Committee.</p> <p>b. Research strategy</p> <p>Since the last RAE we have maintained a strong focus on the enhancement of our research environment. In RAE2008 we said we would:</p> <ul style="list-style-type: none"> • substantially increase research income; • invest in two or three centres of research excellence, including recruiting research leaders in these areas; • focus publications even more on the top international journals and increase the impact of our research on policy and practice; • develop the quality of the Doctoral Programme; • increase the level of engagement with industry and organisations internationally, nationally and regionally; • build research collaborations with other Schools in Aston University, and other institutions. <p>These have been accomplished as follows:</p> <p>Increase research income and Invest in centres of research excellence: The total value of research income during the REF period is £9.9M (compared with £8M in 2001-2007), with a clear emerging trend of successes with new funders and new initiatives such as Knowledge Exchange Enterprise Network (KEEN) Awards. In particular, we have attracted around £5M (from the ESRC,</p>

Environment template (REF5)

EPSRC and EU) to support the creation of the ERC, CRISIS and ACSRP centres. In addition, the University has made strategic investments (via our AU strategic investment funds – SIF) in the creation of centres (e.g., ACRIB) to support the quality research environment at ABS.

Recruit research leaders: Since 2008, we have made important targeted appointments including 11 Professors (**Baines, Bailey, Evanschitzky, Feiger, Hart, van Knippenberg, Kotlarsky, Leeflang, Marshall, Mickiewicz, and Woods, M.**), and four Readers.

Focus publications even more on the top international journals: We have increased the proportion of publications in top journals as evidenced by REF2.

Develop and deliver an excellent doctoral programme: We have increased the number of postgraduate research (PGR) students from 90 in 2007 to the current 151. As part of a strategic investment, we have since 2009-10 created 10 doctoral bursaries each year. The REF period has also witnessed an increase in the number of PGR students awarded - from 65 in the RAE2008 period to 85 in the REF2014 period.

Increase the research impact on policy and practice and Increase the level of engagement with industry and organisations internationally, nationally and regionally:

We have successfully developed and led important initiatives such as the 'Innovation Voucher Scheme' – IVS (formerly known as INDEX and now adopted as a UK Government scheme) and continue to lead the Global Entrepreneurship Monitor (GEM) Programme for the UK. We are also leading on regional developmental initiatives including 'Engaging Research for BUSINESS Transformation (EREBUS) involving Birmingham and Warwick universities. During the REF period we have received 12 Knowledge Transfer Partnerships (KTPs), 10 Collaborative Awards in Science and Engineering (CASE) Awards, two KEEN Awards, three ESRC follow on awards and grants from industry (e.g., we have been running the Goldman Sachs *10,000 Small Businesses* Programme since 2011), FP7 and European Regional Development Fund (ERDF) on Business Transformation and on Servitization, as well as key staff playing a crucial role in the development of the Greater Birmingham and Solihull LEP and its initiatives. See REF3a for more information on research impact.

Build research collaborations with other Schools in Aston University, and other institutions:

AIFAR is a cross-School centre with AU's School of Engineering and Applied Science. The ERC, IVS, GEM, EREBUS and the FP7 and ERDF funded projects all demonstrate collaborations with other institutions.

These achievements were supported by further improvements in staffing and infrastructure.

Staffing: In addition to bringing in research leaders, we have appointed 11 Senior Lecturers and 38 Lecturers and our promotions include seven to Professor, nine to Reader and 28 to Senior Lecturer. We strongly emphasize research outputs and income as major criteria in all academic appointments and promotions. Information on our people and support strategies is available in Sections c and d.

Infrastructure development: Research support for our researchers is provided through: the establishment of a proactive Research Support Office (RSO) headed by Pro-Vice Chancellor for Research (PVC) including a dedicated specialist on EU funding; the Business Partnership Unit (BPU) led by PVC Business Partnerships; and the creation of the Graduate Management School for Research at university level. These operate alongside AARM, which has a dedicated Research Support Officer for ABS, and our ABS Research Degrees Programme (RDP) Office. Further details on research infrastructure are provided in Section d.

Major achievements of academic groups 2008-2013:

Below we summarise achievements of our researchers, by Academic Group:

Economics & Strategy Group (ESG)

Professorial Leads: Bhaumik, Driffield, Hart, Love, Mickiewicz. **Constituency:** Decker (SL), Delis (ECR), Du (R), Gong (SL), Karoglou (L), Saal (SL), Sullivan-Taylor (SL), Sun (ECR), Wolf (ECR)

Aims: The ESG has four major research themes: *international business, innovation and entrepreneurship, economics and strategy*. ESG aims to inform the strategic decisions of policymakers, corporate partners and other stakeholders through research projects, consultancy and policy advice.

Environment template (REF5)

Activities and achievements: The group has successfully leveraged its research reputation to attract research funding and engage with policymakers as well as corporate stakeholders (see below). It co-hosts the ERC with Warwick University (**Hart**), which has enabled collaboration between leading scholars in five UK business schools and their research teams to conduct policy relevant research on SME growth and development. This research is supplemented by the data collection, analysis and research related to GEM (its national team is based in the ESG and led by **Hart**) which is now being developed as a result of funding received under Marie Curie (**Reynolds**), and the Goldman Sachs *10,000 Small Businesses* programme which facilitates a knowledge exchange between research and practical outcomes for small businesses regionally and nationally. Researchers in ESG work with regional bodies (such as Local Enterprise Partnerships (LEPs) and UK Trade & Investment (UKTI), and advise them on the impact of inward investment and wider business support – **Driffield, Love** and **Hart**) and with government representatives and their programmes (e.g., ABS contributed to Lord Heseltine’s 2013 initiative on ‘The Greater Birmingham Project: The Path to Local Growth’ – **Driffield** and in developing the Small Business Charter for Lord Young - **Hart**). ESG hosts ACRIB, which has brought together over 10 researchers whose work focuses on the interactions between internationally mobile capital and local or national markets for goods, services, skills and people, as well as hosting two ESRC awards. **Funding sources** include the ESRC, FP7, Marie Curie, British Academy, the UK-India Education and Research Initiative (UKIERI), BIS, UKTI, National Endowment for Science, Technology and the Arts (NESTA), Organisation for Economic Co-operation and Development (OECD), OFWAT, LEPs, Greater London Authority, Scottish Enterprise, Department for Environment, Food and Rural Affairs (Defra) and industry.

Finance and Accounting Group (F&AG)

Professorial Leads: Chelley-Steeley, Joseph, Lowe, and Woods, M. **Constituency:** De Cesari (L), Leventis (RF), Belal (L)

Aims: The F&AG’s work influences policy and practice in the financial services, government and corporate sectors by examining and developing empirical models that advance our understanding of the efficiency and functioning of financial reporting and markets, business reporting, corporate governance and risk management.

Activities and achievements: F&AG research focuses upon the following themes. *Empirical Finance* (**Chelley-Steeley, Joseph** and **De Cesari**) develops models and uses data from financial markets and the experimental laboratory to understand the efficiency and functioning of markets and corporate decision-making. *Risk Management:* **Woods M.’s** research on major UK banks identifies and proposes solutions for problems and deficiencies in risk management, reporting and responsibility. *Accounting and Business Reporting:* **Lowe’s** work highlights the usefulness of aspects of the development of electronic reporting standards on accounting information and due diligence processes in the private equity industry. *Management Control* (**Lowe** and **Woods M.**) shows the impact on performance and control techniques of systems within organisations. Researchers in F&AG are also (**Woods M.**) providing direction for the future training and competency requirements of the audit profession. **Funding sources** include British Council, UKIERI, European Risk Research Network (ERRN) and Marie Curie (EU).

Marketing Group (MG)

Professorial Leads: Evanschitzky, Lee, and Leeflang (0.2). **Constituency:** Frenzen (ECR), Gilliland (SL; 0.25), Pillai (R), Rudd (R)

Aims: To advance marketing knowledge and practice within a global context, through excellence in research, education and consultancy.

Activities and achievements: MG’s research activities are structured into three themes: *Services and Retailing* (**Evanschitzky** and **Leeflang**); *Organisational Research* (**Lee, Rudd, Gilliland** and **Frenzen**); and *Consumer Psychology* (**Pillai**). A range of methodological techniques are used including econometrics, experimental methods, psychometrics and neuro-scientific methods. Research is undertaken in collaboration with international partners (e.g., Rice University, Wharton Business School and Florida State University).

Research in the MG impacts on management practice and policy in several ways. For example,

Environment template (REF5)

optimum allocation and spend of marketing budgets in competitive markets (**KTP** with Aquarius Action Projects), and assessing the role of marketing in the boardroom and leveraging marketing capabilities and assets to create sustainable competitive advantage (**KTP** with the British Association of Social Workers). The 'Aston Marketing Research camp', attended by academics from around two dozen universities in the UK and Europe, and attracting names such as Parasuraman (University of Miami) and J. Scott Armstrong (University of Maryland) demonstrates MG's commitment to developing and promoting good research into marketing issues globally.

Funding sources include The Home Office, KTPs and industry.

Operations & Information Management Group (OIMG)

Professorial Leads: Baines, Dey, Edwards (0.2), Kotlarsky and Thanassoulis. **Constituency:** Anastasakis (ECR), Chicksand (SL), Clegg (R), Emrouznejad (SL), Gholami (SL), Giraleas (ECR), Schroeder (ECR)

Aims: OIMG researchers apply theoretical developments to support the practice of effective decision-making in highly complex environments and to create new waves of theoretical and practical knowledge.

Activities and achievements: OIMG research has three distinct themes: *Operations Management* (consisting of Servitization, Operations Improvement and Supply Chain Optimisation); *Management Science*; and *Information Systems and Technology*. The hub for servitization research is the ACSRP (led by **Baines**), which has current funding from the EPSRC and the ERDF, the latter for bringing servitization to 400 SMEs in the West Midlands. The *Operations Improvement* sub-theme focuses on new critical approaches for operations management to highlight multi-organisational enterprises, holonic management and quality management practices to improve efficiency and effectiveness in operations. The *Supply Chain Optimisation* sub-theme covers issues of strategic sourcing, supply chain integration, risk and performance management and has led to the development of decision support systems and supplier performance measurement frameworks. The *Management Science* theme (led by **Thanassoulis**, with **Emrouznejad** and **Giraleas**) provides mechanisms to assess efficiency and productivity of diverse organisational units. Researchers working within this theme are key founders of the international Data Envelopment Analysis (DEA) Society and have developed software for implementing DEA assessments, which has been adopted by organisations globally. Research within *Information Systems and Technology* highlights the processes and systems for knowledge creation, transfer, organising, sharing, storage, and (re)-use in co-located and distributed inter- and intra-organizational settings (**Edwards**, **Kotlarsky** and **Gholami**). The OIMG is also home to CRISIS, which focuses on disaster management including mass evacuations and response to emergencies (see summary of impact case on emergency preparedness in REF3a). **Funding sources include** the EU, EPSRC, ESRC, KEEN, KTPs, DTI, DSTL, the British Council, UKIERI, and INTERREG EU.

Work & Organisational Psychology Group (WOPG)

Professorial Leads: Budhwar, Martin and van Knippenberg (0.2). **Constituency:** Butler (R), Epitropaki (SL, 0.2), Guillaume (SL), Sacramento (SL), Theodorakopoulos (SL), Thomas (SL), Woods, S. (R)

Aims: WOPG research advances understanding of the social and psychological processes involving people and organisational management to influence individual and organisational effectiveness, and to contribute to the development of organisational theory and practice.

Activities and achievements: WOPG research focuses in three areas: *People Management and Organisational Performance (PMOP)*; *Leadership*; and *Team Effectiveness and Diversity*.

The *PMOP* theme covers work processes and outcomes, such as human resource management (HRM) systems and their impact on organisational performance. **Budhwar's** research has found significant positive linkages between various aspects of HRM and organizational performance in different emerging market contexts (e.g. India and Greece). Under the *Leadership* theme, **Martin**, **Thomas**, and **Epitropaki** have explored extensively the linkages between employees' ideal and actual manager profiles and the extent to which they predict employee well-being over time and how this affects employee effectiveness. *Team Effectiveness and Diversity* research (**van Knippenberg**, **Sacramento**, and **Guillaume**) highlights how firms and managers can effectively manage team processes and innovation, diversity, decision-making, and creativity. WOPG

Environment template (REF5)

research informs the practice and policy of a variety of organisations in different settings. **Funding sources include** ESRC (CASE Awards), KTPs/ KEEN, Society for HRM (USA), NESTA, ERDF, and industry.

The WOPG researchers also work within two centres: AIFAR and ACHR. The creation of AIFAR (a cross-school centre) enabled more than a dozen leading researchers and their associates from diverse fields (e.g., HRM, Marketing, International Business, Project Management, Engineering and Neuroscience) based at ABS and AU to collaborate on projects to improve practices, policies, operations and profitability of firms in India. AIFAR has attracted significant international research income (e.g., £3M with researchers based at ABS, AU School of Engineering and Indian Institute of Technology, Delhi) and doctoral students, jointly supervised by AU and India based researchers. Regular seminars, keynotes, workshops and conferences are organised both in the UK and India, resulting in an active interface with the users of our research. **Funding sources** for AIFAR include Science Bridge, EPSRC, UKIERI, ESRC, British Academy and Society for HRM (USA). Researchers at ACHR are interested in understanding, identifying and improving the effectiveness of HR practices to facilitate organizational competitiveness, encourage individual growth and development and enhance performance, quality and work-related attitudes and behaviours. ACHR has created opportunities for researchers to collaborate on research projects and also showcase their research through weekly seminars in the WOPG, regular seminars with the CIPD (Chartered Institute of Personnel and Development), and via the ESRC Seminar Series (Shipton and **Budhwar**) involving Lancaster and Warwick Universities. Researchers based at ACHR have organised major conferences at ABS (e.g., the 11th International HRM Conference and 25th British Academy of Management Conference). **Funding sources** for ACHR include British Academy, ESRC, CIPD, KTP/KEEN and CASE awards.

STRATEGY 2014-2019:

The research strategy for the school is based on **building and developing research excellence and impact**. In particular we aim to: recruit more leading researchers, prioritise the activities of research staff to enable them to focus on research, and provide staff with support to deliver excellent research while strategically supporting engagement with business to drive impact and international collaborations to intensify knowledge exchange.

Building on research excellence. We will build on the strengths of our Academic Groups and Research Centres to ensure that ABS is recognised as an international centre of excellence in clearly defined areas relevant to regional and national economic growth. Key areas of investment will include:

- Entrepreneurship, innovation and growth in SMEs (building on the Enterprise Research Centre, GEM UK, and the Goldman Sachs *10,000 Small Business* Programme).
- Transforming the operations of regional and national manufacturers via servitization and re-distributed manufacturing (building on ACSRP).
- Co-creating value for customers (building on the Marketing Group and ACSRP). This involves making viable and innovative value propositions as well as effectively and efficiently managing value creation in order to achieve high levels of customer/stakeholder satisfaction and sustainable success for organizations.
- Inward investment and its role in regional and national economic growth (building on ACRIB and developing links with the LEP framework – see below).
- A ‘Centre for Growth’ to drive engagement and impact of existing research expertise (building on our reputation in local engagement, SMEs and entrepreneurship, sectoral and local economic restructuring and policy debates on driving growth in the private sector). The Centre will offer an opportunity for all ABS staff to access a range of unique datasets for their research on business growth (e.g. the new UK Panel Study of Entrepreneurial Dynamics (PSED), building on GEM).

Engaging with stakeholders. Led by ESG’s engagement with policy and corporate stakeholders (see above), ABS will deepen and enhance its links and research activity with regional stakeholders. Central to this is the partnership with Greater Birmingham and Solihull LEP, to which **Driffield** is academic adviser. We will initially focus on two areas: the role of inward investment in

Environment template (REF5)

regional growth (through ACRIB), and SME growth and development. The latter area will be led by the Enterprise Research Centre's work on SME innovation, exporting and growth and will involve a programme of engaged scholarship involving business owners from ABS growth programmes such as the Goldman Sachs *10,000 Small Businesses* programme. Engagement will be strengthened by the recent appointment of **Bailey** as Professor of Industrial Strategy who has developed close relationships with employers and policymakers, nationally and regionally, in particular with two neighbouring LEPs. Future areas of engagement will include: SME finance, exporting and innovation, and their links to growth; servitization and its ability to transform the regional manufacturing base; building global companies from the Midlands; developing a world class business support ecosystem (organised through the 'Centre for Growth').

Excellence in PhD provision. Building on the strengths of the PhD programme and the taught components of the Research Degrees Programme (RDP), we will increase doctoral numbers by 50% (from 151 to 225) whilst improving the entry quality of candidates and maintaining recent improvements in completion rates (to achieve over 80% of our students completing within four years (F/T) and six (P/T)). This will be done by increasing our commitment to doctoral bursaries and targeting them at the areas of research excellence identified above.

Aligning resource allocation and personal incentives with research excellence. The internal resource allocation mechanism at ABS is moving from 'resources follow students' to 'resources follow excellence'. This is designed to align it with our ambitious research targets and will help ensure that resources flow to areas of strength and new areas targeted for investment. In addition, the Performance Development and Review (PDR) system of annual targets and appraisals for staff will be more explicitly aligned with the School's drive towards research excellence.

Excellence in training and support. ABS will further develop its support for early career researchers (ECRs) through mentoring and support in writing research papers and training in applying for research grant applications. The peer-review system for all grant applications by ABS staff will be strengthened, based on the established successful grant holders in the School. To further enhance the non-academic impact of our research we will proactively encourage and support our researchers to target industry and EU funding (especially under Horizon 2020) to enable them to transfer research expertise into practical outcomes for the business community.

c. People:

Our staffing strategy is closely aligned to our research strategy, emphasising the recruitment and development of promising and leading researchers who will aid us in continuing to build our research culture and profile. Our appraisal (PDR) process specifies stretching but reasonable research targets for research outputs, income and impact/engagement. Aston received the HR Excellence in Research Award in September 2010 and has recently received confirmation that its renewal has been approved for a further two years. Aston is one of only ten universities to have held the Award since 2010.

Staff support and development:

New staff: ABS is proud of its research environment, which nurtures and facilitates research productivity. All new staff are allocated a 'start-up fund', which is to be used to support research related activities, while new entrants to the profession have a reduced teaching load initially. To optimize the use of this, new staff attend induction sessions and participate in a University wide mentoring and training scheme, which facilitates research independence and thereby creates continuity of research activity.

ECRs: Support for our ECRs is available in the form of mentoring, reductions in teaching load during their first three years of appointment, the completion of a career development plan combined with a variety of courses provided by University's Staff and Graduate Development for their personal and professional development. The School and University organise dedicated ECR days and workshops focusing on key themes (e.g. publications, research grants, career development), while Groups have systems of peer review for publication and grant applications. ABS's success with the ESRC "early career" research funding schemes (3 awards in the REF period) indicates the success of this. ECRs join one or more Research Centres, present their work through the research seminars series and participate in the discussion and development of funded

research projects. At the university level, the ECRs attend the 'ECR Forum' chaired by the Aston PVC Research.

AARM: Active support is provided by AARM to staff for attending conferences, workshops and network events. Seed corn funding is available to initiate promising research projects and organises events like the 'writers' retreats' (focused on publications and research grants). The Associate Dean for Research (ADR) makes regular presentations to the whole School and each Academic Group to communicate key developments and also to seek input regarding future support and developmental needs of staff.

Research enhancer: The balance between research and non-research academic duties is managed through a comprehensive workload model. Teaching responsibilities are adjusted in a way that enables staff to concentrate on their research. ABS operates a 'study-leave' scheme, supported with central funds to pay for teaching cover. On average one or two staff members from each Academic Group are supported through this scheme each year. AU allows researchers to keep allocated funds from their earnings from funded research projects and executive teaching in their Personal Academic Support Account (PASA) to support research.

Engagement and development: ABS also supports the secondment of staff to our partner organisations to encourage engagement and research collaboration. For example, **Scully** was seconded for three years to Birmingham City Council, which resulted in two CASE awards and other projects. AIFAR has seconded researchers to help develop a partner institute in India - Indian Institute of Technology, Ropar - and we are pursuing joint doctoral supervisions with them and also co-organising major conferences. ABS has been successful in receiving fellowships (e.g., Marie Curie and Leverhulme) to support research collaborations. University Staff and Graduate Development offers a large number of courses for continuous professional development.

Active interaction and distinguished visitor scheme: The weekly colloquium/seminar meetings organised by Academic Groups allow staff and doctoral students to get useful feedback on their work-in progress projects. ABS also invites applications from staff for prospective visiting scholars (supported by SIF) and annually welcomes on average 15 leading scholars from around the world. ABS also encourages and supports staff to visit our partner institutions to build research collaborations by providing financial rewards and also points in the workload model. On average, 20 staff visit our partner institutions each year (Section e provides details in this regard).

Equality and diversity: ABS is committed to the University's Equality and Diversity Action Plan. 54% of our staff submitted in the Unit are non-UK citizens while our gender ratio is 78% male to 22% female. 16% of our submitted staff are on fixed-term contracts, almost all of them ECRs undergoing probation.

ii. Research students

ABS offers a PhD, a DBA (targeted at senior executives) and an MSc in Research. At present ABS has 151 research students (including 128 PhD and 22 DBA). It funds up to 10, three-year PhD bursaries (GTAs) per year at a value of £20k p.a. each. These awards are open to all non-funded applicants. Currently there are 26 GTAs: 12 overseas and 14 Home/EU students. Other sources of funding include ESRC awards (13), EPSRC (1), Government, University and business sponsors. Each student is normally appointed a supervisory team consisting of a primary and associate supervisor(s).

Graduate School (GS): The School is committed to the provision of excellence in postgraduate training opportunities, as defined by a University Code of Practice for research degrees, based on the RCUK Skills Statement and the Vitae Researcher Development Framework (now adopted by RCUK). ABS's Postgraduate Research (PGR) recruitment, development, monitoring and assessment are now overseen by the AU Graduate School (AUGS), which was established in 2010 with the mission to ensure a consistent and supportive environment for all research students across the University, one that enriches their experience at Aston and facilitates their development. The principal vehicle for overseeing this is the Graduate School Management Committee (GSMC).

The ADR, with devolved responsibility from the GSMC, has responsibility for the academic quality of training and for monitoring student progression, to ensure that all students develop the skills necessary to become professional researchers.

Research Degrees Programme (RDP) Office: The administrative processes for student

Environment template (REF5)

recruitment, admission, training support and monitoring are supported by ABS's RDP Office. Academics new to research supervision receive full supervisory training and an experienced academic advisor is appointed to the supervisory team. All supervisors are required to undertake refresher training every three years. Students are able to comment confidentially on their supervision as part of the Annual Report process and are also encouraged to seek support and guidance from the Postgraduate Tutor, RDP Director or ADR if they have concerns. All doctoral students in their first year complete structured research training through four Research Methods Courses (RMCs), which are based on ESRC research training guidelines. At the end of the first year FTE students produce a Qualifying Report on their research, which they have to defend via a viva voce examination. It is at this point that the student is transferred to PhD/DBA. Each year the student and their main supervisor have to submit annual reports, including a minimum of three logs of supervisory meetings. Students also produce monthly engagement logs detailing their research work (their supervisor signs these off).

Training and development: Apart from the four RMCs, the RDP also organises specific workshops (e.g., on LISREL/ MPlus) and two annual symposia, the first for DBA students and the second a PhD event run jointly between Aston, Warwick and Birmingham Business Schools, led by ABS. In addition we host an EREBUS colloquium for PhD students and in particular the CASE award supported students, and provide £500 per student per annum to go to conferences, etc. The School Research Committee includes a doctoral student representative and doctoral students are actively involved in School wide activities (e.g., Research Days). ABS encourages all doctoral students to register on the Aston Certificate 'An Introduction to Learning and Teaching in HE' to enhance their employability skills (particularly those students who intend to pursue an academic career).

Doctoral degrees awarded

	2008/09	2009/10	2010/11	2011/12	2012/13	TOTAL
PhDs awarded	14	9	21	16	17	77
DBAs awarded	0	1	0	3	4	8
Total	14	10	21	19	21	85

d. Income, infrastructure and facilities

Since RAE 2008, a concerted effort has been made to consistently improve our research awards and income. For 2008-13 research income totals £9.9M. This includes RCUK (11.3%), UK Government bodies (46.3%), UK Charities (5%), the EU (10.2%), UK Industry (26.4%) and Others (0.8%). Major recent awards include £727,000 from EPSRC for **Baines'** work within ACSRP on innovation in applied gaming technology; and the Enterprise Research Centre (**Hart**), which resulted from an ESRC-led research centre competition.

Infrastructure and facilities

Staff at ABS enjoy efficient and proactive infrastructure support from AARM, RSO, BPU and peers.

AARM plays a crucial role in the creation of a supportive research culture by providing administrative support for research related events (conferences, seminars, writers' retreat), financial support to staff for research related events/activities, arrangements for visiting scholars, maintenance and recording of data (e.g., load model, regular review of research centres), working with the Marketing staff to create research related materials (such as ABS/Aston University Research Brochure), provision of seedcorn funding, helping with maintenance of research related websites, dealing with research ethics (including the ethical approvals on all research projects) and any other support needed by staff related to research.

The RSO regularly forwards calls for grant submissions via our intranet and where needed organises workshops on specific themes (e.g., for the ESRC 'Future Research Leaders' initiative, Marie Curie, Leverhulme Fellowships, and Horizon 2020). The RSO also provides one-to-one guidance on grant applications, and brings in specialist consultants for individual initiatives. Active mentoring is provided to colleagues and ECRs are proactively involved as co-investigators by experienced colleagues in their relevant grant applications and doctoral supervision. On a regular basis, seminars and workshops are organised by inviting key personnel from major funding bodies (e.g. ESRC, British Academy, Leverhulme, and EU) and networking events.

Environment template (REF5)

The BPU provides support to attract industry linked funding and initiate and sustain active engagement with non-academic users of our research to enhance its research impact. It acts as an intermediary and a centre of expertise to support the development in number and depth of links between ABS's research activity and public, commercial and third-stream sectors. In particular, the BPU has played a significant role in helping staff with KTP, KEEN, CASE awards and ERDF funding applications.

Investments in infrastructure

The university has supported research at ABS through the Vice Chancellor's Strategic Investment Fund (SIF), which led directly to the founding of ACRIB. The creation of this and the other Centres has enabled us to focus our research on our key research areas. It has also provided research staff and the infrastructure needed to deliver our challenging funding, publication and impact related targets. ABS funds 10 full PhD bursaries annually (discussed above), with an intention to increase this number in line with intended PhD student growth. There has been extensive refurbishment of the RDP suite for PhD students. AARM also has dedicated funds to allow all researchers to attend conferences, network for EU grant applications and seedcorn funds to support small-scale research, which may lead to external grant applications. Investment has been made in specialist support (e.g. a consultant to support the making of EU grants). ABS also invests significantly in firm-level data sources for research (e.g., ORBIS), totalling over £200K annually: the provision of the latest databases and datasets is a priority.

e. Collaboration or contribution to the discipline or research base

The development of collaborative networks and partnerships in the UK and abroad is an important dimension of ABS research. Equally important is the School's wider and proactive engagement with the end users of its research and its key subject disciplines through participation in advisory panels, professional associations, and other academic leadership, advisory and citizenship roles.

International collaboration:

Most staff in ABS pursue active collaborative relationships with researchers in other academic institutions and with partner organisations national and internationally.

For example, **Dey's** work on technology and business solutions in bio-engineering has led to major international and national collaborations, including: a Science Bridge project (£3M RCUK funding) within AIFAR in collaboration with Aston's School of Engineering and Applied Science and Indian Institute of Technology Delhi, 2009-2014; INTERREG NW project (£7M funding) in collaboration with European Bioenergy Research Institute, Birmingham City University and four other European Universities, 2010-2015; and the Bioenergy project plan development (£150K two ESRC case studentships) in collaboration with Enco Plc and Express Energy, 2010-2012.

An example of how international collaboration enriches the ABS research base is the use of the EU Marie Curie (Incoming Scholars) scheme to leverage support to allow the Aston research team in Innovation and Entrepreneurship to collaborate with one of the leading international scholars in the field (Prof Paul Reynolds, USA). This has the sole purpose of developing a UK Panel Study of Entrepreneurial Dynamics (PSED). This project will be the first of its kind in the UK and will lead to wider international collaboration in the EU; it will add significant value to the existing GEM UK research programme and is aligned with one of the research themes in the ERC at Aston.

Selective illustrations of individual international collaborations include: **Baines** - Singapore Institute of Manufacturing Technology, 2003-2010; **Budhwar** - Loyola University, Chicago since 2006. University of Missouri since 2008; MDI, India, 2006 – present; Griffiths University, Australia since 2008; University of Macedonia, Greece, 2006 – present; University of Texas, Dallas, 2007-2012; Rutgers University, New Jersey, 2009-present; California State University, Fullerton, 2010-present; **Dey** - British Council funded project in collaboration with University of Thai Chamber of Commerce, Thailand, 2009-2011; British Council funded project in collaboration with Dhaka University Bangladesh, 2010-2012; British Council funded projects in collaboration with Jadavpur University, India, 2012-2014 and 2013-2015; INTERREG EU funded project in collaboration with Fraunhofer University, Germany, 2011-2015; **Du** - Tianjin University, China, 2009; University of International Business Economics (UIEB), Beijing, 2009; Renmin University, China, 2011; Chinese Social

Environment template (REF5)

Science Academy 2010 to date; Stockholm School of Economics, Stockholm, Sweden 2013; Monash University, Australia 2011; **Evanschitzky** - Rice University, Texas, USA; Wharton School of the University of Pennsylvania, USA, 2008 to present; **Gong** - Kiel University, Germany, 2008; **Hart** – GEM Global research network involving ~70 national teams on average each year 2002-present with strategic connections to University of Utrecht and EIM (Netherlands) and the International Islamic University Chittagong (Bangladesh); **Lee** - University of Houston, Texas, USA, 2008 to present; Darden School, University of Virginia, USA and University of Alabama, USA (both 2011 to present); Penn State University, USA (2012 to present); **Martin** - Claremont Graduate University, USA, 2000 - present; Aristotle University, Greece, 1992-present; **Pillai** - Florida State University, USA, 2008 to present; **Saal** - DIW Berlin (The German Institute for Economic Research), Berlin, Germany, 2010-present; Kinki University, Osaka, Japan, 2013; Department of Economics and Management, Public University of Navarra, Pamplona, Spain, 2008; **Steeley** and **Chelley-Steeley** - University of Central Florida, USA and University of Cincinnati, USA, both 2008 – present.

Collaboration with other research providers and users

Significant examples of deeply-embedded links between ABS and research users include the following:

- ESRC Capacity Clusters Project ‘Engaging Research for Business Transformation’ ‘EREBUS’ - ESRC funded, £3M, across 3 Midlands universities and 42 sub-projects with 27 different non-university organisations, September 2008 – August 2013.
- The INDEX innovation vouchers project. This involved working with 12 other universities in the West Midlands and 672 SME companies. This led to **Scully**, the INDEX Project Manager, being seconded to innovation projects on Birmingham City Council (2009-2012), and led to an invitation to join the Southern Ireland Innovation Scheme Steering Group (Sligo).
- The work of ACRIB on inward investment. This led to an ESRC ‘follow-on’ award for **Driffield** working with Marketing Birmingham on the inward investment strategy for the Greater Birmingham and Solihull LEP (GBSLEP), and to his joining the Executive Steering Group for the GBSLEP. The team also authored “the future of inward investment” as part of the BIS foresight “future of manufacturing”, contributed to the Witty Review and to a Department for Transport project of infrastructure and international business.
- ERC strategic input into the business support strategy of the GBSLEP and Leeds City-Region LEP in 2013 (**Hart**) based on evaluation expertise and experience leading the Goldman Sachs *10,000 Small Businesses* Programme.

Chairing, membership of distinguished committees:

Budhwar, Council member of British Academy of Management (BAM) since 2011; Caucus Chair, Annual Academy of Management Conference, 2009; Chair of BAM Awards sub-committee, 2013; Founder and first President of Indian Academy of Management (2008-2011); Member of Scientific Committee for the Association of Business Schools; Member International Guide to Academic Journal Quality (June 2013 – present); **Butler**, Member, Executive Development Committee, Association of Business Schools, 2012 - present; International DBA Consortium, Association of MBAs, Member, 2012 - present; Chartered Management Institute (CMI)’s Practitioner Panel; Founding Member, CMI Faculty, Member, 2012 – present; **Decker**, Secretary of Association of Business Historians, UK, 2010-2012; **Du**, Research Scholar of Advanced Institute of Management (AIM), 2009; **Love**, Member of ESRC Research Committee, 2011 to present; Member of commissioning panel for ESRC Big Data Network Phase 2, (2013); **Saal**, Member of OFWAT’s Future Advisory Panel, 2011-2012; **Woods, M.**, Co-ordinator and Scientific Committee Member of European Risk Research Network (ERRN), 2011; Member of CIMA Risk Research Panel, 2008; Review committee member on management accounting guidelines on risk management for CIMA, 2008.

Environment template (REF5)

Service on international advisory boards relevant to research:

Budhwar, Advisor to Commonwealth Commission for Scholarships and Fellowships (2009-present); **Decker**, Economic History of Developing Countries, South Africa, 2009-present; **Love**, Independent Advisory Committee of the DFID-ESRC Growth Research Programme, 2012; Member, International Assessment Board of the Irish Research Council for Humanities and Social Sciences, 2011); Member, Expert Panel for evaluating the European Commission's *European Service Innovation Scoreboard* (2013); **Pillai**, Global Advisory Council, World Brand Congress, 2012 to present;

Honours and awards:

Six ABS Professors are Academicians of the Academy of Social Sciences (**Anyadike-Danes, Bailey, Budhwar, Driffield, Hart and Love**). Other honours include: **Budhwar**, Fellow of British Academy of Management, 2012; **Butler**, The TRANSFORMATION Project identified by the ESRC as a Good Practice Case Study in 2013; **Lee**, Joseph Lister Award, British Science Festival, 2010; **Pillai**, Brand Leadership Award, Asia Brand Congress, 2008.

Membership of Editorial boards:

Lee - European Journal of Marketing, 2008 to present (editor); **Budhwar** - Human Resource Management, 2011 - present (associate editor), British Journal of Management, 2007-2010 (senior associate editor); **Chelley-Steeley** - Journal of Banking and Finance, 2013 to present (associate editor); **Mickiewicz** and **Du** - Regional Studies (editors), June 2013; **Emrouznejad** - Annals of Operations Research, 2012 - present (editor); Data Envelopment Analysis Journal, 2011 - present (editor); Socio-Economic Planning Sciences, 2013 (associate editor); IMA Journal of Management Mathematics, 2011 - present (associate editor); EURO Journal on Decision Processes, 2012 - present (editorial board); International Journal of Productivity Management and Assessment Technologies, 2011 - present (editorial board); International Journal of Society Systems Science, 2008 - present (editorial board); International Journal of Applied Decision Sciences, 2008 - present (editorial board); **Evanschitzky** - Journal of Business Research, 2005 - present and Industrial Marketing Management, 2006 - present (editorial board); **Gong** - Management and Organization Review, 2013 - present (editorial board); **Rudd** - European Journal of Marketing, 2008 - present (editorial board); **Pillai** - Journal of Business Research, 2012 - present and Industrial Marketing Management, 2008 - present (editorial board); **Thanassoulis** - European Journal of Operational Research, 2010 - present (editorial board); **Driffield** - Journal of International Business Studies, 2010 - present (editorial review board); **Hart** - International Small Business Journal, 2009 - present (editorial review board); International Journal of Entrepreneurial Behaviour and Research, 2010 - present (editorial review board); International Journal of Gender and Entrepreneurship, 2009 - present (editorial board); **Joseph** - British Accounting Review, 2013 - present (joint editor) and 2009 - 2013 (associate editor); Decision Analytics, 2010 - present (associate editor); International Journal of Applied Decision Sciences, 2007 - present (associate editor); International Journal of Strategic Decision Sciences, 2008 - present (associate editor); Finance Letters, 2003-2009 (editorial board); Journal of International Business and Finance, 2007-2009 (editorial board); **Lowe** - British Accounting Review, 2012 (joint editor); **Martin** - European Review of Social Psychology, 2008 - present (editorial board); Group Processes and Intergroup Relations, 2006 - present (editorial board); **Dey** - International Journal of Energy Sector Management, 2007-2012 (founder and co-editor) and 2012 - present (chief editor); Journal of Advances in Management Research, 2011 - present (editorial board); Production Planning and Control, 2011, International Journal of Operations and Production Management, 2013, International Journal of Production Research, 2013 and International Journal of Production Economics, 2013 (special issue editor).

Major events hosted by ABS:

British Academy of Management (BAM) Annual Conference (2011); UK and Ireland Academy of International Business (UKAIB) Annual Conference (2013); 11th International Human Resource Management Conference (2010); GEM UK Research Conference (2009).