

Institution: Unit of Assessment: 18

a. Overview

The Oxford Economics Department is one of the largest and most diverse groups of academic economists in Europe with a permanent faculty of 50, including 11 statutory (i.e. established) professors. Of the remainder, the large majority hold University Lectureships (UL) in Economics involving both teaching and research; 12 with the title Professor (equivalent to a personal chair). In addition to our permanent faculty, there are 42 postdoctoral researchers on fixed-term appointments of 3 or 4 years, and more than 80 research students. There are economists employed also in the Blavatnik School of Government, the Faculty of History and in college-only fellowships. Economics at Oxford is broad-based, aiming to produce first-class research across the full range of the discipline, rather than specialising in particular sub-fields. Research spans almost all the major sub-fields with particular strengths in microeconomic theory, including behavioural economics; econometrics, both micro-econometrics and time series; economic history; development and international economics.

Given the size and diversity of the Economics Department and the number of economists based elsewhere in the collegiate university, the specialised research groups play a vital role in bringing together economists working in particular sub-fields The current set of research groups are: Applied Microeconomics; Behavioural Economics; Development Economics; Econometrics; Economic History; Financial Economics; Industrial Economics; Macroeconomics; Microeconomic Theory; Resources and Environment. The Economics Department is the home of two major research centres: Centre for the Study of African Economies (CSAE); and the Oxford Centre for the Analysis of Resource-Rich Economics (OxCARRE). In addition, Economics set up the Oxford Institute for Global Economic Development (OxIGED) in 2009 as a (virtual) integrating institution to promote and facilitate research on issues relating to development and the global economy across the University of Oxford. The Institute for New Economic Thinking (INET) programme on Economic Modelling (EMOD) led by Professor Sir David Hendry is affiliated to the Department.

In addition to the research centres based in the Economics Department, economists are active in two cross-disciplinary research centres. The **Oxford-Man Institute for Quantitative Finance (OMI)** brings together researchers from the departments of Economics, Engineering Science, and Statistics, as well as the Mathematical Institute, the Computing Laboratory and the Saïd Business School. The **Centre for Experimental Social Sciences (CESS)** is based in Nuffield College and its goal is to promote and facilitate experimental research across the social sciences.

The Economics Department is one of 13 departments within the Social Sciences Division of the University of Oxford. The Division operates a principle of subsidiarity according to which costs are shared between departments where appropriate, but for the most part income (including research income) and costs are devolved to Departments.

b. Research Strategy

The Economics Department aims to engage in innovative research that extends the frontiers of the discipline, deepening our understanding of the operation of modern economies. The fundamental strategic aims for research set out in RAE 2008 were to maintain world-class expertise in the core areas of microeconomics, macroeconomics and econometrics and to build clusters of research strength in important subfields of the discipline. These aims have remained the same throughout the assessment period and will continue for the next five years. Evidence of the success of this strategy is that recent research rankings of economics departments worldwide consistently place Oxford in the top twenty and second in Europe (e.g. Tilburg University Top 100 Worldwide Economics Schools 2008-2012 ranks Oxford 13th worldwide, 2nd in Europe). Our REF submission includes 37 papers published in the top-5 general economics journals, with many more in top-ranked field journals. This compares with a figure of 26 papers published in the top-5 journals over the RAE period. Between 2008 and 2013, the annual research income of the Department increased from £3.4 million.



The recruitment and retention of academic staff of the highest quality at all levels of appointment is essential for the achievement of our strategic goals. The Department ensures that at each stage of their career, members are supported to achieve the highest international standards in research. The Department's research structures seek to encourage research collaboration, within Oxford and more widely; to facilitate the dissemination of our research to the international academic community and to the broader audience of practitioners and policymakers; and to strengthen the overall research culture within the Department.

Mechanisms for developing and reviewing strategy and performance

Within the Department, responsibility for developing strategy, overseeing its implementation and reviewing performance against targets lies with the Department's Management team and the Department's General Purposes Committee (GPC). The Department's Management team is made up of the Head of Department, the Deputy Head of Department, the Strategy Officer, the Director of Graduate Studies, the Director of Undergraduate Studies and the Departmental Administrator. This group meets fortnightly during term time (less regularly out of term) to address issues arising in the day-to-day management of the Department. The Department's GPC, which consists of the Management team and elected members of the faculty, meets twice a term to consider issues relating to research performance, academic appointments (initial and tenure decisions), and resource allocation within the Department. More informal mechanisms for discussing and reviewing research strategy are provided by the twice-termly department meetings which bring together economists from across the university (including those in college-only posts); and by twice-termly meetings of the senior professors to discuss strategic issues relating to research and academic appointments.

The University conducts major 5-year reviews of all its departments covering research, and teaching, and also governance and resources. Economics was subject to major review in May 2013, with professors John Beath (St Andrews University), Angela Redish (University of British Columbia) and John Sutton (LSE) acting as the external members of the review panel. The final report from the review is expected in Autumn 2013 and the recommendations of the review panel will feed into the Department's strategic plans for 2014 onwards.

Research groups

The specialised research groups bring together economists working in particular sub-fields, support postdoctoral research fellows and research students and promote research of the highest international standards. All members of the Department, including research students, belong to at least one research group, many to more than one. Each group has a senior academic as convenor, responsible for coordinating activities.

Over the REF period, new research groups have been created in response to developing research collective interests and growing research strengths in specific sub-fields. The appointment of Vincent Crawford has attracted a strong group of mid and early-career researchers in the field of Behavioural Economics. The establishment of the Oxford Centre for the Analysis of Resource-rich Economies (OxCARRE) has been a catalyst for the formation of a research group focusing on issues relating to resources and the environment. Growing research strength in micro-econometric analysis of large and complex datasets to investigate the behaviour of individuals and households has led to creation of the Applied Microeconomics group, bringing together the research groups in labour and public economics

The research groups provide an important interface between the research centres and the Department more generally. Each of the research centres works closely with the research group in their specialist sub-field: Behavioural Economics and CESS; Development Economics and CSAE; Econometrics and INET-EMOD; Financial Economics and OMI; Resources and Environment and OxCARRE. Other research groups facilitate collaboration across departments: for example the Economic History group work with economic historians in the History faculty; and the Financial Economics group engage with the Finance group in the Said Business School.

Each group has a regular specialist seminar series with external speakers, and a more informal workshop where members, in particular research students and early-career researchers, present



their research in progress. In a given week during term-time, there are seven specialist seminars with external speakers, and as many informal workshops for internal speakers. The research groups facilitate the integration of early-career researchers into the larger academic community by arranging one-to-one meetings with visiting academics; by organising joint workshops with other institutions in the UK or further afield (e.g. the annual Transatlantic Theory Workshop involving Northwestern University, Oxford and the Paris School; the economic history network of student seminars). Each group receives an annual budget of up to £5,000 from the Department to fund their regular seminars and workshops, and many receive additional support from colleges. Additional funding for one-off activities such as research away-days and workshops is also available on application to the Department.

Research centres

The Department's research centres are a hub for innovative research and reach out to other academic and policy-making communities world-wide through their seminars, workshops and annual conferences. They provide additional support for members working in their fields of interest, including funding for research assistance, support for undertaking fieldwork etc. In 2007, the Economics Department set itself the goal of expanding the role of the research centres as vehicles for developing and funding new research programmes. In what follows, we describe the main achievements against this objective.

At the time of the RAE, the Oxford Centre of the Analysis of Resource-rich Economies (OxCARRE) had been in existence for less than a year, and Tony Venables had just taken up the post of Director. Rick van der Ploeg was appointed as Co-director in January 2008. Alongside the senior academics, OxCARRE has a current team of 6 postdoctoral research fellows plus affiliated research students working across a number of research themes: managing resource revenues; political economy, governance and conflict; trade and economic diversification. Since 2008, OxCARRE has rapidly established itself as a global centre of excellence for research on the performance of resource-rich economies. Its annual conference has developed into an international forum for academics, policy-makers and practitioners to review and discuss research and related policy. The 2013 conference on the theme of "Understanding international commodity price fluctuations" which was held at the IMF headquarters in Washington attracted more than 120 participants including policymakers and industry practitioners. OxCARRE research is having a significant impact on the design and conduct of the policies of international bodies such as the IMF relating to resource revenue management (For evidence see impact case study: 18.04). In 2012, OxCARRE was awarded a second 5-year tranche of core funding of over £2.5m from BP following a full external review.

The **Centre for the Study of African Economies (CSAE)** maintains its international reputation as a centre of excellence for the rigorous quantitative analysis of African Economies. CSAE is a focus of collaboration between researchers and practitioners seeking to transform African economic performance. (For evidence of its impact see case study: *18.05*). Engagement with policy-makers and researchers in Africa and elsewhere is at the core of CSAE activities, which include: networking in collaborative research projects, making available primary data, organising conferences, policy-briefings and workshops. The CSAE Annual Conference has evolved into the world's largest forum for academic research on African economies – attendance at the 2013 conference exceeded 450, of which more than 100 were from central banks, governmental bodies and international organisations.

The overlapping research interests of CSAE and OxCARRE in the impact of natural resource revenues on the performance and governance of African economies has led to fruitful research collaboration. Joint research in the two centres, and collaboration with policy bodies such as the Revenue Watch Institute, underpinned the development of the Natural Resource Charter, a major international policy initiative to develop principles for government and societies for the effective use of natural resources for development. (See *impact case study: 18.04*)

In line with RAE 2008 plans, the **Oxford Institute for Global Economic Development (OxIGED)** was established in 2009 as a (virtual) integrating institutition to facilitate closer collaboration among



economists with research interests in development issues from departments and research centres across the University of Oxford. Through OxIGED, economists in the departments of Economics and International Development, the Said Business School and the Blavatnik School for Government have successfully co-ordinated research initiatives, raising £1m of funding for a major research programme 'Inclusive globalisation: Transforming the world's lagging economies', investigating the challenges faced by low-income economies in transforming into successful middle income countries. Going forward, OxIGED, in collaboration with economists at the LSE, is working with the World Bank to launch a major programme of research on housing and urbanisation in Africa to be led by Tony Venables (OxCARRE) and Paul Collier (CSAE).

INET Programme in Economic Modelling (EMoD) is a recent initiative jointly funded by a \$10 million grant jointly from the Oxford Martin School and the Institute for New Economic Thinking (INET). Launched in 2011, under the Directorship of Professor Sir David Hendry, **EMoD** is developing new methods of empirical modelling and forecasting that are robust to sudden, or very rapid, unanticipated changes in underlying economic conditions. Recent research provides solutions to problems of modelling multiple structural breaks and robust forecasting methods. **EMoD** is closely linked with the econometrics research group and supports early career researchers through its postdoctoral research fellowships and bursaries for research students.

The Oxford-Man Institute of Quantitative Finance (OMI) was established in 2007, with core funding from the Man Group, as a multidisciplinary centre for research on quantitative aspects of finance. The OMI provides an innovative model of collaboration between academic researchers and their counterparts in the commercial world with the OMI co-located with the Man Research Laboratory (MRL). The two centres are independent but researchers come together for seminars, workshops and conferences, allowing academics to benefit from practitioner expertise and Man's researchers to be introduced to leading-edge research in the field. (For evidence see *impact case study: 18.09*). Economics has played a major role in OMI since its creation - Neil Shephard was the founding research director until 2012, and most members of the Department's Financial Economics research group are affiliated to the OMI, working on projects relating to the analysis of high frequency financial data, the impact of electronic trading platforms, efficient markets and market anomola.

Founded by Nuffield College in 2008, the **Centre for Experimental Social Sciences (CESS)** is an interdisciplinary research centre to promote and facilitate experimental research by social scientists. Members of the Behavioural Economics research group are active participants in the CESS programme of interdisciplinary seminars and workshops. CESS provides state-of-the-art laboratory facilities and runs a summer school on the design and implementation of experiments in the social sciences under the auspices of the Social Sciences Doctoral Training Centre.

Research Support

In 2007, the Department appointed a Strategy Officer to work with members to develop new research initiatives and to obtain funding to support their research activities. The Department strongly encourages and supports applications from faculty and postdoctoral researchers for research grants to fund research assistance and to release further time for research through teaching buyouts. The Strategy Officer, who is an academic economist, provides advice to department members – faculty, postdoctoral researchers and research students - on developing their research plans, identifying sources of funding and preparing detailed proposals. The Departmental Administrator provides support with budgeting and post-award management. Additional support is provided by the Social Sciences Divisional Research Facilitator who acts as a clearing house for information on sources of research funding, and organises workshops on specific funding schemes. The University Research Services team provides further specialised support in relation to European and North American funders, and research governance.

The Department has significantly enhanced the level of financial support that it provides to support the research of its members. Since 2009/10, each faculty member has been allocated an individual annual research allowance, currently £2500 for permanent faculty and £1500 for postdoctoral research fellows. Additional funding for conference attendance, research assistance and similar



research-related costs is available on application to the Department's designated research funds. Research students, as well as faculty, may apply to these funds. Since 2007/8, £75,000 has been awarded to faculty and over £105,000 to research students to support their research.

Strategic objectives from 2014 onward

As evidenced above, the research activities of the Department, at the individual level and within the research centres, have increased significantly since 2007, and with it, our research income. However, much of this has been focussed in Oxford's traditional areas of strength – mainly development economics, linked to international trade and resources. Going forward, a key objective is to raise the international profile and the research income flowing to priority developmental areas of growing research strength, notably applied microeconomics and behavioural economics. To support this, the Department will:

- make further high quality academic appointments at all levels in these fields, building on the existing research groups;
- invest in additional senior level administrative resources to work with the Department's Strategy Officer to develop and implement major new research initiatives and to enhance the work of the existing research centres;
- work with the research groups to raise the profile of the Department's research and to foster greater research collaboration, both nationally and internationally, through international workshops and networks (as for example the Transatlantic Theory Workshop).

The establishment of the Blavatnik School of Government, in 2010, represents an important new development for research in economics and economic policy at Oxford. In 2012, Professor Paul Collier moved from the Economics Department to the School and the CSAE is to become a joint centre, with development economics research focused in the Economics Department and the more policy-related activities based in the Blavatnik School. Funding has been raised for the creation of a new joint professorship in Economic Policy, to be appointed in 2014, and this will be a catalyst for future joint initiatives.

c. People, including:

i. Staffing strategy and staff development

The recruitment and retention of academic staff of the highest calibre at all levels of appointment is essential to achieving our research aims. The Department offers a range of positions, each providing a different balance of duties between teaching, research and associated activities to suit academics at different stages of their careers. Research achievement and potential are the main criteria for appointment at all levels and the Department recruits internationally in competition with top US and European departments. As a large department, appointments are not driven by short term teaching requirements, but rather focuse on recruiting the strongest candidates, taking into account strategic priorities for the development of particular research areas. Over the longer-term, our staffing strategy recognises the importance of maintaining critical mass in the core areas of the discipline and of building in upcoming areas of research strength, as is reflected in recent appointments.

In the 2008 RAE, Oxford returned the largest number of 4* and 3* outputs in the field of Economics and Econometrics. At this time, the Department set itself the following key objectives in relation to its staffing policy:

- further investment in research leadership in key new areas of the discipline;
- improved support for University Lecturers to better enable them to develop their research while maintaining the high quality of teaching;
- further investment in early-career researchers recruited from leading academic institutions worldwide.

Investing in research leadership

The Economics Department has successfully invested further in research leadership with the creation of two new statutory professorships in Economics, bringing the total to 11. In expanding the number of statutory professors, the Department has sought to appoint senior scholars of



international distinction with well-established tracks records of research achievement, with the objective of raising the international profile of Economics at Oxford University and in so doing attract able young academics. The distinction of the present incumbents is evidenced by the fact that all are Fellows of the Econometric Society and many serve or have served on the editorial boards of the top-ranked economics journals. The high quality of our appointments to lectureships and postdoctoral positions over the REF period is evidence of the success of this strategy (see *Staff Profile, p.7*).

Three of our current statutory Professors of Economics were appointed during the REF period. Vincent Crawford was appointed as the Drummond Professor of Political Economy in 2010. Professor Crawford is one of the world's leading researchers in Behavioural Economics and his appointment has been a catalyst for the development of a new research group. The Department has supported this through its appointments strategy at the postdoctoral and University Lecturer levels. Professor Mark Armstrong was appointed to a newly-created professorship at All Souls College in 2011, adding to our long-established research strength in industrial organisation. Professor Mike Keane was appointed to the newly-created professorship at Nuffield College in 2012. He is internationally renowned for his work in the area of choice-modelling and his appointment further strengthens our research expertise in applied microeconometrics.

In addition to the above, Kevin O'Rourke was appointed to the Chichele Chair in Economic History in the Faculty of History (with an association with the Department of Economics) in 2011. A distinguished economic historian and international economist, Professor O'Rouke's appointment adds considerably to the research strength of the economic history group at Oxford and reinforces the strong links between economic history in the Economics Department and in the History faculty.

To attract and retain outstanding academics who are establishing international reputations as research leaders in their fields, the Economics Department, in collaboration with Nuffield College, created two new permanent Senior Research Fellowships, with terms and conditions of employment comparable to those of statutory professors. Ian Crawford was appointed to one of these posts in 2013, with the second to be filled in 2014.

Supporting university lecturers (ULs)

The majority of permanent faculty hold University Lectureships (ULs), with teaching and other responsibilities to both the Economics Department and one of the constituent colleges of the University. Increasing the amount of research time available to those in joint posts was a key element in our research strategy for the RAE period, and since 2007 the Department has worked to continue this process. Departmental provision of resources has relieved ULs of some of the workload associated with the organisation and preparation of tutorial teaching. The provision of teaching assistants (TAs) through the department's Doctoral Studentship scheme has been extended (further details in Research Students, p. 9). Since 2007, 14 ULs have been appointed, replacing recent losses and making inroads into the backlog of vacancies that had built up over the previous decade. This has strengthened teaching provision in the colleges and, in so doing, reduced workload pressures on the existing ULs. In addition to recruiting to existing UL posts, two new posts have been created in collaboration with the OMI, to attract able young academics in the competitive field of finance. Tsai from the Wharton School and Wolter from Yale University were appointed to these posts to 2013.

Investing in early-career researchers

In the 2008 RAE, the Oxford Economics Department was commended for the large number and impressive quality of its postdoctoral researchers and their positive impact on the research environment. Since this time, the Economics-Nuffield College Postdoctoral Research Fellowship (PRF) programme has become an integral part of the Department's staffing strategy, recruiting on average 6 new PRFs each academic year for an appointment period of three years. In addition, the Department's research centres appoints PRFs to undertake research in their specific fields of interests. Since 2008/09, 9 PRFs have been appointed by CSAE, 8 by OxCARRE and 5 by INET-EMOD. In addition, the Department has maintained its success in attracting external funding to support early-career researchers with 6 postdoctoral research fellowships funded by the British Academy, 5 funded by the ESRC and 4 funded by other external sources.



In a recent joint initiative with a number of Oxford colleges, four-year fixed-term Career Development Fellowships (CDF) have been introduced to provide a carefully structured and supported introduction to the role of college tutorial fellow for those starting an academic career. Career Development Fellows are fully integrated within a college, with teaching duties focused on undergraduate tutorial teaching. At the same time, they maintain a base within the Economics Department and are mentored by senior colleagues to support their research. The first CDF appointment was in 2011, followed by three appointments in 2012, and four in 2013.

Our postdoctoral positions attract early career researchers of the highest academic calibre with recent appointments drawn from leading academic institutions worldwide including LSE, UCL, Warwick, Paris School, Universitat Pompeu Fabra, Stockholm School, Toulouse, Chicago, Princeton, Michigan, and Yale.

Staff profile

The REF period has seen a modest increase in the number of permanent members of the Economics Department. Since 2007, there have been eight resignations, five retirements and one death. It is evidence of their quality that many moved to take-up positions as full professors at other top-ranked departments (e.g. Myatt to London Business School, Nocke to University of Mannheim, Patton to Duke University, Thanassoulis to Warwick Business School, Wallace to University of Leicester). In addition to these departures, Sir John Vickers stood down as Drummond Professor of Economics to become Warden of All Souls College in 2008, from where he continues to contribute to research and teaching of the Department (but is not submitted to the REF due to the nature of his employment contract). In 2012, Paul Collier moved to the new Blavatnik School of Government to lead research in development economics and policy.

Over this period, six distinguished researchers have taken senior positions at Oxford (Armstrong, Baldwin (part-time), Crawford (V); Keane; O'Rourke, van der Ploeg). The Department has filled a total of 16 UL posts, recruiting from leading institutions in Europe and North America. Recent recruits have contributed to maintaining expertise in the core areas (Eso, economic theory; Bhattacharya and Mavroeidis, econometrics; Ellison, Ferrero, Zanetti, macroeconomics); to developing new research strengths (Abeler, Gill, and Huffman in Behavioural Economics); to strengthening areas of existing research strength (Quintana-Domeque and Quinn, development economics; Fenske, economic history; Wolter and Tsai, financial economics/econometrics; Bell, labour economics; Rauch, international trade and economic geography).

The current stock of postdoctoral researchers on fixed-term appointments is 42. Of these, 9 are CDFs, jointly funded by the Economics Department and a partner college; 18 are appointed under the Economics–Nuffield College PRF scheme; 10 are funded through the Department's research centres; and the remaining 5 hold competitive fellowships (British Academy and ESRC). Our postdoctoral researchers span the research interests of the department with particular strengths in behavioural economics, development economics, economic theory, and econometrics.

The numbers of academic staff submitted to the REF in each category as compared with the 2007 RAE is shown in the table below:

	Statutory professors	Other permanent	Postdoctoral research	Other fixed
		academic staff	fellows	term
RAE 2007	9	37	27	6
REF 2013	12	39	30	5

Evidence of the high calibre of the Department's faculty is provided by the number of prestigious research fellowships that have been secured over the REF period. Among those at an earlier career stage, several have gained competitive fellowships to buyout their time so that they may focus on developing their research: Abeler, ESRC Future Leaders (2012); Bhattacharya, Leverhulme Trust Research Fellowship (2011); Crawford (I), Leverhulme Trust Research Fellowship (2010); Esteves, ESRC First Grant (2010); Quinn, All Souls Examination Fellowship (2007-2012); Mavroeidis, Philip Leverhulme Prize (2011); Wills, ESRC Future Leaders (2013). Three senior members (Crawford (V), (2013) Neary, (2011), O'Rouke, (2009)) have been



recognised by the ERC as exceptional research leaders and awarded Advanced Grants to lead major projects opening up new directions in their fields.

Forty percent of the Department's current permanent faculty (excluding the statutory professors) are below the age of 40 years, and five retirements are expected before 2020. The Economics Department is committed to maintaining UL recruitment over the next 5 years to restore numbers to our long-term established level and to build research strength in key areas. Of the statutory professors, seven are expected to retire between 2014 and 2020, and will be replaced as quickly as possible. While this poses a challenge for the Department, it provides also an opportunity to appoint a new generation of research leaders and to increase the diversity of our senior academic leadership.

The Department is committed to maintaining the PRF programme with Nuffield College at its present steady-state level, recruiting up to six new Fellows each year. Alongside this, it will continue to work with colleges in establishing CDFs and TAs to support teaching in the colleges and ensure that ULs in Economics have the time necessary for high quality research.

<u>Staff development and support – University Lecturers (ULs)</u>

Research achievement and potential are the main criteria for appointment to a UL, both in the initial appointment decision and on reappointment to retirement age (tenure) following a probationary period of five years. The Department applies rigorous tenure criteria in line with leading economics departments worldwide. Individuals are required to contribute to the Department's research profile at the highest level, with publications in leading general or top field journals. Probationary ULs are supported in maintaining good progress towards meeting these requirements by a senior colleague who acts as mentor. A supportive interim review takes place after two years, with written guidance on progress provided.

The Department has a work-load management scheme that monitors not only teaching loads, but also supervision, administrative and examining responsibilities, to ensure that no individual is overburdened. Teaching loads are reduced for those undertaking major administrative roles to ensure that research-time is protected. During the first two years of appointment, a UL's departmental teaching load is reduced to fifty percent of the standard to facilitate their integration into their role, without detrimental effects on their research. Probationary ULs are not expected to take on significant administrative responsibilities beyond those directly associated with teaching. The University provides a wide range of courses to support and develop the academic skills of newly appointed ULs through the Oxford Learning Institute.

There is a University-wide system of annual appraisal for all staff, with a major review every five years. The Department's ULs are encouraged and mentored to apply for the title 'Professor' (i.e. a personal chair) by application to the University's regular processes. Research quality is the primary criterion for the award and independent external references play the major role in the decision. Successful applicants for these awards have records of research achievement comparable with those of professors at other major research universities. Since 2007, five ULs in Economics, including two women, have been awarded the title of Professor.

The Department considers equality of opportunity as integral to its goal of recruiting and retaining the best academics. In July 2013, the University established a £1m fund to support the advancement of diversity at Oxford, particularly focusing on the under-representation of women in senior posts. The Economics Department will make use of this to support its strategy for equality of opportunity. In order to further improve our processes and ensure fair, flexible and accessible working conditions for all members of staff, the Economics Department will pilot the Athena Swan initiative to advance women's careers in academia within the Social Sciences Division from 2014

All permanent faculty are entitled to one term of paid sabbatical leave after six terms of service. In addition, the Department encourages and supports its members in applying for research grants and fellowships to fund teaching buyouts, and accommodates all such requests where possible. Each member of faculty is allocated an annual research budget of £2500 to fund conference attendance and other research-related activities, and additional funds are available on application



to the Department's or to the University's research fund. The University has generous family leave arrangements and the Department works with individual members to meet their requests for flexible working patterns (see *Research Support p. 4*).

Staff development and support – Postdoctoral Research Fellows (PRF)

All PRFs, irrespective of their source of funding, are supported by the Department to develop their research programmes and to publish in leading economics journals. They are expected to develop a pipeline of research such that by the final year of their appointment, they have at least two papers submitted with leading international economics journal. To support them in achieving this goal, a PRF is mentored by a senior colleague in their research field. Alongside their research, PRFs enhance their skills and experience as teachers, but with workloads that are significantly below those for a tenure-track UL. Initial teacher training is provided through workshops delivered by the Economics Network and by the Department, and training for further professional development is provided by the Oxford Learning Institute. All PRFs are allocated work space in the Department and receive support from the Department's Strategy Officer and administrative staff. The Department provides an annual research allowance of £1500 and additional funds are available on application to the Department's or to the University's research funds (see *Research Support* p. 4).

On completion of their Fellowship, the vast majority of PRFs seek tenure track academic posts in the UK or elsewhere. The Department's Job Placement Officer (a senior academic) provides support and advice on the economics job market, including practise at job-market presentations and interviews. Financial support is provided to fund job market related activities (including attendance at the American Economic Association and the RES job market meetings). Since 2008, 43 PRFs have completed their period of appointment, most moving to tenure-track positions in leading economics departments in the UK (including Cambridge (4), Bristol, Oxford, Nottingham, Southampton, Surrey (2), Sussex, Warwick, York), in Europe (including Aarhus, Madrid, Tilberg, Toulouse), or worldwide (including California-Irvine, California-San Diego, Melbourne, Michigan State, Carnegie-Mellon (Pittsburgh); Wharton School (Pennsylvania), Wisconsin-Madison). A smaller number have taken up posts at central banks and international organisations (e.g. Bank of England, IMF, the World Bank).

c. ii. Research students

Fostering the career development of young researchers is a key part of the Department's strategy and the doctoral (DPhil) programme in Economics is the first stage in this process. Economics is part of the Social Sciences Doctoral Training Centre (DTC), one of 21 centres across the UK, accredited by the ESRC (an award of £10M over 5 years). Over the period 2007/8 to 2012/13, a total of 144 students have been admitted to the DPhil programme in Economics, an average of 24 per year. Of this group, 40 have been awarded their doctorate and a further 8 have submitted; 6 students have withdrawn and the remaining 90 are still in registration (as of July 31st 2013).

Our research students are funded from a wide range of sources. Of those admitted between 2007/08 and 2012/13, some 25 percent received ESRC studentships, a further 25 percent were funded from other sources such as Clarendon fund, Rhodes Scholarships, government bodies. For those without full funding from an external source, the Department's Doctoral Studentship (DS) scheme provides a bursary (£11,640 in 2013/14) in return for a limited amount of teaching (the equivalent of 96 hours of tutorial teaching over the academic year). DS awards are for two years in the first instance, with a third year of funding where required. Over the period 2007-08 to 2012-13, the DS scheme has supported 85 research students and has provided a total of 150 student-years of funding. Of the 22 students who started the Economics DPhil programme in 2013-14, 9 have ESRC studentships, 10 have some funding (full or partial) from other sources, and 5 have been awarded two-year Doctoral Studentships by the department.

In its admission, supervision, and resource allocation policies, the Department seeks to select high ability students, who are then well supported to undertake substantive original research. Entry to DPhil status is conditional on successfully completing a rigorous programme of advanced study in economics and a substantial piece of independent research. The majority of entrants –



approximately two-thirds – meet these requirements through successful completion of our two-year MPhil degree. Those with a one-year Master's degree from Oxford or another institution are admitted to Probationer Research Status (PRS), with transfer to DPhil status conditional on successful completion of elements of the MPhil programme including a research paper. The Department and the colleges work together to ensure that research students are well supported. Each research student has one or more faculty members as thesis supervisor(s), plus a college-based advisor. Supervisors report termly on the student's progress to the Department's Graduate Studies Committee and to the student's college. Research students submit an annual activity report, providing an account of their research progress. Of our established faculty submitted to the REF (i.e. excluding early career researchers on fixed-term appointments and those appointed in September 2013), over 70 percent are currently supervising one or more DPhil students. Those with limited supervision experience, jointly supervise with a more experienced colleague in the first instance. The Oxford Learning Institute provides workshops on DPhil supervision and maintains a research supervision website as a resource for supervisors and research students.

Every research student has a primary research group affiliation and is required to attend regularly the seminars and workshops of that group as part of their research training (see *Research Groups, p.2*). Research students are required to give at least one seminar presentation within the Department as a condition of confirmation of DPhil status, and the majority give many more. There is a weekly Student Research Workshop in Economics for research students to present their work and obtain valuable feedback from senior faculty. In addition, there is a weekly workshop run by the research students and postdoctoral research fellows themselves where early-stage research is presented and discussed. Research students are strongly encouraged to take advantage of opportunities to present their work at conferences and international workshops and financial support is available from the Department to do so.

The Social Sciences DTC complements the research training offered by the Economics Department through its Research Methods hub offering specialist courses in quantitative and qualitative research methods. The Social Science Division co-ordinates the Academic and Professional Development programme of workshops and seminars covering general research management skills, professional knowledge and career development. Research students are strongly encouraged to undertake some teaching as part of their training. All research students who teach for the Department receive training, in the form of workshops on tutorial and class teaching, assessment and providing feedback, provided by the Economics Network and by the Department.

Our research students are allocated work space in the Economics Department. They are eligible for Departmental funding for conference attendance and are given additional financial support for job placement activities. The Department, working with the University Careers Office, organises an annual Careers in Economics Event attended by potential employers from the private and public sectors, and hosts recruitment visits by major employers of professional economists. The Department's Job Placement Officer supports and advises those seeking academic positions. Of the 83 students, awarded their doctorates between 2009/10 and 2012/13, over half proceeded to academic positions; the majority to postdoctoral research fellowships but some to tenure-track appointments. The remainder took up posts as professional economists within international organisations (IMF, OECD, World Bank), central banks (Bank of England, Federal Reserve); UK Government Economics Service; and economic consultancy (Goldman Sachs).

d. Income, infrastructure and facilities

The REF period has seen a substantial increase in the Department's research income from approx £3.4 million in 2007/08 to £4.9 million for the academic year 2012/13. The Department has a very diverse research income base, as is evident from Figure d.1 below. For individual faculty, the BIS Research Councils and the European Commission are the primary source of funding for research projects, requiring academic staff time in the form of teaching buyouts. The REF period has seen significant growth in income from EU organisations, largely reflecting our success in attracting major ERC awards. The Department's research centres attract funding from a broad range of sources. OxCARRE and the OMI both receive substantial core funding from UK industry,



commerce and public corporations. The REF period has seen a notable increase in funding received from non-EU organisations. This reflects major awards from non-EU charities such as Gates Foundation to CSAE and from the Open Society Institute to INET-EMOD.



Figure d.1

The University's John Fell Research Fund (not included in figure d.1) provides smaller scale funding to support early-career researchers and as pump-priming to bring projects to a stage at which they can apply for external funds. Monies are mainly used to fund experimental work, data, research assistance; travel to research workshops and conferences. Over the REF period, the Department has been awarded over £200,000 from the John Fell Fund, much of this to support research by our early-career members.

The Department of Economics provides all its members with study space within the modern purpose-built Manor Road. All faculty are provided with single-use offices; while PRFs and research students are provided with desk-space in a shared office or open-plan area. The Manor Road Building houses two of the Department research centres – CSAE and OxCARRE – and provides the base for the Department's graduate teaching and for our regular seminars and workshops. The Manor Road Building (MRB) maintains high specification computer networks, accessible remotely, providing desk access to a wide range of general and specialist software, economic and social databases, and on-line journals. There is a specialist MRB IT team to support the computing and IT needs of the academic departments in the building. The building houses also the Social Sciences Library which brings together the University's extensive research collections across the social sciences. It has an annual budget of over £690k including expenditure on electronic resources.

The **Centre for Experimental Social Sciences (CESS) Laboratory** (*Research Centres, p.4*) provides state-of-the-art facilities designed to support a wide range of experimental set-ups and maintains an extensive subject pool for experiments. As a CESS associated department, the Department of Economics contributes to the funding of the laboratory and our members are able to make full use of this valuable resource for their experimental research.

The **colleges of the University** provide our members with additional support for teaching and research: junior research fellowships, research funding, library and IT resources, as well as an extended social network for intellectual interactions across a wide range of disciplines. The Department maintains particularly strong links with **Nuffield College**, a graduate college dedicated to research in the social sciences. The College fellowship includes 13 economists, with particular research strengths in the areas of economic theory and econometrics. The Economics Department benefits from Nuffield's close links with those actively engaged in the design and implementation of



economic policy, maintained through its network of Visiting Fellows drawn from government and business. Current visiting fellows include Greg Clark MP, Financial Secretary to the Treasury; Stephanie Flanders, BBC economics editor; Nick Macpherson, Permanent Secretary to the Treasury; and Paul Tucker, Deputy Governor of the Bank of England).

e. Collaboration and contribution to the discipline or research base

National and international research collaborations

Oxford economists at all levels engage in collaborative research within Oxford and with colleagues in the UK or overseas, as is evident from the large number of submitted research outputs that are co-authored. The Department seeks to foster collaborative research through its research groups and centres (see pp 2-4), by hosting visiting co-researchers, and by providing funding for its members to visit other institutions. Since 2007, the Economics Department has welcomed nearly 100 academic visitors from across the world for visits of between one week and one year. Many of these are engaged in collaborative research with members of the Department; others are early-career researchers who wish to take the opportunity to work with the research groups or research centres in their specialised fields.

Oxford economists are active in a number of international economics research networks including: the Centre for Economic Policy Research (CEPR) based in the UK (Allen, Alvaredo, Armstrong, Browning, Esteves, Fafchamps, Fenske, Javorcik, Klemperer, Muellbauer, Neary, O'Rouke, van der Ploeg, Venables, Vines); the Munich-based CESifo Research Network (Abeler, Crawford (V), Malcomson, Neary, van der Ploeg, Venables); the IZA network of Labour Economists (Abeler, Malcomson); the Euro Area Business Cycle Network (EABCN) linking academic researchers and researchers in central banks and other policy institutions (Ascari, Ferrero, Zanetti). Browning and Crawford (I) are Research Fellows of the Institute for Fiscal Studies. Neary is a International Research Fellow, Kiel Institute of World Economics. Young is a Senior Fellow, Brookings Institution, US.

The Department is party to a number of major collaborative research projects. Improving Institutions for Pro-Poor Growth (iiG) is a DFID-funded network of research organisations drawn from seven countries, including the CSAE, the London School of Economics (LSE), and institutions in Africa and India. Improving the Outcomes of Education for Pro-Poor **Development** (**RECOUP**) is another DFID-funded collaborative research project, including UK institutions (CSAE, Cambridge and Edinburgh) with partner institutions in South-east Asia and Africa. The Spatial Economics Research Centre (SERC) is a collaborative research programme involving economists from Oxford, Cambridge, LSE, Newcastle, Strathcylde and the University of Wales. Established in 2008, with funding from the ESRC, SERC research focuses on the sources of disparities in economic prosperity at all spatial levels. Van der Ploeg and other members of the OxCARRE are part of the ERC-funded research project on "Combating climate change: political economy of green paradoxes", led by Professor Cees Withagen of VU University, Amsterdam. Vines is the Scientific Director of the European Union's Framework Seven Research Programme Politics and Economics of Global Governance: the EuroPean Dimension" a collaborative research project involving seven institutions across Europe, including Universite Libre de Bruxelles, European University Institute, University of Amsterdam, Graduate Institute of International and Development Studies (Geneva), together with the University of Oxford.

The Oxford Economics Department, in partnership with the LSE, directs **the International Growth Centre (IGC)**. Funded by the UK Department for International Development, the IGC has developed ten research programmes based around policy priorities in the world's poorest countries and offers independent advice on economic growth to governments of developing countries. The IGC is directed by a steering group that includes *Paul Collier and Tony Venables*, and Oxford economists contribute to the research programmes and work with the country teams.

Contributions to the Discipline.

One of Oxford's most important contributions to the discipline is through its training of research students and postdoctoral research fellows, many of whom have moved on to academic careers in the UK and further afield (as detailed in *Section c.i and c.ii above*).



Three international journals are based in the Department: Oxford Economic Papers, Oxford Bulletin of Economics and Statistics, and Journal of African Economies. The Department is also closely associated with the Oxford Review of Economic Policy, which provides appraisals of current economic thinking on major policy issues for a wide audience. The majority of our members at all levels contribute to academic journals by acting as reviewers. A significant number have held editorial positions on leading economics journals during the REF period: Armstrong (editor, Rand Journal of Economics 2005-; editor and chair of the editorial board, Review of Economic Studies 2003-10); Beggs (associate editor, European Economic Review 2008-2010); Bhattacharya (associate editor, Journal of Business Economics and Statistics 2012-); Crawford(V) (editor, Games and Economic Behaviour 2011), Ellison (associate editor, Economic Journal, 2008; associated editor, Journal of Money, Credit and Banking 2008-) Gill (associate editor, Journal of Economic Behaviour and Organisation 2011-), *Mukerji* (associate editor, Econometrica 2010-13); Neary (editorial committee, Annual Reviews of Economics, 2009-2011); Quah (co-editor, Journal of Mathematical Economics, 2013-); Shephard (associate editor, Econometrica 2002-14); Venables (editorial committee, Annual Reviews of Resources Economics 2010-); and Young (Co-editor of the Handbook of Game Theory 2010-).

Further evidence of significant contributions to the discipline is provided by the prizes awarded for individual research contributions. *Abeler:* CESifo Distinguished Affiliate Award 2011; IZA Young Economist Award (with Altmann, Kube and Wibral) 2012. *Allen:* Prize for the best article in Explorations in Economic History, 2009. *Collier:* A.SK Social Science Award 2013; *Esteves:* Arthur H Cole prize for best article published in Journal of Economic History in 2009. *Fenske:* Alexander Gerschenkron Prize, 2010. *Shephard:* Richard Stone Prize in Applied Econometrics 2012 (*with K Sheppard*). *Venables:* European Regional Science Association-European Investment Bank prize in Regional Science, 2008; Regional Studies Association Prize (with Overman and Rice) for best article in Regional Studies 2010-11. *Vickers:* British Academy's President's Medal, 2012. *Young:* George Hallet Award, American Political Science Association 2008.

Contributions to professional associations and learned societies:

Our current faculty includes: fifteen Fellows of the Econometric Society, including Browning, Jewitt, Meyer who are members of Council; fifteen Fellows of the British Academy, of which Browning (2008), Crawford (V) (2012), Neary (2008), O'Rouke (2013) were elected in the REF period; Venables was elected to the Council of the BA in 2013. Eight members of the Department have served as Council members of the Royal Economic Society during the REF period (Armstrong (2010-, member of executive committee); Browning (2012-); Collier (2011-); Crawford (V) (2013-), Rice (2006-11); Stevens (2009-); Vickers (President 2007-10); Young (2008-13)). Other significant contributions to learned societies during the REF period include: Allen, President of the Economic History Association 2012-13; Armstrong, member of the selection committee for the Yrjo Jahnsson Award 2014; Crawford (V), member of the American Economic Association Honour and Awards Committee; Ellison, member of the Advisory Board of the Society for Computational Economics; Esteves, trustee of the European Historical Economics Association from 2011; Jewitt, Economic Theory Fellow, Society for the Advancement of Economic Theory; Klemperer, Council of Game Theory Society from 2011; Shephard, Fellow of the Society for Financial Econometrics; Van der Ploeg, Chair of the Scientific Council of the CESifo Network; Venables, Fellow of Regional Science Association from 2009, trustee of the CEPR; Young, President of the Game Theory Society 2008.

Major invited lectures include: *Allen*: Keynes lecture, British Academy 2009; invited lecture European Historical Society, 2011; Cologne Lecture in Economic History, 2011. *Anand:* keynote speaker, second Global Symposium on Health Systems Research. *Crawford (V):* Plenary Lecture, International Meeting of Experimental and Behavioural Economics, Barcelona 2011; Economic Journal Lecture, Royal Economic Society, London 2011. *Fafchamps:* keynote speaker, IZA-World Bank Annual Conference on Employment and Development, Cape Town 2010. *Javorcik:* Keynote speaker, CESifo conference on Global Economy, Munich 2012. *Klemperer:* Keynes lecture, British Academy 2011. *Neary:* Frank D Graham Memorial Lecture, Princeton 2009. *Venables:* Frank D Graham Memorial Lecture, Princeton 2013.