

Institution: University of Essex

Unit of Assessment: 19 – Business and Management Studies

a. Overview

Essex Business School (EBS) was formed in 2008 by a merger between the Department of Accounting, Finance and Management and the School of Entrepreneurship and Business. From 2014 EBS will be housed in a new, £21 million state-of-the-art building. This will be the first carbon neutral building of its kind in Europe, and will provide the necessary space and facilities for the continued growth of the School over the course of the next decade.

Over the course of the current assessment period, EBS research active staff have published over 350 refereed articles with 160 in journals ranked 3 or 4 in the latest ABS guide to journal quality. The doctoral programme has grown to 116, with 48 students funded by academic or industry scholarships and the School has an excellent track record of co-authoring with, and finding employment for, PhD students. EBS is supported by an Advisory Group comprising senior industry figures. The School has recently invested in a number of new appointments in order to build future research strength. Over a quarter of our staff are currently designated as early career researchers.

Much of the research conducted in EBS draws on a critical, social scientific tradition. The School's current research is currently arranged into three clusters.

- The **Accounting cluster** makes important theoretical contributions in the subfields of management accounting, economic development and regulation, particularly within emerging economies. This cluster is also at the forefront of advancing global critical accounting and governance research with a particular emphasis on the role of auditors and tax avoidance.
- The **Finance cluster** acts as a hub for empirical and theoretical research into behavioural finance, asset pricing, financial modelling and banking.
- The **Management cluster** specialises in research on organisational aesthetics, sustainability, new venture creation, social enterprise, and critical social and feminist inquiry. It also includes research activity with an explicitly applied focus, generating external income through industry collaborations.

b. Research strategy

This section summarises our achievements in relation to the strategic objectives outlined in our 2008 RAE submission. References to particular studies given in this section relate to outputs submitted in REF2. The section concludes with plans for continuing to realise our ambitions over the next five years.

Objective 1: Retain and support the distinctive nature of our research, focusing on real-world problems as well as curiosity driven, discipline-based research

This objective has been achieved across all three of our research clusters, supported by the strategic expansion of Category A staff and a growth in professional research support staff. The contributions of each cluster are summarised below, though our staff also work across disciplinary boundaries and clusters.

Accounting Research

The Accounting cluster employs rigorous critical analysis to accounting practices. It has made a distinctive contribution to understanding specific problems of accounting in corporate social responsibility and regulation; accounting and development in emerging economies; and public sector performance measurement. To support these agendas, the Accounting Research Group at EBS engages with leading industry and academic figures through a regular programme of seminars including the Director of the UK Serious Fraud Office, editors and reviewers of leading accounting journals, and representatives from funding agencies. The Group's work is in three main subfields.

Corporate social responsibility and regulation: Research in this area studies interactions between regulation - be it from the stock market, the profession or the law - and accounting and accountancy. This encompasses the specific topics of financial accounting, capital market based accounting, corporate governance and auditing. Our research in corporate social responsibility is a foundational aspect of the Accounting clusters' distinctive contribution to EBS research and very much rooted in real-world problems. For example, Sikka's work (2009, 2011) has highlighted the role of auditors in the global financial crisis, and demonstrated the severe consequences of recent development in globalisation for wider society, particularly in relation to tax avoidance. Uddin's (2008) work has also shown the impact of globalisation on accounting practices and economic wellbeing, specifically, how the diffusion of Anglo-American corporate governance models impacts on the failure of corporate social practices worldwide and especially in emerging economies.

Accounting and Development: Research in this area has made significant theoretical and empirical advances in understanding the role local accounting practices play in the economic development of transitional and emerging economies. In particular, EBS accounting researchers have questioned the direct importation of Western centric accounting knowledge to these contexts, elucidating how accounting, as value-machine and/or actor, circulates and translates monetary values across institutional settings. For example, Uddin et al's (2009) article defined the scope of the field, setting an agenda for future research in accounting and development. Adhikari (2011) highlighted the changing attitude of international organisations leading developing nations (e.g. Nepal) to focus on improving their own accounting standards and Jayasinghe (2009) was one of the first to document the influence of Hindu and Buddhist faiths on perceptions of accountability. Intellectually, these studies have opened up new spaces for accounting research using interdisciplinary theory, for example concepts from the Arts to consider accounting as an aural as well as a figurative practice (Frandsen et al. 2010). Rethinking the discipline in this way is needed given concern over failings of accounting and accountability since the financial crisis.

Public sector and Performance Measurement: The work of this Group addresses management accounting practices, accounting information systems and performance measurement and management in the UK public sector and internationally. Specifically, our research on the public sector has demonstrated that the failure of many UK government public private partnership (PPP) contracts was due to a lack of accountability mechanisms, e.g. Khadaroo's (2012) research reported empirical evidence that challenged assumptions about risk diffusion and due diligence in PPPs. Guven-Uslu's (2012) research in this field questioned the effectiveness of performance measurement systems in NHS, revealing a number of unintended consequences including conflict and crisis. Further studies in performance measurement in the private sector have established the particular role management accounting practices play in product development innovation, complicating the formulation of performance measurement strategies in dynamic environments (e.g. Malagueno de Santana 2009, 2012).

Finance Research

The Finance Group's research has made distinctive contributions in a number of different subfields described below.

Banking: Research in this subfield focuses on the performance of the banking sector related, in particular, to bank securitisation and efficiency. These topics are extremely relevant to policy discussions about the integration of the European financial services industry since the financial crisis. For example, Sarkisyan's (2013) research shows that in contrast to theoretical predictions, banks engaging in securitisation would have had comparable performance had they not securitised. This suggests that the securitisation model used by banks in the run up to the crisis not only led to an increase in systemic risk, but also undermined the potential bank-level benefits offered by the technique. In other important work, Girardone (2013) shows a country's economic and financial freedom are crucial for an efficient banking sector.

Theoretical and financial econometrics: Work in this area concentrates on both the theoretical foundations of econometrics and applied empirical financial research. In a theoretical context, time series work by Taylor (2012) established a consistent bootstrap implementation of the popular likelihood ratio (LR) co-integration rank test and associated sequential rank determination procedure. The simulation evidence reported suggests that bootstrap procedures work extremely

well in practice. In a more applied vein, our financial econometricians have applied analogous techniques to both modelling and forecasting financial data. For example, Valente (2013) investigated the out-of-sample predictability of bond excess returns, showing that the information content of forward rates does not generate systematic economic value to investors and that such models do not outperform the standard no-predictability benchmark.

Behavioural and corporate finance: The work in this subfield has confirmed that there are short run departures from market efficiency across the spectrum of financial markets. In corporate finance, Coakley and Wood (2009) uncovered new underpricing anomalies in the new (equity) issues market where companies leave large amounts of money ‘on the table’. Specifically, they found that the combination of venture capitalists and prestigious underwriters in the UK market was strongly associated with the highest underpricing witnessed during the 1998–2000 high tech bubble period. Within behavioural finance, Coakley and Wood (2013) uncovered a novel seasonal stock market anomaly called the ‘School’s Out’ effect in family oriented economies in East Asia and Mediterranean Europe. As investors are distracted by child care duties during the Summer school vacations, so market turnover and returns are lowered.

Asset Pricing and International Finance: The work in this area examines techniques both to improve the pricing of financial assets and to identify how risk is currently priced empirically. For example, Liu (2011) applied the meshfree Radial Basis Function interpolation to numerically approximate zero-coupon bond prices and survival probabilities in order to price Credit Default Swap contracts. Several numerical experiments show the new approach achieves more accurate and computationally efficient results. Within international finance, Kellard’s (2010) research established the frequency of data used for measuring volatility is important for the results of market efficiency tests. This means that for many popular exchange rates, the use of intra-day data suggests the existence of risk premia in option prices.

Management Research

The activities of this cluster span a wide range of research including organisational aesthetics, sustainability, new venture creation and growth, internationalisation, and critical and feminist methodology. The Management cluster has an international reputation for making a distinctive contribution to understanding contemporary developments in management and organisational theory and practice. It publishes its research in high quality academic and practitioner outlets, and disseminates its work at both UK and overseas conferences and symposia.

Organisational aesthetics: This continues to be a distinctive element of Management research within the cluster (Biehl-Missal, De Cock, Hancock, Land, Johannson, Shukaitis, Tyler, Warren). Specifically, through the study of unusual labour relations and non-typical workplace contexts, Essex management research contributes specifically to an understanding of contemporary organisations and new workplace practices. For example, Hancock’s (2013) investigation of labour processes in the production of Christmas drew attention to increasing requirements for emotional and performative labour, while Tyler’s (2011, 2012) research in London’s Soho district has contributed the hitherto unheard voices of those who work in sex-shops to the debate about the licensing of such premises. Similarly, Land’s (2010) research on the creative industries has enriched our understanding of how self-management in knowledge work is experienced by individuals and what the consequences are for work-life balance and increasing organisational demands on workers’ identities. Johannson’s research on festivals management (2011) is among the first of its kind to apply a consumption-led perspective to understanding this growing and lucrative sector of the economy along with Duffy’s (2013) research on the labour and economy of the ‘vintage’ movement which defines this emerging field of study.

Sustainability: Another central concern of research undertaken within the cluster is that of environmental and business sustainability. An important strand of this former area has developed a critique of the operation of carbon markets. Böhm and Moog (2012) show how such markets do not lead to improved environmental outcomes. Their current work investigates how best to exploit local, efficient food supply chains and raise consumption of locally produced food, reducing ‘food miles’ and boosting regional development – issues which are at the forefront of food security concerns. Meanwhile, research in business sustainability has addressed product/ policy innovation. Work by Sena (2013) found firms are reluctant to enter the patenting system in the UK for financial

reasons which has a negative impact on the diffusion of knowledge and reduces innovation rates for the economy as a whole. The importance of structure and governance processes as a determinant of innovation networks' performance across the EU was also established by Fernández De Arroyabe (2012).

New venture creation and growth: Research in this field includes social enterprise (Tasavori); marketing and business development (Eng, Kwong, Poulis, Yang); and female and international entrepreneurship (Kwong, Sena). For example, Sena (2010) identified different borrowing patterns between men and women. The results showed that women are less likely than men to seek external finance and that gender differences in access to finance adversely affect the transition into self-employment. Kwong's (2012) research established a firm link between social agendas and higher managerial and organisational skills development by evaluating the effectiveness of social business plan (SBP) teaching in inducing social and civic awareness and intentionality amongst business school students.

Critical and feminist studies: This strand of work includes various theoretical and empirical developments. Examples include Riach's (2009a, 2009b, 2011) work on age discrimination in the labour market, which found that stereotyped perceptions of older workers are inaccurate and that age does not determine a person's commitment and productivity levels. In a study of HRM professionals, Warren (2012) showed how performance management discourses are used to legitimate manager-to-employee bullying, a theme also picked up in Hoedemaekers (2010) work which cements the importance of language in these processes. Tyler (2008) showed how discriminatory attitudes are amplified in popular culture. Her subsequent research on gendered labour (2010) demonstrated the importance of the physical environment on how employees construct their identities at work in ways that reinforce traditional gender norms and ultimately perpetuate inequality.

Internationalisation: Management research in this area addresses international business networks and inter-firm collaboration; the role of emerging market multinational corporations in poverty reduction; small firm internationalisation; autonomy and embeddedness of subsidiaries of MNC's; innovation and networking in international business; and labour migration. Examples of significant contributions include Eng's (2009) work, which established the significance of capability upgrading and inter-firm business networks in the business transformation processes of manufacturing firms in China and Hong Kong. Sena's (2008) research across 20 Italian regions found that programmes of investments in public capital should be accompanied by additional policy measures that can remove the structural factors that hamper the total factor productivity growth in specific areas. Sliwa and Johannson's (2013a, 2013b) work on professional migrant workers was the first to question how meritocratic principles in organisations contribute to the reproduction of organisational inequalities and to the perpetuation of extant power relations within organisations, particularly in relation to gender.

Objective 2: Produce research that has discernable impact beyond academia

We consider engagement with user communities to be a cornerstone of research excellence in Business and Management. As detailed further in REF3a, we have variously facilitated non-academic impact through collaborations with user communities at the design, execution and dissemination stages of our research. The **research design** of a number of our projects has been directly influenced through co-author research with leading industry figures, collaborations that have in turn arisen from joint participation in seminars and conferences. This approach has been especially successful in the Finance cluster. Collaborations include the Bank of England, and the Bank of Japan where two Bank of Japan discussion papers have been co-authored with officials there. EBS Finance researchers have been invited to visit and work with HSBC on forecasting risk; the European Central Bank on mispricing in equity markets; and with the Hong Kong Monetary Authority and Federal Reserve Bank of St Louis. In addition to guiding policy, the latter of these collaborations has resulted in high quality academic publications co-authored with Federal Reserve of St Louis bank staff (e.g. Valente 2012).

Our collaborative projects have also embedded impact into **research execution**. Examples include Johannson's evaluation of festivals for the Swedish Cultural Foundation (SCF), which provides current data to support SCF's future investment decisions as well as academic findings on

consumer culture and festival-goers (Johansson 2011). Land and Böhm's action research helped arts collective 'Cuckoo Farm Studios' to re-engineer their business processes during the data collection process; Tyler's work which has informed Westminster Council's licensing of sex-shops in Soho (Tyler 2011, 2012); and Jayasinghe's investigation of regional micro-finance which helped Colchester Credit Union make fuller use of their accounting software systems, as well as providing data for future academic outputs. Further collaborative developments include work with Central Essex Community Services, on patient frailty trails and systems re-engineering, the National Intensive Care Health Research Centre. All of these are ongoing action research relationships.

With regard to **dissemination**, a strategy of open-access publishing has been successful in engaging practitioners through widespread free-to-access dissemination of EBS research through the University's online institutional repository, and the activities of EBS researchers. For example, Shukaitis's research on collective organisation and modes of resistance and Böhm's work on the operation of carbon markets (disseminated under creative commons licenced open-access publishers) have been taken up by NGO and third-sector users especially. An even more activist approach to dissemination and impact is taken by members of the Accounting cluster, who have pursued a long-term strategy of activism and lobbying in order to influence policy and wider public debate. Most notable is Sikka's work on auditing and tax avoidance which feeds into the national media <http://www.guardian.co.uk/profile/premsikka> and which has resulted in requests to give evidence to House of Commons Select Committee. Sikka's research also supports the practitioner-focused Association for Accountancy and Business Affairs, and the influential pressure group 'Tax Justice Network'.

Objective 3: Maximise 4* rated publications as an indicator of research excellence

Of the outputs submitted to REF2014 almost a quarter appear in 4-ranked journals according to the most recent ABS guide to journal quality, which is almost double the number achieved in the RAE2008 period. These cover a broad spectrum of Business and Management disciplines, representing the diverse range of research expertise among EBS staff members. Mentoring, peer-review and a programme of co-authorship between senior colleagues and early career researchers have helped realise this aim. Papers written by early career and other junior scholars appear in a variety of ABS 4-ranked journals including *Journal of Management Studies* (Biehl-Missal); *Journal of Money, Credit and Banking* (Sarkisyan); *Organization Studies* (Hoedemaekers, Moog); *Sociology of Health and Illness* (Carmel). At the same time, EBS has also invested in the development of existing senior researchers and made further appointments of Professorial staff with demonstrable research excellence. Their papers have been published in *Accounting, Organizations and Society* (Sikka); *Econometrica* (Taylor); *Environment and Planning A* (Böhm); *Human Relations* (Tyler); *Organization Studies* (Hancock, Riach, Tyler); *Review of Financial Studies* (Valente); *Review of Economics and Statistics* (Kellard); *Strategic Management Journal* (Wood); and *Work, Employment and Society* (Hancock, Tyler).

Objective 4: Increase the number of externally funded research projects

External funding is a key benchmark of research excellence within the EBS research strategy. In the current REF period, over 25% of School research funds have been dedicated to supporting external funding applications, through small grants to researchers for pilot projects and an incentive scheme for staff writing and submitting bids. The number of applications rose threefold after the introduction of these schemes, with over half Category A staff submitting bids in 2008/09 (n=31) levelling off to around a third in 2011/12 (n=19). The conversion rate of bids to awards has averaged 14% since 2008 which is commensurate with the current success rate reported by the ESRC of 14% (*Vital Statistics* 2011/12 pp. 22). In addition to increasing bidding activity through the incentive scheme, strategic appointments have been made to increase expertise in winning external funding, at both early career and senior level. Sarkisyan, appointed to a lecturer position, was awarded a highly competitive and prestigious European Central Bank Lamfalussy Fellowship in 2010. Valente, a professorial appointment, was co-investigator on a 2009 research grant on Algorithmic Trading from the Agencie Nationale de la Recherche. Also appointed as Professor in 2010, Warren brought with her an ESRC 'Researcher Development Initiative' Grant, placing EBS at the centre of a national consortium of business schools. Most recently, Taylor took up a Professorial appointment within the School in 2013 and is Principal Investigator on a substantial

grant from the Danish Council for Independent Research.

Summary of strategic objectives for the next 5 years (2014-2019)

1. Continue to be internationally recognised for cutting edge and critical research that both advances theory in academic disciplines and has relevance for practice.

Action plan: Each research cluster has identified strategic priorities centring on the following questions:

Accounting: To what extent can existing understandings of Corporate Governance be used to understand emerging economies, particularly in relation to the operation of global firms?

Finance: Econometrics – How can the use of high frequency data, time-series and computationally intensive methods be further exploited to explore the linkages between short-interval trading and longer term financial market effects?

Management: How can the twin agendas of environmental issues and food security effectively be addressed through sustainable business practices?

These strategic priorities will be achieved by maintaining support for all Category A staff through workload allocation, mentoring and financial support commensurate with a major research intensive business school. We will continue to make strategic appointments in the above areas, and a new 'Impact Strategy' will be implemented to underpin the School's influence on industry and policy debates (see REF3a).

Monitoring: high quality publications, journal editorships and other international esteem indicators, engagement with industrial partners locally and internationally.

2. Continue to improve performance in securing external research funding, particularly through larger, multi-disciplinary applications.

Action plan: The research strategy for the School will be renewed, emphasising the need for a more structured, interdisciplinary, and problem-based approach to funding applications. This will take place alongside the development of new mechanisms to strengthen EBS's capacity to act in a responsive manner to industry and professional body tenders.

We will target funding applications towards the above strategic priorities, and towards UK and EU research council priorities. This will involve realigning the current incentive scheme for staff; providing time allowance in the School workload model to support the writing of bids; and embedding the requirement to apply for funding into the research leave applications of senior staff. Stringent internal peer review of applications in the light of funding bodies' requests for institutional demand management will continue to apply.

Monitoring: regular update on external funding application numbers and success rates.

3. Continue strategic growth of the School's research portfolio by consolidating and developing new Research Centres into Centres of Excellence around areas of research prioritised for expansion. As noted above, these include Sustainability, Corporate Governance, and Econometrics.

Action plan: EBS will continue to recruit entry level academic staff across its research clusters, supplementing this with senior staff in those areas highlighted for strategic growth above. Where possible, teams of staff will be appointed with existing expertise to develop doctoral cohorts and research projects in specialist areas. The numbers of Visiting Fellows will also be increased to add expertise and flexibility to the School's staffing and this objective will also be supported by success in securing major research grants as outlined above.

Monitoring: indicators of research success in new areas (publications, esteem recognition, research grants, PhD registrations)

c. People, including:

i. Staffing strategy and staff development

EBS' staffing strategy is to appoint research active staff whenever possible, with a large majority of new appointments being appointed as Category A. A **rigorous selection and appointment** process ensures only staff with excellent research track records appropriate to their career stage are offered positions, whilst recognising strong research potential in early career candidates. Since 2008, there has been an emphasis on **recruiting early career researchers** (ECRs n=27) which provides a firm foundation for our research culture. EBS doctoral students have been successful in obtaining three of these positions. Senior appointments have also been made to expand capacity in School management, thereby reducing the burden on junior staff at the beginning of their careers. All probationary staff members receive a reduced workload allowance, including time to attain Fellowship of the Higher Education Academy through an accredited in-house professional development course. Ensuring **diversity** is central to our staffing strategy, 40% of EBS staff are female, with women comprising 39% of senior positions, and 35% of the Professoriate; 36% of EBS staff are from ethnic minorities,

Investment in research leadership has also been made, with 7 appointments at Senior Lecturer /Reader and 8 at Professorial level (DeCock, Eng, Hancock, Lamla, Sena, Taylor, Tyler, Valente, Warren). Existing staff have also been successful in securing internal promotions to Reader and Professorial level (Böhm, Girardone, Kellard, Khadaroo, Riach, Wood). This helps to ensure EBS remains a 'research-led' school in all its activities. There is strong expectation that all research staff will produce a substantial body work of at least 3* quality and this is supported by an emphasis on research-led education and high quality PhD supervision. All of this supports the retention of staff. The high level of staff retention in the lead-up to this REF assessment is testament to the research culture and levels of staff commitment engendered by the School. We expect to expand staff numbers further from Spring 2014, when we relocate to the new building that will house EBS. We will make strategic appointments to consolidate growth areas and research teams as appropriate.

A related staffing policy has been to **build capacity** through increasing the numbers of *visiting professors* and *research fellows* (currently 10) affiliated to the School. This is intended to enable greater collaboration between EBS staff and visitors, especially in relation to the development of ECRs. EBS has put several mechanisms in place to support early career staff successfully to complete probationary periods. These include mentoring from senior staff (including collaboration on article writing); a period of research leave one term early; prioritising applications to the Research Committee Awards scheme from ECRs; and giving precedence to probationers when allocating funding for research training (e.g. attendance at the Essex Summer School) and conference attendance. As noted in relation to the Essex Finance Centre, EBS has an excellent record of working with PhD students as collaborators on research projects and outputs (see below) to maximise their chances of gaining an academic appointment at or before completion of their doctoral studies, either at EBS or elsewhere.

Development for non-probationary staff is managed through an **annual appraisal and a twice-yearly research performance monitoring** scheme. The University Learning and Development Centre provides comprehensive training on all aspects of research careers and soft skills (such as time-management and leadership), and EBS staff can attend as many as they wish. For development activities outside the University, staff are eligible to apply either to their Head of Centre for funding or to the EBS Research Committee Awards scheme (detailed in section (d) below). This is in addition to their individual 'purse' account which they are free to spend on individually determined research-related expenditure. New starters automatically receive a 'landing allowance' double that of the annual allocation.

Support for equality and diversity: The University of Essex has a very clear policy supporting equality and diversity in relation to both staff and students. Specific objectives are set each year and an annual report is produced indicating achievements against objectives. The University facilitates flexible working; has a set of harassment advisers; and trains all staff involved in making appointments in equality and diversity issues. It has carried out a project on 'Caring for Carers' that has developed recommendations to support staff caring for others. It recently secured an Athena

Environment template (REF5)

Swan Bronze award for its work in eliminating gender bias and creating a culture that values all staff across the whole University. It also has accreditation for the use of the 'Two Ticks' disability symbol. Mentors and those carrying out appraisals within EBS help to ensure that those whose research is interrupted for maternity leave or any other reason are fully supported in their return to research activity.

ii. Research students

The EBS doctoral programme has **grown significantly since 2008**, with 116 students now registered for full time study and 14 part-time registrations at the time of writing. 48 students are on fully funded scholarships from the School or University (20), their home governments (26), or their employer (2). The remainder (68) are self-financed. In 2012, the Collaborative PhD scheme was launched where students are jointly funded by the School and an industry partner – and we currently have 2 enrolments on this programme.

Our doctoral community is vibrant and thriving, with PhD students involved in the day-to-day life of the department through **attendance and presentations at research seminars** and the School Research Conference (e.g. in the Accounting cluster, on average 10 presentations a year are by doctoral students. When EBS relocates to its new building in 2014, PhD students will have their own dedicated research suite including a trading lab for those undertaking studies in Finance. Around half our PhD students benefit from career development as Graduate Teaching Assistants and Research Assistants, where appropriate and desirable. Students are specifically integrated into the research success of the School through routine **co-authorship of conference papers and journal articles** with their supervisors and 5 outputs submitted to REF2014 have been co-authored in this way, including Coakley, Manson and Petrovic (2009). The approach also ensures PhD students are well placed to secure academic appointments on or before completion of their studies, e.g. Petrovic is now a Lecturer at the University of Bristol.

In 2010, the University of Essex Faculty of Social Sciences (of which EBS is part) was awarded '**Doctoral Training Centre**' status by the ESRC. Whilst this has brought opportunities to develop advanced 'Level 8' training across the doctoral curriculum, it has also posed a challenge for EBS given the ESRC's imposition of a 'strategic steer' that studentships awarded to Essex should be allocated to quantitative PhD projects ahead of qualitative research designs. With the exception of the Finance group, EBS has a tradition of critical qualitative research (especially in the Management and Accounting disciplines). Nonetheless, EBS has received at least one ESRC scholarship student each year since achieving DTC status. Competition for the School's own PhD scholarships remains fierce, with 50 applicants for 4 places in the last round of funding (2012-13).

The introduction of the **Integrated PhD pathway**, which includes a taught first year similar to an MRes programme, has allowed us to admit students who might not otherwise meet the requirements for PhD study on arrival at the University. This has produced a very successful feeder programme, with 95% of students continuing to the independent research stage at the end of the taught first year. Modules on this taught programme are open to all PhD students regardless of their study stage, with all students completing a 'training needs plan' each year. All research active staff are involved in PhD supervision, and at least 14 REF-returned staff contribute to doctoral training modules and events within the School and across the University. The University's Research and Enterprise Office offers additional distinct services to doctoral students, including a postgraduate consultancy service allowing students to gain or extend engagement with employers, a business incubation hub and advice on securing start-up funding and on patents.

Students also have access to a **training budget** of up to £1,000, which they are encouraged to use for conference attendance, completion of external courses and other development activities throughout their studies. Attendance at the prestigious Essex Summer School (normally c. £2,000 per course) is free for EBS PhD students. This is in addition to the programme of 'Proficio' training events run centrally by the Graduate School.

d. Income, infrastructure and facilities

Over the current REF period, around 40% of EBS researchers have been supported by **external funding** enabling the employment of 26 research assistants over the relevant period. This is a substantial achievement for a School established only 5 years ago, and with 26% of its staff categorised as early career academics. Our research is funded through diverse income streams including research councils; learned societies; third-sector; government; regional and international industry. Major funders include *Agence Nationale de la Recherche (ANR)*; *Age UK*; *Central Essex Community Services*; *Chartered Institute of Management Accountants (CIMA)*; *Department of Business, Innovation and Skills (BIS)*; *Danish Council for Independent Research*; *East of England Co-operative Society*; *ESRC*; *European Central Bank*; *European Regional Development Fund*; *FirstSite*; *Greenlight Trust*; *HSBC*; *Institute of Chartered Accountants of Scotland (ICAS)*; *National Institute for Health Research (NIHR)*; and *The British Academy*.

Members of the School have also been successful in obtaining **funding to enable positions as Visiting Academics** at overseas institutions (DeCock, Kellard, Malagueno de Santana, Riach, Sliwa, Taylor, Uddin, Valente, Warren) in countries including universities in Adelaide, Canberra, Melbourne, and Sydney (Australia); Chittagong (Bangladesh); Copenhagen (Denmark); Grenoble (France); Lahore (Pakistan); Lund (Sweden); Madrid (Spain); New York, Nebraska, Tennessee, and Yale (United States).

EBS and the University as a whole have **invested heavily in supporting research excellence**. The Albert Sloman Library holds a sizeable collection of around 66,200 printed volumes, provides 5,800 online journals and around 14,100 e-books in business, management, finance and related subjects, supported by qualified librarians with many years experience in assisting EBS students and staff in making the best use of these resources. In addition to database resources such as JSTOR, ScienceDirect, Emerald, Datastream and FT.Com, EBS has access to specialist databases, including Thomson ONE, PI Navigator, Morning Star, Bankscope and Compustat/CRSP (via WRDS), which play a key role in facilitating research at postgraduate level and beyond.

The School spends over a third of its total operating budget on research. From 2014, **relocating to the new building** will provide purpose-built academic space conducive to research, including individual offices, collaborative work-space for each research cluster, working space for international academic visitors, and conferencing facilities for local organisations to maximise opportunities for research collaboration. The new building is also adjacent to the 'Knowledge Gateway', a development of office and R&D space for knowledge-intensive firms with immediate access to the School's research and business development activities and offering great potential for cross-fertilisation of ideas, impact, income generation and excellent research outputs for the School.

The Pro-Vice-Chancellor (Research) chairs the University's Research Committee (RC) which has oversight of research across the University. For its own research-support purposes each Department receives: (1) a fraction of the HEFCE QR income it earns; (2) a share of a cross-University 'Research Promotion Fund' (RPF); and (3) approximately half of the indirect-cost component of research grants won, with a further 10% going directly to the principal investigator. In addition, for academics who succeed in winning external research funding for a proportion of their salary, there is a scheme which returns a maximum of 30% of the funded salary to departments as an additional resource allocation to provide for teaching and administrative buy-out of the academic.

The RC engages with the departmental research committees, monitoring research grant activity and the strategic deployment of centrally provided resources. In EBS, this is the **School Research Committee**, which includes formal representation from across the School and across the researcher life-course, led by the School Research Director. The Committee oversees an annual one-day EBS internal conference where staff and students present work-in-progress and **allocates funding** for the following priorities in line with the EBS Research Strategy:

- pump-priming projects intended to lead to external grant applications;
- incentive payments to staff involved in writing large funding bids;

Environment template (REF5)

- the purchase of data sets and/or financial support for empirical data collection on which to base excellent quality publications;
- activities intended to maximise engagement with business, government, professional bodies and other non-academic stakeholders; and
- researcher staff development.

Category A and C staff are also allocated an **individual research account** for conference attendance and personal research support (totalling around £70k per annum across the School) and the School has a dedicated Research Administrator to support effective research management at 1.0 FTE. All research active staff are released from teaching and administration duties for one third of their contracted hours, to allow them to focus on research activity. This is monitored through an annual submission and assessment of individuals' research plans and progress by the Committee.

The University operates a **generous research leave scheme** (one term of leave for 6 terms' service) which supports the sustained activity necessary for research excellence and enables international collaboration which might otherwise be precluded by other commitments. All staff, regardless of contracted hours or seniority, are expected to take up study leave as it falls due, but probationary and/or early career staff are invited to apply one term earlier than standard, in order to support their development and maximise their ability to secure permanency.

The Head of Group of each research Cluster holds a budget of on average, £10,000 p.a. to support the vibrancy of their research cultures through their programmes of seminars, academic and industry visitors, and investment in high quality hardware, software and databases. For example, investment has been made in datasets from WRDS, DataStream, Bankscope and high-frequency data from Olsen Associates. In 2011, £26,500 was invested in a high-powered multicore server running under Linux and containing Matlab, Oxmetrics, GAUSS, Stata and RATS.

e. Collaboration or contribution to the discipline or research base

EBS researchers contribute to the intellectual infrastructure of the Business and Management discipline through the development of local initiatives; involvement at the highest scholarly level in editorial work, keynote and plenary speeches; and national and international cross-institutional collaboration. Much of our work is interdisciplinary and major strands include work with computer science (Constantino); cultural and theological studies (Hancock, Jayasinghe, Land, Shukaitis, Uddin); economics (Girardone, Taylor, Wood, Kellard); political science (Moog); psychoanalysis (Batta, Hoedemaekers); sociology (Hancock, Land, Riach, Tyler, Wood); and the arts (Biehl-Missal, Frandsen, Hancock, Höpfl, Shukaitis, Tyler, Warren). Examples of collaborative activity that has contributed to the disciplinary research base across the three research clusters include

- The influential 'Association for Accountancy and Business Affairs' is the UK's only independent voice on these matters, informed by academic research. It is co-run within the accounting cluster, in collaboration with colleagues from parliament, Cardiff University, Queen Mary University of London and University of Strathclyde (Sikka).
- The 4th Critical Finance Studies Conference was organised and hosted by EBS in 2012, attended by academics and practitioners from 39 countries. The conference was a response to the aftermath of the financial crisis and so far this event has led to a knowledge exchange project to develop research-led teaching materials with the New Economics Foundation (Frandsen).
- Ongoing relationships with the University of Sydney, Australia have led to edited journal special issues, conference streams and co-authored research outputs (Hancock, DeCock, Riach and Tyler)
- *inVisio*: the International Network for Visual Studies in Organisations is hosted within the management cluster and involves collaboration between 5 UK universities (Royal Holloway London, Bath, Manchester, Surrey, UWE, Keele) and one US institution (Rochester Institute of Technology). *inVisio* has attracted 2 ESRC grants, run 8 one-day seminars, a 2-day conference, supports a network of over 400 scholars worldwide, an online researcher

development resource and has published a Routledge Companion of 25 edited papers in the current REF period (Warren).

- Since 2008 EBS staff have guest edited 27 academic journal special issues (including *Accounting, Auditing and Accountability Journal*, *Journal of Consumer Culture*, *Economic Theory*, *Journal of Econometrics*, *Organization Studies and Organization*) and edited 17 books.

Cross-institutional and international collaboration is at the heart of EBS research activity. Collaboration is encouraged through a comprehensive system of financial support to enable colleagues to attend conferences where they are presenting papers, to maximise networking opportunities. 70% of the outputs submitted to this REF exercise are co-authored with external collaborators and half of these involve co-authors from overseas, extending EBS' reach and reputation worldwide including.

In particular, EBS plays a key role in the following interdisciplinary areas:

Protecting the environment and promoting a sustainable future. Böhm, a management cluster Professor founded and currently directs the *Essex Sustainability Institute* (ESI) which brings together world-leading, impact-focused research on all aspects of sustainability science being undertaken across the University of Essex. EBS has a specific input into the 'food and wellbeing' and 'environmental governance' nodes e.g., work on carbon accounting and local food production (Böhm, Moog). These nodes of ESI currently run 8 research projects, supported by 3 external grants (British Academy, ESRC, East of England Cooperative Society), 2 research assistants and 7 PhD students, 2 of whom are co-funded by industry sponsors.

Monitoring and promoting human rights and democracy. EBS staff are involved with 'The Essex Business and Human Rights Project' (HBR). For example, in 2011, Bohm, Kellard and Uddin worked on a project assessing the equity and impact of long-lease agricultural land rentals in Sierra Leone by multinationals.

Investigating the aesthetic and artistic dimension of organisational life. Management and Accounting cluster researchers within EBS have been instrumental in leading the development of this emerging field (Biehl-Missal, Frandsen, Hancock, Höpfl, Johanssen, Tyler, Warren), including establishing the first international 'Art of Management' conference and associated journal *Aesthesis*, which drew together artists, architects, and practitioners from the performing arts. Since 2008, EBS has graduated three practising artists as PhDs.

Journal editorships held by EBS researchers during the current assessment period include *Journal of Accounting in Emerging Economies* (Uddin: Editor), *International Journal of Work, Organization and Emotion* (Hancock, Tyler: Editors), *Journal of Time Series Analysis* (Taylor: Editor), and *Organizational Aesthetics* (Biehl-Missal: Co-editor), with a further six associate editorship positions held across the School. Journal editorship attracts an allowance in the School workload allocation model, recognising the extensive labour that goes into these vital activities.

Virtually all our research active staff **review for journals** across the range of business and management disciplines, and we are well represented on journal **Editorial Boards** for a school of our size. During the period under review, EBS staff have served as Chairs or on boards of pivotal disciplinary associations and scholarly networks including the ABS Research Committee (Warren), Commonwealth Commission UK (Uddin), Chevening Scholarship Commission (Uddin), ESRC Peer Review College (Riach, Warren), the board of the Standing Conference on Organizational Symbolism (Riach, Warren), Chair of the British Accounting and Finance Association special-interest group Accounting and Finance in Emerging Economies (Uddin). School research funds are used to support attendance at associations' board meetings to encourage staff to take up such positions which place EBS firmly at the centre of disciplinary and professional agenda-setting. Well **over 350 seminars** have been given by EBS researchers at UK and international Universities including keynote speeches by Uddin: *2nd African Accounting and Finance Association* (2013), *8th International Conference Accounting and Management Information Systems* (2013), and Warren: *Ethnography* (2011) and *10th International Conference on Organizational Discourse* (2012).