

Institution: University of Dundee

Unit of Assessment: UoA19 Business and Management

a. Overview

The UoA draws from staff based in the School of Business, created in August 2010 as a strategic University initiative, through the merger of Accounting & Finance and Economic Studies and the Graduate School of Natural Resources Law, Policy and Management, a separate constituent member of the College of Arts and Social Sciences. The submission reflects the growing extent of collaboration between these two schools and interdisciplinary research and teaching within the University's 'business and management' provision broadly conceived. Three disciplinary areas of strength: accounting & finance, economic studies, and management are represented.

Research within accounting & finance remains similar to that submitted to RAE2008 (UoA35) encompassing three foci, with some individuals being members of more than one research grouping. These are *interdisciplinary and critical studies*, now extended to incorporate management; *financial accounting and reporting*; and *finance and corporate governance*. In economic studies, research continues to be organised around two broad themes: *globalisation, competitiveness and wellbeing*; and *inequalities, poverty and variations in health and health care*, previously submitted to UoA34. In addition there is growing expertise in energy economics. Management research forms a growing part of activity of both the School of Business and the Graduate School, encompassing two broad themes: *people and organisations*, and *the management of environmental resources*.

b. Research strategy

Throughout the period of assessment the constituent parts of UoA19 have been focused on pursuing research excellence in key areas of strength. The growing interdisciplinary nature of continuing research endeavours was recognised to be a major strength within the University. This informed a strategic initiative to create and grow a new School of Business in 2010, bringing together accounting & finance, economic studies and management, and to extend the scope of the Graduate School to encompass business and management, energy economics and the management of environmental resources. Further interdisciplinary leverage has subsequently been accomplished through closer day-to-day proximity and a focus on recruiting staff with backgrounds and interests allied to this strategic intent, especially in securing research funding. Recent appointments within the UoA covering both schools have been premised on continued collaborations of an interdisciplinary nature, in both research and teaching. Future recruitment strategy remains focused on securing new high quality research-oriented staff who demonstrate both *rigour* and *relevance*. Appointees will enjoy a workload management model that has been developed to provide proven researchers with the means to further enhance their research accomplishments in the coming years. This model will be subject to continued refinement in line with the University's broader research strategy.

Careful consideration has been given to promoting existing research foci and emphases whilst at the same time avoiding being overly prescriptive regarding individuals' evolving research interests. The strategic aim here is to further grow a culture of excellence among staff at all levels of seniority who continue to drive forward both their own trajectories as individual researchers, while at the same time bringing to fruition the synergies, and complementarities of focus, across areas of strength. In the disciplines covered by UoA19, staff turnover in what is a most competitive sectoral and international environment remains a key contextual factor with which to contend at the strategic level. This was evident within accounting & finance, resulting in a broadening of the *management accounting and control* focus into related areas including governance, following the departures of Burns, Balvinsdottir and partial retirement of Nixon. In parallel, new and replacement appointments at both junior and senior level have strengthened the work of the interdisciplinary and

critical studies group, an established Dundee focus. Reinforcing the decision to grow future research in finance and corporate governance, the University has provided the resources for the establishment of a new Centre for Research in Qualitative Finance under the leadership of Burton.

The main themes that inform research in economic studies each encompass a variety of projects. The globalisation, competitiveness and wellbeing theme includes work on globalisation, economic insecurity and wellbeing; globalisation, growth and environmental sustainability; global production chains, competitiveness and labour market outcomes; employment policies and competitiveness; and jute and the management of economic decline. The inequalities, poverty and variations in health and healthcare includes: work on the development of tools to measure and explain changes in health inequalities and benchmark performance; incentives and healthcare; inequality, devolution and policy evaluation; and the maximisation of delivery, care, treatment and recovery in drug and alcohol misusers. A newer theme is research in energy economics, incorporating work on understanding the price and volatility of energy commodities, industrial organization and regulation of energy industries, and the impact of natural hazards.

Research into health inequalities, and the generality of social indicators, is also pursued within accounting & finance. Work has challenged some widely accepted claims about the putative superiority of the corporate governance culture, and related accounting and finance practices, associated with Anglo-American (or common-law) countries relative to social market (civil law) countries. Workforce health also features prominently both in the context of accounting for people and the management control of employee health and wellbeing. These interests provide a basis for future interdisciplinary synergies and growth.

Staff are actively encouraged to pursue collaboration with colleagues within the institution, including in other Schools, as well as externally, including internationally; some of these are long term in nature, giving rise to visiting and similar appointments. Since its inception in 2007, economics staff have played a leading role within the Scottish Institute for Research in Economics (SIRE), a development designed to overcome a number of capacity constraints experienced by economics departments within Scotland. SIRE has provided funding for a number of posts, including at the University of Dundee, which have been associated with the Work and Wellbeing theme. The Dundee Health Economics Group within the School of Business has fostered productive links with researchers in the School of Medicine.

Throughout the period of assessment all staff have been encouraged to increase their efforts to secure external funding for their research, with growing success. Staff in economic studies have attracted funding from the European Union (under FP7), the ESRC, NHS (Scotland), the National Institute of Health Research, the Medical Research Council, the Chief Scientist's Office and the Leverhulme Trust, having also bid successfully for Knowledge Transfer funding. By comparison accounting & finance staff have attracted more modest amounts of funding, reflecting the strategic emphasis there on work with the professions in order to grow the knowledge transfer interface; despite their size, such awards regularly translate into academic and professional outputs of significant quality, underpinning engagement and impact activity, with the majority of awards continuing to be funded by the professional accounting bodies.

Management research on people and organisations and the management of environmental resources has grown following key appointments at professorial and senior lecturer level. In line with the University's strengths in Work and Wellbeing, much of the research has focused on healthcare management and human resource management. This group has secured funding for research projects, which include £90,000 from NHS Scotland in 2008-9 for a study of employer branding and engagement, and £20,000 from the Chartered Institute of Personnel and Development for a study of HRM and social media. The sustainability agenda in business and management is addressed by research into the governance and management of water resources and ecosystems. The management of environmental resources group have been part of research collaborations that have secured extensive funding from the Scottish Government, the European Union through FP7, and NERC amounting to €3.74 million to address the challenges of developing efficient and equitable water governance systems and integrated management strategies

worldwide. This group has also demonstrated significant interdisciplinary research in bringing together environmental sciences, strategic planning and stakeholder management, and law.

Growth in PhD activity was identified as a key element in the research strategies of the UoA's constituent elements in 2008. At that time accounting & finance had 9 full time and 3 part time candidates. Currently its portfolio of doctoral students is three times this number, having at its peak exceeded 40 students. Late in 2010, and despite good completion rates, the decision was taken to reduce numbers to more manageable proportions in preparation for a second period of growth, recruiting higher calibre candidates. Demand for places remains impressive, itself an indicator of the success and reputation of the PhD programme over the past decade. For accounting & finance students there is also the facility of entry level research training via a DipRes/MRes route, which has been an important driver of securing high calibre candidates.

Doctoral student numbers in economic studies has continued to grow since 2008, notwithstanding the intense competition that exists in attracting students of desirable calibre. The economics doctoral programme benefits in this regard from a longstanding association with the Scottish Graduate Programme in Economics (SGPE) and the doctoral research training sessions offered by SIRE and the Scottish Graduate School of Social Science. PhD activity in management research is also growing following recent appointments of key staff, the management of environmental resources group having five PhD students undertaking research in the broad area of governance and management of water resources.

c. People, including:

i. Staffing strategy and staff development

During the assessment period the University has formalised a dual contract arrangement for permanent staff, whereby the majority are employed on Teaching and Research contracts though scope also exists for appointment to a Teaching and Scholarship contract. Provision exists for movement of staff from one contract to another, in either direction, depending on interests and aptitude. Provision also exists for employment at reduced levels on both types of contract. The University's ambition remains to maximise the proportion of staff on Teaching and Research contracts, while seeking to ensure that these staff operate at a 3/4* level of research excellence or show clear promise to do so. Moreover, as we have noted in REF3a, the recruitment of senior staff is also based on their ability to contribute to policy and practice to ensure impact on these key end users of research

The majority of new appointments since 2008 have been made on Teaching and Research contracts in an effort to further enhance the research profile of the broad business and management area. Work allocation is strategically managed to reflect research performance over time. This process has been facilitated as a result of the introduction of an Objective Setting and Review (OSAR) system at a University level, designed to allow all employees to maximise their individual potential and contributions to the institution. This arrangement will continue to operate in the coming years as the University seeks to achieve the best use of its human resources in line with its recently implemented *Transformation* initiative.

A number of new appointees have been at the early career researcher (ECR) stage, for whom special provisions have been developed and implemented. ECRs are normally required to complete a three-year probationary period towards "confirmation of appointment". Specific research targets form part of probation requirements and performance is reviewed annually. Each ECR is allocated a mentor with whom s/he is expected to meet regularly to discuss progress. The mentor also has responsibility for preparing documentation towards the annual staff review conducted at School level, which as a process allows support of individual career development while steering overall development of disciplinary areas.

The UoA's staff development philosophy has been formulated in accordance with the principles set out in the Concordat to Support the Career Development of Researchers. This statement forms a

key element of the University's human resource management strategy in relation to the promotion of research excellence amongst its staff and postgraduate students, which has been recognised by the European Commission as affording "HR Excellence in Research". As an equal opportunities employer, the University is fully committed to the Athena SWAN charter as a further dimension of its equality and diversity provisions and policies. A complementary provision also exists in respect of the University's postgraduate community.

At an operational level, as part of the development of research within research groupings and in support of individuals' research ambitions, all staff have access to funds to facilitate participation at academic conferences. A sizeable budget across the UoA exists to resource such participation, which is allocated on the basis that staff will present a paper at such events. Staff are strongly encouraged to participate in national and international conferences of high standing and relevance to their research to secure useful feedback before submission to journals and to enhance networking for the purposes of research collaboration.

Both schools in the UoA continue to play host to a series of visitors presenting seminar papers, with an increasing proportion coming from abroad. These seminars are also attended by doctoral students as part of their professional development. Seminars are also organized for staff and doctoral students to gain formative feedback on papers before presenting at a conference. Support is also provided for working paper series that allow staff in some fields of study such as economics and management of environmental resources to disseminate early research findings because of long 'time to print'.

During the REF period visiting scholars have been welcomed to the UoA for periods ranging from a few months to a year, from universities in Australia, China, Italy and Japan.

ii Research students

The impressive growth in the number of doctoral students since 2008 has been accompanied by a concerted effort to create an enabling culture for these aspiring members of the academic community. Each doctoral student has two supervisors, and on some occasions a third to provide specialist input. Despite the continued growth in demand for places over recent years, it has been possible to provide students with supervisory teams capable of meeting their needs and expectations. This process is set to continue in the future when it is envisaged that the quality of student will increase further as a consequence of reputational growth and even greater selectivity.

Meetings with supervisory teams beyond those required by programme regulations are scheduled according to the preferences of their members. Oversight of the broader process is vested in individual PhD Committees, which meet several times a year and are chaired by the Programme Director. Each student is also required to demonstrate progress annually to a performance review committee composed of senior researchers. Postgraduate student fora provide a mechanism for doctoral students to communicate concerns to the divisional head, plus the opportunity to make representations to the School Board and, if necessary, to committees and higher level fora within the University. Overall student satisfaction with their Dundee experience continues to be high.

It is a requirement that all doctoral students admitted to a three year programme of study have experience of training in the area of research methods and methodology, possibly in the context of a Masters programme elsewhere of an appropriate level. For those lacking such a training, appropriate provision exists, e.g. by means of a DipRes/MRes or through a 1+3 programme (one year SGPE MSc training in Edinburgh and then 3 years study in Dundee), or through participation in programmes offered within the SGPE, or by research methods programmes run by the two Schools comprising UoA 19. The doctoral degrees awarded are all PhDs; there are no research-based professional doctorates.

Throughout the academic year all doctoral students are required to participate in regular seminar sessions designed to enhance their professional development. Later years doctoral students are encouraged to present at these seminars, sometimes in advance of presenting at academic

conferences. More formal presentation requirements also apply as part of student monitoring and evaluation. On occasion, academic staff make presentations at the seminar sessions, principally on research method and methodology topics. There is a continuing tradition of producing jointly authored papers with later years/successful PhD candidates, although this practice must be consistent with the research aspirations of staff and students.

In parallel with SIRE and the associated joint SGPE in which Dundee as one of the founding institutions plays a significant role, accounting & finance research students have long benefited from participation in the Scottish Doctoral Colloquium (SCOTDOC), of which the former Department of Accounting and Business Finance was a founding member two decades ago. SCOTDOC brings together doctoral students from all of Scotland's higher education institutions, meeting for an annual conference on a rotating basis. Dundee has acted as host on a number of occasions, most recently in May 2013. The conference provides doctoral students with a further opportunity to present their work to peers and research academics in a highly collegiate atmosphere. In 2011 SCOTDOC's activities were complemented by the formation of the Scottish ESRC Doctoral Training Centre (DTC) for the social sciences in which accounting and finance is a recognised pathway. An evolving programme of DTC training provision is now in place, including a Summer School encompassing a series of master classes led by leading researchers, including Dundee staff. In due course it is envisaged that the DTC pooling arrangements will result in closer cooperation across disciplines at an institutional level, including the development of integrated doctoral programmes.

Visiting doctoral students from foreign institutions, where such practices are more commonplace, occasionally spend several months in Dundee. It is envisaged that the School of Business will soon enter into a formal collaboration with the Department of Business and Management at the University of Aalborg that will facilitate further student exchanges in both directions. A similar arrangement at institutional level has recently been established with UTS in Sydney, in which staff in UoA19 are playing a leading role. Further international collaborations are also planned for the coming years.

The vast majority of doctoral students continue to be funded either by their own governments or by private means. Provision exists for some discounting of fees but only in exceptional cases. The School of Business as a whole continues to be recognised for ESRC 1 + 3 training purposes. Economic studies host one such award winner, as well as a student with an ESRC/SG collaborative award. The practice of providing funding internally has been given greater emphasis since 2012, when the School of Business funded two such awards, for fees and subsistence. A second pair of awards was offered for 2013 and a third has been budgeted for in 2014. As a condition of these awards, doctoral students are required to undertake some tutorial teaching at first and second year undergraduate level. Similar opportunities also exist for the doctoral students in the Graduate School.

d. Income, infrastructure and facilities

During the period of assessment, economic studies staff have been successful in attracting a substantial portfolio of external research funding, totalling close to £1.5M. Individual awards vary in size and composition. In some cases collaboration has been with other groups of economists, both in the UK and internationally, e.g. an FP7 award under the *Welfare, Wealth and Work for Europe* incorporating 32 partners drawn from 12 EU countries. Collaboration may also include colleagues from elsewhere within the University, including the Medical School. Smaller awards to individuals have been received from the Leverhulme and Carnegie Trusts, while KTP projects have also been funded.

Accounting & finance researchers continued to secure the majority of their external research funding from the UK's professional accounting bodies during the assessment period, although there have been exceptions to this pattern such as an award of \$25,000 from the International Association for Accounting Education Research in 2008. These awards are usually relatively modest, reflecting the needs of individual researchers, but in terms of credible academic outputs,

engagement and impact, they deliver significant value for money to the University. During the assessment period a number of grants have been provided by ICAS and ACCA, with whom we individually and collectively share good relationships, as well as CIMA and ICAEW.

Over time competition for such funding has become more intense, accompanied by rising expectations from the associations, so continuing success in this direction should be viewed as a clear indicator of collective status within this arena. With the move towards greater incorporation of management within the Division of Accounting and Finance, there has been a widened pool of potential research funding, a process that will continue in future years.

Small awards have been secured from NHS Tayside in association with a senior researcher within that organisation who was recently appointed as an honorary professor within the School. In a similar vein, a researcher in this division acted as a senior adviser to RAND Europe on a commercial research project commissioned by the Department for Business, Innovation and Skills. In recent years accounting & finance staff have made a number of more ambitious funding applications for FEC awards, while the creation of the School of Business affords a range of potential research synergies that are currently being explored.

As noted above, the management of environmental resources group has been particularly successful in attracting substantial research and consulting income, including extensive funding from the Scottish Government, the European Union through FP7, and NERC amounting to €3.74 million to address the challenges of developing efficient and equitable water governance systems and integrated management strategies worldwide.

In all research funding initiatives, staff are supported by the University's central Research and Innovation Services and in particular by the College of Arts and Social Sciences' Business Development Manager who provides regular updates on current funding opportunities.

The School of Business and Graduate School are located in three adjacent buildings. All staff members are allocated personal rooms to facilitate research activity and collaboration. The School of Business has a well-equipped in-house computer laboratory where sessions on specialist software, e.g. Datastream, are conducted. In addition, the building currently houses a number of specialist library collections with a particular emphasis on annual reports, and two staff common rooms

Doctoral students in the School of Business are largely accommodated within the main School building, with additional facilities available in a recently refurbished facility in an adjacent building that also provides a common/social area. Like academic staff, doctoral students have access to the buildings on a twenty-four hour basis. Each student has their own personal workspace, which incorporates a modern PC and physical file storage provision, with access to shared facilities in each location. A similar arrangement exists for PhD students in the Graduate School, all of whom have their own workspaces, PCs, etc., in a further refurbished building.

The nearby University Library is a modern structure that incorporates extensive study space. Access to much relevant material is now possible on-line, including from remote locations. The University's integrated campus with a city centre location is an attractive feature of the institution as a whole and is appreciated by staff and students alike.

Both the School of Business and the Graduate School are housed in attractive old buildings which date from the earliest days of the University. They are set in established and attractive grounds which overlook the Tay Estuary. The Graduate School buildings have been sympathetically upgraded in recent years to the highest standards in terms of facilities and the fabric and appearance of the buildings. The University has indicated that the School of Business will be imminently be upgraded, with a budget of £1.4 million allocated for this purpose.

e. Collaboration or contribution to the discipline or research base

i Accounting & Finance

As previously noted, a significant proportion of the research pursued by accounting and finance staff is interdisciplinary in nature, with the result that the largest research grouping merits this designation. There is engagement with a wide range of other disciplines including: economics; education studies; health, human resource management; law; marketing; organisation studies; social philosophy; and sociology. Several staff members have experienced a formal training outside of accounting and finance, as a result of which the challenges inherent in producing genuinely interdisciplinary outputs can be met with a range of complementary skills.

External collaborations vary in extent and degree, although overall those staff who have been appointed more recently tend to be more externally focused in respect of their collaborations. These same individuals have in turn encouraged colleagues to follow suit, a process that will continue to be promoted in the coming years. Several staff regularly collaborate with former doctoral students including Burton, Collison and Power, while others continue collaborations with their own supervisors. Roslender is currently a Visiting Professor at the University of Aalborg, Denmark, having held similar appointments at Malardalen University, Sweden and MARA Institut of Teknologi, Malaysia during the assessment period.

Burton is the founding editor of *Qualitative Research in Financial Markets*, established in 2009, and is an associate editor of the *European Journal of Finance*, as well as a member of the editorial board of the *Journal of International Accounting, Auditing and Taxation*. Roslender served as editor of the *Journal of Human Resource Costing and Accounting* between 2008 and 2012, and has recently been invited to become an associate editor of a new journal, the *International Journal of Financial and Accounting Studies*. These and many other colleagues serve on editorial boards and are active reviewers for a wide range of journals. As already noted, Dundee staff are prominent in, and they contribute disproportionately to, SCOTDOC and DTC events.

A number of staff are active contributors to the work of professional bodies and other external organisations. Collison served on ICAS's Sustainability Advisory Group throughout the assessment period, acting as the Institute's representative on the Sustainability Group of the Federation of European Accountants (FEE) until 2011. He also serves on the ACCA's Sustainability Forum and in 2012 joined the Sustainability Advisory Board of Scottish and Southern Energy plc. Until September 2011, Collison was a member of the Council of the Centre for Social and Environmental Accounting Research. Crawford is a member of the Research Committee of ICAS.

ii Economic Studies

Staff are generally very outward-looking and, on an individual level, exhibit a long history of collaboration with groups of researchers across discipline and/or institutional boundaries, both nationally and internationally. There is also a growing collaboration at the team level, including strong involvement in the SIRE initiative and, more broadly, as a result of an expansion of existing economics research networks. A notable example of the latter is the recent success in the grant application "Welfare, Wealth and Work for Europe" (€8.5 million) under the EU Cooperation Programme/Theme 8/Socio-economic Sciences and Humanities (Call ID "FP7-SSH-2011-1") which involves a consortium that covers thirty-two partners from twelve EU countries. Several economic studies projects pursued during the assessment period have involved collaborations with the University's Medical School, for example the SUMIT (Substance Misuse Information – Tayside) project (£308,469), which aims to improve information collection and analysis of drug and alcohol services in Tayside, and the SPOT project designed to evaluate cost effectiveness and patient acceptability of alternative topical treatments for the prevention of skin cancer (£249,967).

These recent successes in obtaining research funding are underpinned by a sustained programme of collaborative research that Economic Studies staff are engaged in with economists across other institutions (in Scotland, the rest of the UK, Europe and North America), and across disciplines

(medicine, history, geography, regional and urban studies, statistics and management sciences). These collaborations also reflect the interdisciplinary nature of the research that is pursued within the division and across the School of Business, in terms of both theory and applications. In turn, this culture and external profile has contributed towards increased involvement in the development of collaborative research, including research funding applications to international bodies (the European Commission and the US National Science Foundation), the organisation of international conferences, invited lectures to large international audiences, and invitations to the membership of scholarly societies and presence on the editorial boards of international journals, including in senior editorial roles.

As previously mentioned, economic studies has been fully engaged with SIRE, taking the lead in organizing a number of events. Of particular note is extensive participation in both the SIRE Young Researchers' forums (two out of the 3 events in 2010 were organised in Dundee) and the SIRE Policy Forums, in which two of the five events mounted to date by SIRE were proposed and coordinated by our researchers. The former illustrates a commitment to investing in the next generation of economists to conduct research in Scotland; the latter is evidence of a focus on policy engagement and impact activities – and has resulted in a professor being invited to direct the Policy Forum series. In the field of energy economics, researchers have been engaged in the SIRE energy and environmental economics research group and hosted one of their workshops in 2011. Mu has also collaborated with other energy economists in China and North America.

iii Management

In the general area of management, Martin and Reddington have longstanding collaborative links with industry, the public services and professional bodies in the UK and overseas, in the human relations management field. Both are Academic Fellows (professorial level grade) of the CIPD and have been appointed 'expert advisors' by that institute. Reddington has extensive consulting experience with the NHS in England, as well as local government and a number of large international companies, while Martin served on the Scottish Advisory Committee on human capital and has acted as a consultant to three multinational companies and to a number of public sector organizations during the period of assessment, providing an Impact Case Study for the University of Glasgow Business School.

Martin was recently appointed as an Associate Editor of the *European Management Journal*, and invited to join the editorial board of a new journal: *The Journal of Organizational Effectiveness: People and Performance*. He has held visiting professorial appointments at Peking University, Macquarie University (Sydney) and UTS (Sydney), where he has recently taken the lead in 2013 in establishing an international research collaboration on behalf of the University.

In the specialist area covered by the management of natural resources theme, Gooch has a long-standing and world-wide network of collaborators in water and environmental management, including the Council for Scientific and Industrial Research (CSIR) in South Africa, the Norwegian BioForsk research institute and NIAPP, the Vietnamese National Institute for Agricultural Planning and Projection, part of the Ministry of Agriculture and Rural Development. He is a member of the editorial board for Sustainability of Water Quality and Ecology and is series editor for the new IWA Water and Environmental Policy series. He is an appointed expert for the EU in this field and has taken part in EU missions to Brazil, South-East Asia and China. Gooch also acts as an evaluator for research applications to the EU, the Norwegian Research Council and NERC. Spray has also demonstrated significant collaborative effort built around his involvement in the UNESCO global network of HELP basins (Hydrology for Environment, Life and People), and through collaboration with research groups, environmental agencies, governments, industry, universities and participative catchment management organisations in Europe and the UK. His collaborations also extend to many other land management groups, industry and local government, e.g. National Farmers Union; Scottish Land and Estates, Scottish Agricultural College and Highland Spring Ltd.