# Institution: University of Cambridge

Unit of Assessment: Faculty of Economics (UOA 18)

### a. Overview

The Faculty of Economics provides the physical and intellectual hub for research in economics across the University, but research happens across different departments (Politics, History, the Judge Business School) and across the colleges.

The aim of the Faculty is to produce world-class research with a lasting impact on scholarship and policy, and to train the next generation of world-leading economists. The Faculty currently has 35 permanent researchers, 54 PhD students, 149 graduate students on one-year courses and 480 undergraduates. Research in the Faculty is currently based in 6 Research Groups: Econometrics, Microeconomic Theory, Macroeconomics, Empirical Microeconomics, Economic History and Alternative Approaches to Economics. Researchers in the latter group are submitted under Politics, UoA 21. Each research group runs a seminar series and enables Faculty members with similar interests to meet regularly and support each other's research. Each PhD student is based in a Research Group and students form an integral part of the research environment.

In 2012, in collaboration with the New York-based Institute for New Economic Thinking, the Faculty set up the Cambridge-INET Institute (C-INET) to cut across Research Groups and to support fundamental research in economics. C-INET provides a vibrant programme of visiting researchers, a post-doctoral programme, PhD student support, and seed-funding for new research projects. Its interdisciplinary focus maximizes interaction of Faculty researchers with colleagues and visitors. In 2011, the Keynes Fund for Applied Economics was established by a £5 million donation to further support research within the faculty This research environment is supported by wide-ranging administrative, financial and logistical support, including a specialist Research Administrator for grant applications and a Director of Research Strategy to enhance support for research projects.

The Faculty belongs to the School of Humanities and Social Sciences. Since 2003, the university has devolved considerable financial autonomy to the School. This means resources can be allocated to best support research across the range of social sciences and to ensure cross disciplinary collaboration. The School provides both resources and strategic advice on research.

#### b. Research strategy

## i. Achievement of RAE 2008 Aims

As outlined in its RAE2008 submission, the Faculty's research strategy between 2003 and 2011 built on a merger between the Department of Applied Economics and the Faculty of Economics and Politics. The aim was to produce world class research. This aim was to be supported by moving away from atomistic research based on individual intellectual agendas towards coherent clusters of researchers working in similar areas who would benefit from systematic interaction and also support PhD training. To this end, the Faculty established the Centre for International Macroeconomics and Finance (CIMF), the Centre for Research in Microeconomics (CReMic), the Centre for Quantitative Economic History (CEQH) and the Electricity Policy Research Group (EPRG). Since RAE2008, these Centres have been very successful in organising workshops, hosting academic visitors and fostering research. One clear measure of the success of the RAE2008 aims is that a quarter of the research outputs submitted to the REF are publications in the top 5 economics journals.

CIMF brought together macroeconomists and econometricians with special emphasis on international macroeconomic financial issues. Wider collaboration within the University has been orchestrated through Cambridge Finance, with a weekly financial economics seminar. The Centre ran a number of workshops and conferences: Learning and Macroeconomic Policy (2008), New Instruments of Monetary Policy (2010), Links between Macroeconomics and Financial Markets (2011), as well as workshops on Statistical Learning and Applications to Finance, European Convergence, Forecasting Under Model Instability, and the London–Oxbridge Time Series Econometrics Group Workshop.

CQEH hosted a large research project on consumption history, co-organized the Core Economic History Seminar and held its own lunchtime workshops. The centre has supported numerous



# **Environment template (REF5)**



visitors to the Faculty, including Tim Guinnane (Yale) and Michael Bordo (Rutgers). Gary Libecap was the Pitt Professor of American History for 2010-2011 and Barry Eichengreen (Berkeley) will take up this tri-ennial position in 2014-15.

CReMic supported several conferences and workshops in empirical and theoretical microeconomics. These included workshops on topics such as Political Economics, Networks, Auctions and Pricing and the Cambridge Experimental and Behavioural Economics Group (CEBEG) Workshop Series. The centre sponsored ongoing seminars within the Faculty Microeconomics and Empirical Microeconomics seminar series, the Economic Epidemiology Seminar Series and the Cambridge Networks and Theory Reading Group. It also provided funding for the joint Cambridge-Microsoft 2010 Information, Networks and Markets and 2012 Games, Networks and Markets meetings and inaugurated the Sir Richard Stone Annual Lecture series in 2008-9.

EPRG has been an important collaboration between the Faculty and the Judge Business School (JBS). It has both created an active research programme on energy policy and has had substantial impact on the policy debate. The group has been led by David Newbery, and he has continued in this role despite his retirement in 2011.

Alongside this role of the centres in generating research activities through these conferences and visitors, the Faculty has had a substantial research seminar programme. This has included weekly research seminars in Macroeconomics, Microeconomic Theory, Econometrics and Empirical Microeconomics with external speakers, as well as internal workshops. These seminars brought together researchers in the same fields, but were not constituent parts of the research centres.

### ii. Strategic Aims 2011 – 2019

The underlying aim from 2011 remained to generate coherent research groups, rather than atomistic research programmes. The implementation of this aim evolved for two main reasons: first, the research seminars which were organised by the Faculty each week were not explicitly within research centres and so there was no regular natural meeting of those in each research centre; secondly, there was a shortage of funding for research activities. This led to the Faculty changing its research strategy in five ways: 1) the Faculty shifted to organising research around Research Groups that met regularly at weekly seminar series, and these have replaced the Research Centres; 2) the Cambridge-INET Institute (C-INET) was set up in 2012 to provide funding for research and to generate cross-group research interactions; 3) the Keynes Fund for Applied Economics was established in 2011 to boost new approaches to macroeconomic research in the Faculty; 4) the Faculty expanded support for research and for grant applications both in practical ways through its Research Office and the post of Director of Research Strategy and through financial help (detailed in section d(i) below); 5) the Faculty focused on integrating PhD students into the research environment as suggested by RAE2008 (detailed in c(ii) below).

## Research Groups

Faculty research is now structured into the following Research Groups, each meeting at a regular seminar with both internal and external speakers:

- 1) Econometrics: Focuses on econometric theory including all areas of econometric research, whether macro-, micro- or financial econometrics. Applications include financial markets, measuring volatility, prediction, programme evaluation, inequality, dynamic panel data and heterogeneity.
- 2) Microeconomic Theory: Focuses on understanding individual motivations and decisions and how they shape collective outcomes. Topics studied include auctions, contract theory, networks, repeated games, epidemiology, matching, mechanism design and learning. Researchers use a mix of research methodologies, from mathematical models to laboratory experiments.
- **3) Macroeconomics**: Focuses on fiscal and monetary policy, and debt management, in both a domestic and international setting, as well as longer term issues such as economic growth, networks and behaviour of the housing market.
- 4) Empirical Microeconomics: Focuses on understanding the observed behaviour of individuals,



and in particular behaviour in labour markets and education, and the effects of public policy. Both structural and reduced-form approaches are used, and data is from advanced and developing economies.

**5) Economic History**: Focuses on applying quantitative methods to economic history covering a range of topics including early modern Germany, living standards in the industrial revolution and the evolution of political participation. The group has close links to the History Faculty.

Each Research Group comprises senior Faculty members, research associates, PhD students, and visitors, and operates to further the research of the whole group and provide a forum for intellectual exchange. Professors take the lead in guiding each group's research via regular meetings and explicit mentoring. The Faculty provides funding for each group to host visitors and hold seminars, and plans to channel more funds through groups to underwrite grant applications and provide seed money for new projects. To support this research strategy, the Faculty has pursued a focussed appointment and promotion strategy, documented below in Section (c). Section (c) also documents the build-up and integration of the graduate programme.

There is a 6<sup>th</sup> research group on Alternative Methods in Economics, which has a strong interdisciplinary focus and with close links to POLIS (the Department of Politics and International Studies) and Development Studies. Its researchers are submitted under UoA 21 but its presence in the Faculty reflects the importance the Faculty places on interdisciplinary research and having an open research environment.

## Cambridge INET Institute

A second strand of our research strategy centres on C-INET, set up in 2012 with Sanjeev Goyal as director. C-INET explicitly complements the Research Groups and is organised around 4 themes: (1) Networks, crowds and markets; (2) Transmission mechanisms and economic policy; (3) Information, uncertainty and incentives; and (4) Empirical analysis of financial markets. C-INET enables research that cuts across particular research groups and creates a stimulating research environment with frequent visitors, post-docs and PhD students. C-INET hosted thirteen visitors in 2012-3, including Steven Durlauf, Mathew Elliott, Larry Samuelson, Michael Woodford and Stephen Morris; twenty visitors are already scheduled for 2013-4. The first 3 post-docs arrive in 2013-4, with an anticipated steady-state number of six, and there is funding for three doctoral students. Visitors and post-docs join Research Groups as well as being recruited directly to work in the C-INET research themes.

## The Keynes Fund for Applied Economics

The third strand of the research strategy is to create a key presence for Faculty research in the global debate on the interaction between the macroeconomy and financial markets. This was motivated by the market failures and policy failures in the recent crisis and a vision of moving Cambridge to the forefront of research on the crisis. The Keynes Fund was established with a donation of £5m to further this vision. It is directed by Giancarlo Corsetti, with Lord Adair Turner, William Janeway and Prof Hyun Shin as external managers.

## University Wide Strategy

Across the University, Cambridge Finance provides a network for research into finance, combining researchers from Economics, the Judge Business School and the Faculty of Mathematics. It provides a forum and support for cross-disciplinary research into finance, with regular seminars throughout each term. Researchers from the Econometrics research group (especially Andrew Harvey) and Macro research group (especially Sean Holly) have been closely involved.

Interdisciplinary research in the Faculty is further enhanced by the University's Centre for Research into Arts, Social Sciences and Humanities (CRASSH), located 200 yards from the Economics Faculty building. Established in 2001 to foster cross-disciplinary research, CRASSH hosts a substantial programme of visitors, post-docs and early-career support (discussed below). CRASSH has hosted several initiatives with Faculty members, such as on Risk and Uncertainty and on Sustainability, and enhances our cross-disciplinary activities. Cross-disciplinary research is further enhanced by our participation in the University's Strategic Research Network on Public Health, and Strategic Research Initiatives on Energy, Public Policy and Big Data.



## c. People, including:

# i. Staffing strategy and staff development

### 1. Departures and Recruitment

The Faculty has made a number of senior appointments to provide leadership and has recruited new lecturers to give breadth and depth to each Research Group.

The Econometrics group has been strengthened by the arrival of Linton as Professor of Political Economy from the LSE and Onatski as Reader in Economics from Columbia, compensating for the retirements of Pesaran and Satchell. The Microeconomic theory group still enjoys the active participation of emeritus professors Dasgupta and Newbery and has been strengthened by the recruitment to lectureships of Erdil, Ritz and Gallo (all from Oxford). Since RAE2008, the Macroeconomics group has been significantly strengthened at the senior level by the arrival of Corsetti from EUI, Teulings from Amsterdam (who spans both macroeconomics and empirical microeconomics), and Carvalho from Barcelona, as well as by the appointment to lectureships of Faraglia from Barcelona and Rendahl from UC Davis. The Empirical Microeconomics group lost Crossley and Alan who both moved to Essex but is being strengthened by the arrival from Brown of Munshi as Frank Ramsey Professor of Economics and the internal promotion of Low as Professor of Economics, as well as by the appointment to lectureships of Aunshi as Strank Ramsey Professor of Economics and the internal promotion of Low as Professor of Economics, as well as by the appointment to lectureships of Fruehwirth from University of Wisconsin-Madison, Crowley from the Federal Reserve Bank of Chicago, and Wallace from Stockholm School of Economics.

The recruitment of new staff at all levels continues and is a very positive part of the research environment, the mobility of researchers enabling Research Groups to evolve with new ideas and approaches. Mobility also signals the success of staff research development at Cambridge, with the following lecturers leaving to obtain promotions elsewhere: Van Berg to a Chair in Heidelberg, Carmona to a Chair in Surrey, Alan to a Chair at Essex, Impullitti to a Readership at Nottingham, Ganguli to a Readership at Essex. Furthermore, Crossley moved from a Readership at Cambridge to a Chair at Essex.

# 2. Promotions and Tenure Process

The recruitment, retention and motivation of world-class young economists are central components of the Faculty's strategy. The appointment process starts with interviews at the AEA annual meetings, followed by day-long visits and interviews of each shortlisted candidate. Each newly appointed teaching officer undergoes a probationary period of up to 5 years during which she or he is expected to publish at a level appropriate for REF submission. Annual teaching loads consist of about 40 hours of lectures, plus graduate teaching, and if appointed to College fellowships, 80-120 hours of small-group supervisions. All faculty are entitled to sabbatical leave of 1 term in 7, and this is universally taken up. During the first 3-4 years of junior appointments, the Faculty encourages combining ordinary sabbatical with an additional term's leave to provide an entire year of leave to help new appointments establish their research agendas.

Promotion to personal Readerships and Professorships takes place via an annual, highlystructured, competitive exercise. The final decision is made by a University committee chaired by the Vice-Chancellor. Promotions and associated salary increases operate as motivation for faculty. Additional salary increases through market supplements and J.M. Keynes Fellowships help make Faculty remuneration packages competitive. The University promotes the career development of all staff members through its Emerging Leaders Programme and Senior Academic Promotions CV Mentoring Scheme. The University offers more generous maternity/paternity/adoption leave provision than that required by law with further provision for a graduated return to work plan and flexible working arrangements. It also provides two workplace nurseries. A new Returning Carers Scheme was introduced in 2013, open to all staff, to help those resuming their research following a career break arising from caring responsibilities. The gender balance in the University and issues of equality and diversity are a particular focus through the Gender Equality Group and the University Equality Champions. In recognition for these efforts, the University has received a number of awards including being ranked 11<sup>th</sup> (the highest for a UK HEI) on the Stonewall list (in 2012 and 2013) and winning the inaugural Employee Engagement award from the Employers Network for Equality and Inclusion (2012).

# **Environment template (REF5)**



The Faculty also employs a number of contract research staff. Pursuant to the Concordat on Contract Research Staff Career Management, the Faculty endeavours to ensure that arrangements for recruitment, career development and support of contract research staff match those for teaching officers. The Faculty is committed to the University policy of providing a clear and uncomplicated framework for reviewing staff performance, forming action plans, and identifying development needs. Within this framework, the Faculty makes specific provision for the development and support of contract staff, including the balance between research and non-research activities.

### 3. Prestigious Research Awards

Members of the Faculty have been awarded numerous prestigious research fellowships since RAE2008: Ogilvie held a Leverhulme Major Research Fellowship (2008-11) and now holds a British Academy/Wolfson Research Professorship (2013-16). Low held an ESRC Senior Research Fellowship (2010-13). Linton holds an ERC Advanced Investigator award (2010-14), and Carvalho has just been awarded an ERC Starting Grant. Toxvaerd and Fruehwirth have both held British Academy mid-career Fellowships (2012-2013 and 2013-2014 respectively). Lawson holds a Professorial Fellowship with the Independent Social Research Foundation (2011-2014).

#### 4. Support for Early Career Researchers

It is common practice in economics for PhD graduates to be appointed to lectureships within 2 to 3 years of graduating, so it is crucial to their research development that they enjoy guidance, support, and full integration into the research environment. The Faculty has an explicit mentoring scheme, whereby each new appointment is mentored by a senior academic within their Research Group. The Faculty attaches particular importance via this scheme to providing encouragement and support to those facing the challenges of a new appointment. The Faculty adopts a long-term approach of investing in their development through a supportive research environment. Two Faculty members, Toxvaerd and Sa (now at Kings College, London), have been supported via CRASSH Early Career Fellowships. To enable new appointments to establish research records before relying on external grants, the Faculty's Staff Review and Development Scheme provides an opportunity for all staff to discuss their activities and interests. Annual progress reviews during the probationary period are followed by biennial reviews for the duration of an appointment.

Since 2012, the School of the Humanities and Social Sciences offers a School Staff Review and Development Scheme that offers additional support for career development of researchers during their induction and probation periods and in relation to appraisals. The School's Research Facilitators offer training in research grant writing which include dedicated events such as a research funding induction, and training and advice on developing pathways to impact. Other university-wide support for early career researchers includes Postdocs Of Cambridge (PdOC), a University Society for early career researchers, the CRASSH Postdoctoral Researcher Forum and the Careers Service. The CRASSH Postdoctoral Researcher Forum is designed to encourage interaction and integration, and address research and career development needs. Events include workshops on career and research skills both with and beyond academia, information sessions on funding opportunities and postdoctoral research. CRASSH also provides extensive online guidance for postdoctoral researchers on careers, research, impact and other topics. The Careers Service offers specialist careers advice for all staff, and early career researchers can also draw on bespoke Arts, Humanities and Social Sciences advice programmes as well as seminars and faceto-face advice with a dedicated advisor.

The University has recognised the growth in the number of early career researchers and post-docs across the University and in response is developing the North West Cambridge site. In the first £300M phase, due to open in 2015–16, high-quality and sustainable housing will be provided for over 600 postdocs and their families, together with retail and social facilities, and homes for graduate students. In addition, the University has created the new role of Director of Postdoctoral Affairs who will coordinate and develop strategy for the entire postdoctoral community and act as an advocate for postdocs in the governance machinery of the University.



### ii. Research students

The Faculty has 54 currently active PhD students and 149 graduate students on one-year courses. Since RAE2008, the Faculty has substantially remodelled its graduate programme, with four aims: 1) to improve recruitment of the best PhD students; 2) to give students more research training before they tackle independent research; 3) to provide students with more support and resources during their research; and 4) to improve students' job market outcomes.

1) PhD students are recruited both via our MPhil Economic Research and directly from graduates of equivalent Masters elsewhere. Candidates join the Research Group that most closely matches their broad research interests. The best candidates are identified at an early stage and offered funding through four dedicated ESRC DTC awards, Gates Fellowships, internal Faculty resources, and outside sponsors identified via the Cambridge University Development Office. Since RAE2008, 47 PhD students have received full funding and 15 have received partial funding, while 64 MPhil students have received substantial funding. Funding plus systematic recruitment enables the Faculty to identify and attract the best PhD candidates.

2) Recognizing the benefits of US-style PhD coursework, the Faculty divided its MPhil into a more applied terminal MPhil (further bifurcated into the MPhil in Economics and the MPhil in Economics and Finance in 2012) and an MPhil in Economic Research for those continuing to a PhD (part of our ESRC-recognized 1+3 research training programme). The latter MPhil provides advanced modules at the frontier of economics to equip students for PhD research. At the +3 stage, PhD students must do a minimum of 80 hours of specialist coursework and participate actively in a Research Group by attending its seminar and presenting work there. Seminars are supplemented by specialist reading groups, e.g. on Political Economics, Network Economics, Microeconometrics, Time Series Econometrics and Life-Cycle Modelling. Some PhD students are appointed as part-time Research Assistants on funded projects related to their field to gain experience of contract research work. All first-year PhD students write dissertations involving original work, present them at their Research Groups, and thus produce one-third of their eventual PhD dissertations. Close attachment to a Research Group provides support and nurturing to all PhD students. Cross-disciplinary training is provided as part of the ESRC sponsored Doctoral Training Centre (DTC).

3) The Faculty has improved its resources for PhD students, who now all have individual desks in dedicated PhD rooms, a PhD-only Common Room, shared use of the Faculty Common Room, and shared support from the Faculty's 3.5 IT Officers. Improved resources have contributed to a strong, integrated PhD community and high completion rates: 77 PhDs have been awarded in the five academic years since RAE2008 on annual intake averaging about 15.

4) To ensure the best future research opportunities and the best job placement outcomes, the Faculty offers financial support for PhD students to attend conferences and present papers. It participates in the EDGE Network which meets annually for PhD students to present their work. Students are encouraged to spend time at other universities, with recent visits by Cambridge students to Berkeley, Stanford, and Wisconsin. The Faculty also encourages students to visit research organizations, with recent Cambridge internships at the IMF, World Bank, Bundesbank, ECB, and Institute for Fiscal Studies. The Faculty's Job Placement Officer supports job market placements by holding one-on-one meetings, videoing trial job presentations with feedback from tenured faculty, conducting mock interviews, and assistance with job market packs. The success of the Faculty's nurturing is evidenced by PhD students' employment destinations. Since 2008, PhD students have moved to tenure track positions at LSE, Warwick, Bristol, Manchester, University of Pennsylvania, Pompeu Fabra, Birkbeck College, Royal Holloway College, Copenhagen, CORE (Belgium), Amsterdam, Tilburg, York, Sydney and Sussex; as well as to postdoctoral and other research positions at Oxford, the IMF, African Development Bank, Deutsche Bank, Bank of Canada, ECB, People's Bank of China, and the Board of Governors of the Federal Reserve System.



### d. Income, infrastructure and facilities

### i. Research Support and Research Income

Since RAE2008 the Faculty has aimed to provide better research support and generate more research income. To this end, the Faculty created the post of Director of Research Strategy to complement the existing Director of Research in providing guidance on grant applications and the organisation of Faculty research projects. The Faculty employs a full-time Research Grant Administrator, distributes a weekly newsletter summarising grant opportunities, and provides support for writing applications and internal assessment of grant proposals. The School of Humanities and Social Sciences provides complementary support through two School research facilitators, especially with large or cross-disciplinary grants, including a peer review service to ensure bids are of the highest quality. The Faculty, supported by the University Development and Alumni Relations Office, has also successfully raised external donations to support research, leading to the recent establishment of C-INET, the Keynes Fund for Applied Economics, and the J.M. Keynes Fellowships.

This extra support has meant the Faculty has been highly successful in raising research income, both from research councils and from external donors. This has created a diversity of research funding sources so there is no over-reliance on any one source. For expenditure on research in 2008-13, the Faculty raised over £4.5 million in external funding. This has included two ERC awards (for Linton and Carvalho), as well as fellowship awards and general grants from the ESRC, EPSRC, Leverhulme, British Academy. For the next 5 years, the Faculty has already obtained external funding commitments of £6.4million: this comprises the funding for C-INET (£3.8million) as well as research money from the ERC (£1.3million), ESRC (£575K), Leverhulme, British Academy, Institute for Social Research and the Newton Trust. These figures exclude the 2011 Keynes Fund for Applied Economics donation of £5 million to support research. Detail on research grants for the current REF period is provided in document REF4b.

In addition to research funding raised by specific research groups, the Faculty and University provides additional financial support for research:

- 1. Each new appointment receives at least £3000 annual research support for the first 3 years. All Faculty now receive an allowance of £1000 per year, which can be further enhanced by extra support via a new incentive scheme related to publication success.
- 2. C-INET, financed from a donation of \$750,000 annually for five years from the Soros Foundation, the Isaac Newton Trust, the Cambridge Endowment for Research in Finance, and the University, includes among its activities the provision of small grants, specifically for research scoping.
- 3. The Keynes Fund for Applied Economics provides grants for research, fellowships and teaching at the intersection of financial markets with the real economy; it actively encourages collaboration between economics and other disciplines such as psychology, history, anthropology and biology, and supports academics in extending the frontiers of traditional economics. 9 awards have been made so far.
- 4. The University has established an internal small grant scheme in the Humanities of £300K per year, to compensate for the 2008 withdrawal of the ESRC small research grants scheme; the University Vice-Chancellors' Endowment Fund provides similar small grants.
- 5. The Isaac Newton Trust provides small grants for research assistance, seedcorn funding for projects, and matched funding for projects with external funding.
- 6. The Faculty provides a Summer Bursary Scheme for undergraduate and graduate students for Faculty researchers to employ students to work on Faculty research projects.
- 7. Cambridge Colleges provide research support for travel and computing, with each college officer receiving c. £1000 worth of support per year.

## *ii. Infrastructure and Facilities*

The Faculty is housed in the Austin Robinson Building on the Sidgwick Site, which operates as the University's social science hub and also includes the Faculties of Law, History, and Politics. Each University Teaching Officer in Economics has an office in the building. The building also houses

# **Environment template (REF5)**



the Marshall Library of Economics and numerous seminar rooms, which are supplemented by lecture and seminar theatres elsewhere on the Sidgwick Site. In 2011 the Faculty expanded provision for PhD students, with the creation of 28 new workplaces so all students have individual places to work. This creates an environment facilitating research interaction between PhD students, post-docs, new appointments, and tenured academics.

## IT Support

The Faculty's IT provision is supported by 3.5 full-time Computer Officers and a Technician. Each office in the building has a desktop workstation with associated software. Servers provide access to filespaces and specialist software including Gauss, Eviews, Limdep, Microfit, PC-Give, Shazam, STAMP, Stata, SPSS, Matlab, Mathematica and Fortran. PhD computing facilities are now shifting from individual desktops to server-based virtual desktops, enabling efficient allocation of processing power, flexible resource use, and easy remote access. Parallel processing is provided to all academics and PhD students through a cluster (supported by Faculty IT officers) running CamGrid, enabling use of Matlab and C. More intensive parallel processing is available through the University's High Powered Computing Facility.

### Dissemination

Faculty web pages actively support both teaching and research. Computer Officers maintain research web pages with automatic updating through publications and seminars databases. The publications database helps the Faculty ensure compliance with Open Access requirements. Each Research Group also has a web page displaying its membership and activities.

### Library

The internationally renowned Marshall Library of Economics plays a central role in supporting the Faculty's research. Serving over 1,500 registered readers, the Marshall is one of the finest specialist economics libraries in the country, with c. 73,000 books, 26,500 journal volumes, and a wide range of offprints and pamphlets, and important archives regularly consulted by visiting scholars. The Library provides online access to Datastream, the majority of the journals, and an ever-expanding array of electronic publications and databases. The University Library, a legal deposit library, is 5 minutes' walk away, and the Squire Law Library and Seeley Historical Library lie within a 200-yard radius of the Faculty.

## e. Collaboration or contribution to the discipline or research base

The Faculty assigns great importance to its contribution to the discipline and the research base in economics, both via its specialist Research Groups and via C-INET, which was established explicitly to foster research interaction and capacity-building within the discipline.

## Visitors and External Collaboration

Almost all Faculty research is co-authored, with many co-authors drawn from outside Cambridge, often from outside the UK, who visit regularly, such as Patrick Bolton (Columbia), Luigi Pistaferri (Stanford), Matt Jackson (Stanford). Research collaborations are deliberately fostered through the Faculty's visitor programme, now primarily coordinated through C-INET, with 13 visitors in 2012-3 and 20 scheduled for 2013-4. The Faculty also hosts visitors via the numerous University and College visitor programmes, Marie Curie training schemes, the Yro Johanssen Fellowship for visiting Finnish economists, the Anglo-Czech Education Fund, the Portuguese National Science Fund, and many other international schemes for academic exchange.

#### Conferences and Workshops

The Faculty itself and its members have organized and hosted a number of conferences in the past 5 years. The Faculty hosted the Royal Economic Society Annual Conference in March 2012, with more than 700 attending. It organized a conference to mark the 75<sup>th</sup> Anniversary of Keynes General Theory in June 2011, with contributions from Paul Krugman, Markus Brunnermeier, Barry Eichengreen, John Geanakoplos, Charles Goodhart, Albert Marcet, Stephen Morris, Jose Scheinkman, and Michael Woodford. It organized a conference to mark the work of Hashem Pesaran in July 2011 at Trinity College with presentations by Jerry Hausman, David Hendry, Soren



Johansen, Adrian Pagan and Ken Wallis. A conference is co-organised by Princeton and Cambridge Finance on an annual basis (as discussed in section b, Cambridge Finance is the umbrella group in the University for research on Finance). Regular, smaller workshops and conferences have been organised, for example, by Aidt (on Political Economics), Low (on Public Economics), Corsetti (on Macroeconomics through the CEPR), Ogilvie (on Consumption History) and Goyal (on Networks). In the near future, Cambridge is to host the annual Economics of Religion conference, the Review of Economic Studies tour and the European Public Choice Society meeting.

The annual Marshall Lectures provide the opportunity for internationally renowned scholars to expound their work in two lectures and a seminar; Marshall Lecturers since 2008 include Daron Acemoglu, Drew Fudenberg, James Heckman, Peter Diamond and Esther Duflo. The Sir Richard Stone Annual Lecture, established in 2008-9, has been delivered by Richard Blundell, David Laibson, Angus Deaton, Susan Athey and Debraj Ray. The Distinguished Lecture in Economics and Public Policy, funded by Clare college, has since 2008 been given by Joe Stiglitz, Jean-Claude Trichet, Adair Turner, Carmen Reinhart and Barry Eichengreen. Each Research Group also runs a seminar series with external speakers and frequent visitors.

### Collaboration within the University

Faculty members collaborate both internally to the Faculty and with other Faculties in the University. The structure of the University makes this interaction straight-forward and frequent. The School of Humanities and Social Sciences provides a strategic role in assessing research across the different Faculties within the school. This provides a mechanism for looking for complementarities between different researchers in different Faculties, especially in grant proposals. An example of how this can work is the involvement of Munshi's work on tuberculosis in the Strategic Research Network on Public Health. Further, strategic research initiatives on Energy, Public Policy and on Big Data combine researchers from across the School and from different Schools. These University Strategic Initiatives provide a more formal mechanism for cross-disciplinary research. An indication of the success of the promotion of interdisciplinary interaction is that two researchers from Economics are being submitted through other UoAs within the School. The Cambridge College system also fosters interdisciplinary collaboration because Faculty members are also members of Colleges where they interact with other disciplines.

These mechanisms have led to collaboration between Aidt with Martin Daunton (in History) and William Saslaw (in Astrophysics); between Low and Jo Miles (in Law); between Ogilvie and Richard Smith (in Demography); and between Newbery and several members of the JBS. A strength of teaching the PhD through the Cambridge ESRC DTC is its cross-disciplinary focus which ensures that PhD students also interact outside the Faculty. A strategic aim of the Faculty for the next five years is to increase such internal collaboration.

#### External Recognition

Faculty members have served as editors and co-editors of various journals since RAE2008 including the BE Journal of Macroeconomics, BE Journal in Theoretical Economics, Econometrics Journal, Econometric Theory, Fiscal Studies, International Journal of Central Banking, Journal of Applied Econometrics, Journal of Development Economics, Journal of Econometrics, Journal of International Economics, Network Science; and on the editorial boards of the American Economic Review, Cliometrica, Economic Theory, Econometric Theory, Econometrica, European Journal of Political Economy, IMF Economic Review, International Finance, Journal of the American Statistical Association, Journal of Economic Theory, Public Choice, Review of Economics and Statistics, Review of Network Economics. In addition to these formal positions at journals, Faculty members frequently referee papers, projects and other applications for the ESRC, NSF, ERC and the CUP and OUP.

External recognition for Faculty researchers can be seen in the number who are members of key societies and academies: Fellows of the British Academy (Dasgupta, Harvey, Linton, Newbery, Ogilvie, Pesaran, Sabourian, Smith), Fellows of the Econometric Society (Dasgupta, Harris, Harvey, Linton, Newbery, Pesaran, Sabourian, Smith) and Fellow of the Royal Society (Dasgupta). Among the junior faculty, in addition to her British Academy Research Fellowship, Jane Fruehwirth has been awarded the Philip Leverhulme Prize for 2013.