

Institution: The University of Edinburgh

Unit of Assessment: 18 Economics and Econometrics

a. Overview

The submitted Unit comprises 18 members of staff (17.5 FTE), all based in the School of Economics. Since RAE2008, two important changes have contributed to our development. We have achieved the status of an independent School within the university, and we have moved into our own building, enabling us to co-locate our staff and postgraduate students. At the same time the Scottish Institute for Research in Economics (SIRE), established in 2007, has begun to operate at its full potential. This research pooling project – funded by the Scottish Funding Council (SFC) with a priming investment of £9m (matched by the participating universities), of which the University of Edinburgh received over 30% – has delivered a step change in economic research and research training in Scotland. This concerted investment of funds and the commitment to an ambitious vision for inter-institutional cooperation has led to a significant and sustainable increase in research collaboration, as well as in the quantity and quality of research output, detailed below.

b. Research strategy

Our strategic aims for the REF period, as set out in our RAE2008 submission, can be succinctly put as growth in size, reputation, visibility and reach of both our faculty and our PhD programme. This submission contains ample evidence that we have made substantial progress. In particular:

- (i) Our submission is now dominated by **early and mid-career researchers**: 50% of those submitted are newly appointed, and 67% are within 10 years of completing their PhD, evidencing our contribution to the future and the sustainability of our research;
- (ii) Our registered **PhD student cohort** (on 31 July 2007/2013) has increased **by 140%**, from 10 to 24 candidates, while the **PhD degrees awarded** more than **quadrupled** from RAE to REF;
- (iii) **Grant income awarded** (in addition to SIRE) rose **by over 300%**: from <£1m during the RAE2008 period to >£4m during the REF period, including two prestigious ERC Fellowships;
- (iv) We have won numerous prizes: Fransman was a shared winner of the (biennial) Schumpeter Prize (\$15k) in 2008, Moore was joint winner of the (biennial) Stephen Ross Prize in Financial Economics (\$100k) in 2010, Steiner won second prize in the Czech SCOPUS Young Researcher Award (€3k) in 2011, Grobovsek was winner of a FEEM award at the EEA meeting in 2011, Elsby won a Leverhulme Prize (£70k) in 2012, Belot was joint winner of the David Davidson Prize for the best paper in the Scandinavian Journal of Economics in 2012, while Kircher won the inaugural Wiley Prize in Economics awarded by the British Academy (£5k) in 2013;
- (v) Improved infrastructure: in the REF period we coalesced all economics research into a fully refurbished (£0.78m) building with a state-of-the-art experimental laboratory, facilitating myriad interactions, driving vitality and ensuring sustainability.

Since RAE2008 we have undergone a major organisational change. In full recognition of our financial stability and projected growth, notwithstanding our relatively small size, the University **established Economics as an independent School in 2009**. This increased autonomy allows us to engage directly with the College and with other Schools as equal partners and it has resulted in more flexible, tailor-made policies, especially concerning recruitment, staffing and research support (see the People section below). Importantly, it has also given us a heightened sense of identity with our own premises. The **shared mission** of our new School is to build a research profile of depth and breadth that has demonstrable academic, economic and social impact; to support a community of world-class scholars, enriched by a programme of academic exchange and international links to other world-leading institutions; and to sustain an environment in which academic careers thrive and all colleagues feel valued.

Our School has a very simple structure: **we form a single cohesive team.** We maintain a research climate in which everyone can, and regularly does, talk to everyone about their research. Being continually exposed to different ways of thinking not only generates ideas and helps us see the "big picture" but it also promotes the targeting of a wider audience with our research. As an



example of this "holistic" approach, consider the recent economic/financial crisis: we have contributed to the understanding of (i) what originally happened (e.g. Elsby's 2010 paper "The labor market in the Great Recession" invited by the *Brookings Institution*, 200 Google Scholar cites at the time of writing), (ii) what the likely mechanism of amplification/propagation was (e.g. "Contagious illiquidity", Moore's 2010 Presidential Address to the *Econometric Society*), as well as (iii) what the factors governing the effectiveness of remedial public intervention are (e.g. paper by Sákovics and Steiner: "Who matters in coordination problems?" in the 2012 *American Economic Review*).

More specifically, we have been working towards two – complementary – strategic research goals over the past few years. First, we have **developed a research grouping involving most of our staff** around the broad theme of labour economics. We have capitalised on the gradual breakdown of artificial barriers between micro- and macro-economics by bringing different economic approaches to bear on the issues surrounding the labour market. Since 2008, we have been particularly productive in the search and matching area (Hopkins, Kawamura, Kircher, Sákovics, Visschers), with papers in *Econometrica, JPolE* and *REStud* as well as *IER(2), IJIO, JEBO, JEEA, JET(2), JMonE* and *SJPE* (plus several under submission). Nonetheless, our broad-based methodology also uses empirical work in micro (Belot, Bíró, Dieterle, Güell) and macro (Elsby), micro models (explicit and implicit contracts: Moore, Thomas; coordination: Steiner; tournaments: Kornienko), macro models (liquidity: Clausen, Moore; aggregate productivity: Grobovšek; trade: Zymek), political economy (Sánchez-Pagés) as well as field and laboratory experiments.

The latter brings us to the achievement of our second goal: the creation of an active in-house experimental group. With the strategic appointment of Belot – who had been academic director at the *Centre for Experimental Social Sciences* at Oxford University (2008-2012) – and the subsequent **launch of our own experimental lab** (*Behavioural Laboratory at the University of Edinburgh*) (BLUE) in January 2013, we brought together colleagues who had been increasingly involved in experimental research carried out elsewhere (Hopkins, Kawamura, Kircher, Kornienko, Sánchez-Pagés). The laboratory fosters collaboration between economic theorists and applied economists and also serves as a platform for interaction with policy makers and practitioners. For example, funded by the ERC, Belot and Kircher have designed an innovative experiment combining laboratory measurements with field data: with the aim of informing public policy on how to improve the matching process between the unemployed and vacancies, 500 job seekers are invited to search for real jobs (on the government Universal Jobmatch website in our laboratory) two hours a week. The project collects unique data on how job seekers weigh job features (wage, location, fit with own qualifications) against each other, how their search strategies change over time and what strategies seem to be most effective.

Complementing the above common themes we also have a **healthy proliferation of independent research**. These include *inter alia* communication (Kawamura), consumer behaviour (Sákovics), health (Belot, Bíró), optimisation (Clausen) and relativity concerns (Hopkins, Kornienko). One of these research strands has already attracted considerable attention even outside of academia: Belot's field work on healthy eating uses randomized controlled trials to test for the effectiveness of providing incentives to encourage healthy eating among young children. Both the methodology and the research theme fit very well with the UK policy agenda, indeed the research findings have already been noted by the Behavioural Insights Team of the Cabinet Office.

We maintain on-going links with a number of **high profile affiliates** who provide complementary research leadership, help us benchmark our policies, act as lookouts in the job market and pay research visits. They are: Forbes (Limerick), Hassler (Stockholm), Kanbur (Cornell), Koop (Strathclyde), de Meza (LSE), Samuelson (Yale) and Scott-Morton (Department of Justice/Yale).

While the SFC funding for SIRE is coming to an end in 2014, we are committed to sustaining the synergies and economies of scale it has successfully catalysed (see section e). We therefore plan to maintain collaboration through a pan-Scottish research coordinator and the continuation of the three thematic programmes. In 2013 we submitted a bid to the SFC for ongoing evolutionary funding, which additionally prioritises PhD training and new positions in micro-econometrics.

To help us meet our research objectives we established a Research Committee, comprising the Research Director, the PhD Programme Director, the Knowledge Exchange & Impact Director and



the REF Coordinator, with our Research Administrator also in attendance. The committee provides targeted information to staff about funding opportunities; solicits, coordinates and peer-reviews grant applications; ensures that all research performed in our School abides by our ethical guidelines; promotes new initiatives among colleagues; oversees new projects which cross-cut School interests and expertise; provides advice on dissemination and knowledge exchange; and, together with the Staffing Committee, identifies and addresses the training needs of colleagues and organises research mentoring, including assistance in getting ECRs on the grant ladder.

We have ensured that there are plenty of opportunities for the discussion of research, at all levels. Our main fora for discussion are the general seminar and main workshop series (described below in e). At a less formal and more specialised level we have two internal workshops, one on "applied" and one on "macro/international" economics. These meetings bring together smaller groups with a more closely knit set of interests. Finally, we host on-demand "Quaker sessions", developed from a tradition originally started in Cambridge in the 1970s by Frank Hahn in which students were put on the spot by the "master". In our variant, people put themselves on the spot. We have an hour set apart each week, so that whenever someone has an idea on which s/he would like quick feedback the session can be convened through a simple e-mail. These brainstorming events are instructive and enjoyable to everyone, not only the originator. To encourage (especially ECR) staff to be less self-conscious about presenting their unpolished ideas, research students are usually not invited to these meetings. Instead they are encouraged to have their own brainstorming sessions. Finally, we continue with our internationally renowned "coffee at eleven". The fact that most of the School comes together every day for an extended discussion of current economic issues and papers/seminars has roused the envy of many of our visitors.

We are on track to reach our targets for our research strategy. Following the positive evaluation of its outline proposal, in July 2013 our labour group was invited to submit a full proposal for an ESRC Large Grant of £6m. If achieved, the grant will accelerate our establishment as a world leading centre of excellence. Similarly, we expect that work carried out in the experimental lab should soon reach the target rate of six full projects per year, at least half of which are run by our own researchers, supported by external funding.

c. People

Our research environment is designed to cater for the needs of all members of our community and for colleagues at all stages of their careers and with respect to all aspects of their research endeavours: from idea to impact. We have an outward-facing, diverse faculty – including staff from Australia, Belgium, Czech Republic, Germany (two), Greece, Hungary (two), Japan, Netherlands, Slovenia, South Africa, Spain (three), Ukraine and the USA. Staff work with a large (in excess of 75) pool of external co-authors, most of whom are based outside of the UK, including Hart (Harvard), Heckman (Chicago), Helpman (Harvard), Kiyotaki (Princeton), Greenwood (Penn), Grossman (Princeton), Postlewaite (Penn) and Rogerson (Princeton). Together with our overseas affiliates, this creates a highly internationally facing research environment.

i. Staffing strategy and staff development

The School has grown substantially during the REF period, from 20 to 27 staff on open-ended contracts – notwithstanding one retirement, and the fact that three young colleagues were successful in securing promotion to/positions in prestigious international institutions in the US (Northwestern and Delaware) and France (Toulouse). We have attracted senior academics from LSE (Kircher), Michigan (Elsby), Oxford (Belot) and Southampton (Rodríguez-Mora), and hired fresh PhDs from the US (Brown, Michigan State, Penn) as well as from Europe (CEU, UAB, UPF).

As part of its mission to support the development of early career academic staff (reinforced by the >30FTE Institute for Academic Development), the University has made 200 new five-year tenure-track Chancellors Fellows available in 2012-13, and a further 50 will be advertised in early 2014. These prestigious posts are all anticipated to lead to permanent lectureships. We have one such Fellow already in post (Visschers from UCIII Madrid). The entry of fresh talent has led to a reinvigoration of research life in the School, witnessed *inter alia* by the increase in the number of Quaker sessions to four or five per semester.

Our aim is to continue the expansion without losing the high level of cohesion and collegiality that we currently enjoy. Our staffing policy emphasises the fit of new hires into our research ethos. We



do not hire based solely on CVs, rather, we engage candidates in research discussions prior to interview. We envision a steady state size of 30+ permanent research active staff that we should reach by 2020, with a mix of junior and – when the right opportunity arises – senior appointments.

Each member of academic staff is appraised by the Head of School at least once a year, involving an evaluation of progress on planned research and personal development, and the formulation of future plans. The process ensures that the allocation of workload meshes with the bespoke personal and professional development needs of each individual. During the REF period Kornienko and Sánchez-Pagés were promoted from Lecturer to Senior Lecturer based on their research as well as other institutional contributions.

Some temporary specialisation in administration is helpful in running a School with a large undergraduate programme (821 students were reading for an economics degree in 2012-13). By ring-fencing at least 20% of working hours for research for everyone, we ensure that upon the completion of these more intensive administrative posts, staff can return to fully productive research with relative ease — often with the help of a bespoke sabbatical arrangement. We currently sponsor three concurrent fully paid research leaves (typically for one year each), in addition to the load reductions financed by research grants. Research leaves are granted based on applications that have a coherent research plan with high likelihood of success. Following the leave, staff produce a report detailing their activities and the fruits of their research.

We place a strong emphasis on nurturing our early career researchers (ECRs). They benefit from a 33% reduced teaching/admin load in their first two years (senior hires get one year) to aid the process of acclimatisation. This reduction is over and above the already low standard teaching load (the equivalent of two large semester courses and two PhD supervisions), achieved by the efficient organisation of our teaching and the employment of PhD students and Teaching Fellows as teaching assistants. ECRs receive a £20k personal research fund on arrival, to give them autonomy in carrying out their research activities, especially travelling to other HEIs to work with co-authors (or vice versa), until they can finance these through grant income. They are strongly encouraged and given assistance to present their research at conferences and seminars (in the 2012-13 academic year, our six ECRs gave six external seminars and made 12 international conference presentations). We have a formal three-year mentoring scheme, which mainly covers research but also extends to teaching, administration and career planning. After the three years, only the formality of the role ceases: the supportive relationship continues. Importantly, an ECR's mentor (chosen by research affinity) is not the only source of advice; all experienced staff provide guidance (such as discussing ideas, reading drafts, advising on submission, interpreting referee reports). Our ECRs also have a pan-Scottish support network (see below).

The experience with our first (internally funded) Postdoc – Vikander, who took up a permanent job at the University of Copenhagen – was an all-round success. Based on this, we plan on regularly complementing our hiring strategy through further temporary affiliations of this nature, which help to increase our research base. The first example of this was the reappointment of Steiner – who had left in 2009 for Kellogg at Northwestern – as a three-year Professorial Fellow (half time) in 2013, to intensify his successful collaboration with Sákovics and explore new ones with other staff. We also have two grant supported post-doc positions that we are in the process of filling.

We have made efforts to address the under-representation of women in economics. Within the School we have been able to increase the number of female staff from three to five during the REF period, including the appointment of a female professor. We have introduced measures to make it easier for staff to combine research and caring responsibilities: staff benefit from flexible working arrangements, and we ensure that events and meetings are held within core office hours. We are also participating in the **ECU Gender Equality Charter Mark** trial. The charter mark introduces a partner scheme for Arts, Humanities and Social Sciences, based upon the existing Athena SWAN framework (Charter for Women in Science, which recognises commitment to advancing women's careers in STEMM academia). We have set up a School Steering Group for the project – with a balanced membership comprising people at different stages of their career – which will proactively monitor our performance towards obtaining certification. We recognise the importance of having senior women as role models/mentors for staff and students. Indeed, women play an important role in shaping the School as Research Director, Güell (2009-13), and PhD Director, Belot (2012-13). In our Doctoral Programme we have achieved close to gender parity: over 40% of candidates are



women. Beyond the School, we actively seek to ensure a good proportion of women speakers and participants in all academic events we organize. Belot and Politi are also involved in the *Royal Economic Society*'s mentoring programme for women in Economics.

ii. Research students

During the REF period our PhD programme has grown significantly, doubling its annual intake from three-four to six-eight. We have achieved this increase with a concurrent rise in our entry standards. Specifically, we now require the equivalent of a distinction in an ESRC recognised MSc, a five point increase from our criterion in 2007. We maintain a highly international research student body with students from Brazil, Canada, China, Germany, Greece, Iran, Italy, Malta, Poland, Portugal, Russia, Trinidad, Turkey and USA in addition to home-grown talent. We currently fully support 10 PhD students with Research and Teaching Scholarships and we plan to increase this number to at least 15 in the next REF period. This is a good example of a Pareto improvement: we provide the students with a means of living (and fee remission) and useful teaching experience, while - together with the input of our Teaching Fellows - the teaching load of staff is alleviated, giving them more time for research. Many of our research students have been beneficiaries of ESRC studentships: through a competitive process, we have secured in each year of the REF period at least two of the five studentships allocated for economists in Scotland. We have also been able to take advantage of university support, including the Principal's Career Development Scholarships (five) which provide fees and stipend as well as training and career opportunities beyond the research training, the College of Humanities and Social Science Research Awards (two) and the China Scholarship Council/University of Edinburgh Scholarships (two).

In 2010 we won the competition to continue hosting the flagship Master's programme of the Scottish Graduate Programme in Economics (SGPE) for a further five years. This MSc is jointly taught among eight Scottish university economics departments and is the ESRC Doctoral Training Centre pathway for economics in Scotland. Under the direction of Thomas the programme continues to thrive and it plays the important role of serving as a feeder into the PhD programmes of the participating departments. About half of our PhD students come from the SGPE MSc. During the REF period there has been a strengthening of the SGPE PhD programme. In addition to the annual residential conference, students are now required to take additional advanced options courses from the MSc to broaden and deepen their knowledge base.

Complementing this common requirement, we provide our own PhD students with further second year training in mathematical and econometric methods and selected applied topics, in addition to a weekly reading group. We also encourage (and financially support) our PhD students to attend at least one short course, master class or workshop per year; not just the ones organised in Scotland under the aegis of SIRE but also in the rest of the UK and Europe.

All PhD students benefit from at least two supervisors, usually involving complementary expertise. The University provides a compulsory training course for new PhD supervisors, followed up with a refresher every five years. It covers new developments in research supervision, including regulations and procedures, and allows for the sharing of practice on managing supervision. We complement this through in-school training sessions at regular intervals that cover subject specific issues. PhD candidates and their supervisors agree on a bespoke structure of individual and joint meetings, together with the frequent submission of written material. Students working in the same area sometimes have joint sessions with their supervisors and they also share an office to encourage cross-fertilisation and discussion. We place emphasis on the presentation skills of our PhDs. They are required to present their research every year at the annual conference of the SGPE. Additionally, first year students give a presentation as part of their Progression Exam and finishing students present their job market paper in the workshop series. Recent placements of our PhD graduates include: Boston Consulting Group, Guosen Securities, Scottish Government Economic Service, Shandong University, Universität Innsbruck, University of St. Andrews.

Based on the new developments described above, together with more aggressive marketing and the incorporation of our new hires in supervisory roles, we plan to further expand our PhD Programme. We expect to reach at least 10 doctoral graduations per year by 2018.

d. Income, infrastructure and facilities

As members of SIRE, we have benefited from a large flow of income (nearly £3m) from the SFC



during the REF period. The salary costs of four lecturers and five professors were subsidised at a 50% rate. This gave us time to achieve a commensurate increase in our income from other sources (grants, PG and UG fees) to ensure sustainability of our activities when the SIRE funding ends. Building on scale economies, we have been especially successful in increasing our undergraduate fee income, mainly by increasing our student intake (both home and overseas) and also by tightening our entry requirements, thereby reducing attrition.

We have greatly increased our research income even net of the SIRE contribution. Our staff have been successful in winning prestigious research awards at all stages of their career:

- Moore has won an **ERC Advanced Researcher Grant** ("Money, Liquidity and the Aggregate Economy" 2009-14, €1.6m).
- Kircher has won an ERC Starter Grant ("Labour Heterogeneity in Search Markets" 2012-17, €1.17m).
- Steiner has won an ESRC First Grant ("Prevention of Coordination Failures" 2008, £127k).

Additionally, Belot is a Co-I in an interdisciplinary ERC grant ("Neurobiology of Decision Making in Eating" 2013-18, School of Economics share £1.48m) and has also obtained an Esmée Fairbairn grant (£14.5k). Sánchez-Pagés has obtained two grants from the Spanish Ministry of Science and Innovation ("Theoretical and Experimental Investigation of the Relationship Between Conflict, Inequality and Identity" 2013-15, €20k and "Cooperation Among Women: An Experimental Investigation" 2011, €8.5k), Thomas, Snell and Holt received an ESRC grant ("Cohort Effects within Firms" 2008-11, £343k), while Güell, Hopkins and Kawamura have each won a British Academy Small Grant. Finally, in 2011 Sánchez-Pagés and Steiner have both been awarded prestigious personal fellowships, a Ramón y Cajal Research Fellowship in Spain (€192k); and a J.E. Purkyně Fellowship in the Czech Republic (€210k), respectively.

The increase in the number of successful grant applications is partially due to a scheme we initiated in 2012. Staff receive a discount in their marking load for producing a high quality research grant application, thereby aligning individual incentives with those of the School. This scheme can be implemented thanks to our – ESRC inspired – demand management scheme, through which the Research Committee is closely involved in the development of grant proposals, ensuring strict quality control. We also encourage and mentor newer researchers to step onto the grant ladder, highlighting the importance of obtaining grants for promotion, in addition to the direct benefits that accrue via the support of collaborative work and experimental projects. In winning research funding we draw heavily on the skills of Edinburgh Research and Innovation (ERI). Wholly owned by the University, ERI provides a comprehensive system of support: highlighting relevant funding opportunities, advising on funder terms and conditions, and curating an extensive "bank" of successful proposals. ERI offers an efficient service costing grant applications and an extensive events programme including funder visits and inter-disciplinary thematic networking meetings.

We also offer economics courses on Master's programmes of other Schools (MSc in Carbon Management, Master of Public Policy, MSc in Informatics). In addition to the income they bring, these interdisciplinary ventures also serve as catalysts for further collaborations with cognate Schools. These comprise from personalised invitations to potentially interesting talks to actual joint research. For example, Kawamura is Co-investigator in a – recently shortlisted – ERC Consolidator grant proposal with a Principal Investigator from Politics.

Since March 2012 we have occupied all six floors of a Victorian tenement building refurbished (with a £780k investment) for our exclusive use. We now share a common home with all our postgraduate students and our administrative staff. We have space for workshops and seminars and offices for short and long term visitors, as well as for SIRE. We realised our long-standing goal of establishing an experimental laboratory in January 2013. BLUE is a state-of-the-art facility with 18 partitioned computer work-stations and a separate experimenter's office. It can support various forms of experiments, including those that require real-time interaction among participants.

To source above-standard computing power for empirical research on labour and health economics projects with large data sets, we have engaged the Edinburgh Computer and Data Facility of The University of Edinburgh, which provides a high-performance cluster of computers, large-scale research data storage services and research computing consultancy.



e. Collaboration or contribution to the discipline or research base

We are actively engaged in collaborations at three different levels. Closest to home, we are engaged in a continuous exchange of ideas with other Schools across the University. We have had presentations in our workshop series by researchers from informatics, biology, geology, politics, psychology and sociology. Motivated by this cross-fertilisation, a number of our staff (Anwar/philosophy, Belot/medicine, Kawamura/politics, Kornienko/psychology, Pagés/biology) are actively involved in interdisciplinary research. The interdisciplinary collaboration is not restricted to pure research. Together with the Business School and the School of Geosciences in 2008 we launched an interdisciplinary MSc programme on carbon management. which in 2010 won the Pricewaterhouse Coopers' Award for "Teaching Employable Skills". Based on this programme's success we have also hosted the Chevening Fellows' Programme on "Finance and Investment in a Low Carbon Economy" for two years. The programme, financed by the Foreign Office, each year brings 14 'high-fliers' from around the globe for an intensive three months of study based at the University of Edinburgh. In similar vein, postgraduate programmes in business, politics and informatics offer economics courses taught by our staff. We also teach a generic postgraduate course in economics aimed at research students across the social sciences.

Our second sphere of collaborations is **Scotland-wide** and it involves a great range of activities beyond the SGPE discussed above - many of which are coordinated by SIRE. Our input into the smooth operation of SIRE has been substantial. Moore was the first Director of SIRE until 2009. Sayer has been the Executive Director since the start. The programme directorship for the Behaviour, Incentives and Contracts Programme (one of the three thematic sub-programmes of SIRE) has been held consecutively by Moore, Hopkins and Sákovics. The various SIRE activities related to knowledge exchange and impact are described in REF3a. One good example is the Forum for Young Researchers. Twice a year, at varying Scottish locations, the Forum brings together young researchers from across Scotland and across all of the research areas encompassed by SIRE to meet and discuss economics research. The aim is to develop a shared understanding of the research each is working on, to obtain feedback and to foster the development of joint research. Each meeting consists of a half-day event with presentations given by ECRs from Scottish universities and one presentation by an internationally excellent established researcher. A crucial by-product of the collaboration fostered by SIRE is that it has become standard practice to travel to other campuses and thus researchers from other universities attend events even when they are not organised under the aegis of SIRE (attracting travel subsidy).

The third – and main – arena in which we contribute to the discipline and research base is the **international** one. We have a weekly **seminar series**, which attracts excellent researchers from around the world to present their recent findings in front of a demanding audience that interrogates the speaker. It is a remarkable feat, which greatly helps our cohesion as a single group, that despite the growth in our numbers we can sustain a generic seminar series (attended by nearly all staff), without having to splinter into specialised ones. Affiliations of our *overseas* speakers during the REF period include North American universities: Chicago (5), Columbia (2), Harvard (3), Michigan (5), Northwestern (5), NYU (3), Penn (3), Princeton (4), Stanford (3), Toronto, UBC (2), UC Berkeley (2) and Yale (4); as well as European ones: Bonn (3), UCIII (6), CEMFI (4), EUI (4), IIES (3), PSE (3), Toulouse (2), UPF (8) and Zurich (3).

Our seminars are complemented by a **workshop series**, usually featuring outside speakers but also including staff and advanced PhD students. It is geared towards the presentation of less crystallised work. The workshops are on the same day as the seminars to increase scale economies and so that the speakers can attend each other's talks.

The steady flow of visitors is reciprocated by our faculty giving **invited talks** at other universities. A selected group of these venues include ASU, Caltech, Chicago, Columbia, Cornell, Harvard, McGill, MIT, Northwestern, Penn, Penn State, Princeton, Rochester, Stanford, Toronto, UBC, seven UC campuses, UT@Austin, Yale, the World Bank and the Federal Reserve Banks of Atlanta, Chicago, Minneapolis, New York and Philadelphia, from North America; Berlin (Humboldt, DIW and Frei), Bocconi, Bonn, CEU, ECB, EUI, INSEAD, IZA, Mannheim, Munich, OECD, PSE, Toulouse, UCIII, UCD, UPF and Zurich in Europe; as well as universities in Australia, Belgium, Brazil, China, Finland, Israel, Netherlands and Japan in addition to many UK locations.



Our staff have been invited to **address** numerous **scientific meetings**. In addition to smaller workshops, these include the following plenaries: **Belot** (*European Workshop on Experimental and Behavioural Economics*), **Fransman** (*European Communications Policy Research*, keynote to the *International Association for Development of the Information Society*, keynote to the *International Telecommunications Society*), **Güell** (*Spanish Economic Association*), **Kircher** (keynote to the *Joint Paris Search and Matching Workshop*, Panel Discussion at the *AEA* meetings), **Moore** (*Econometric Society*: Presidential Address to the North American Summer Meeting, Presidential Address to the Tenth World Congress, the Hurwicz Lecture at the Latin American Meeting; *Joint Banque de France-Bundesbank Conference*, *European Economic Association*) and **Sákovics** (keynote to the *Hungarian Society for Economics*).

In terms of large **conference organisation**, **Kircher** was Programme Chair of the *Society of Economic Dynamics* Meeting in 2011, and we had the following Programme Committee members: **Güell** (*European Economic Association* 2009-11, *Royal Economic Society* 2011-13); **Kircher** (*Society of Economic Dynamics* 2009-10); **Rodríguez-Mora** (*Econometric Society* European 2009, 2011); **Sákovics** (*European Association for Research in Industrial Economics* 2009-13).

Kircher ("Directed Search Models of Labor and Consumer Product Markets," 2008) and **Kornienko** ("The Foundations of Decision Making: Recent Developments," 2012) organised a session each at the annual *American Economic Association* Conference.

We have organised a number of **mini-conferences** in Edinburgh with international speakers and nationwide audience: "The Emergence of Institutions" May 2008, "Inter-generational Mobility" June 2008, "Relativity, Inequality and Public Policy" June 2009, "Trust" October 2010, "Hume's Influence on Economics: New Perspectives" June 2011, "Plausible Theories of Behaviour" October 2012, "The Determinants of Dietary Choices" March 2013, and the "Inaugural Conference for the Behavioural Laboratory at the University of Edinburgh" June 2013.

We were the first ever non-English host of the UK leg of the **Review of Economic Studies Tour** in May 2013. The Tour has been held annually in May since 1989 (originally instigated by our colleague **Moore**). Every year, in line with the *Review*'s tradition of encouraging the work of young economists, seven of the most promising graduating doctoral students in economics and finance in the world are selected to present their research to audiences in Europe. The meetings take place at the economics departments of three or four major universities across Europe. Based on the meeting's success we plan to bring further small conferences to Edinburgh, such as the meeting of the Search & Matching Research Group, on whose Executive Board Kircher has sat since 2010.

We have contributed to the functioning of **learned societies**, first and foremost by **Moore**'s holding the Presidency of the *Econometric Society* in 2010. Additionally, **Belot** is Member of Council of the *European Society for Population Economics*; **Güell** is Executive Committee Member of the *European Association of Labour Economists*; **Kircher** is Member of Council of the *European Economic Association*; **Thomas** was Council member of the *Royal Economic Society* 2007-2012 and was elected Fellow of the *Econometric Society* in 2008. Both **Moore** and **Thomas** are Fellows of the *British Academy*, where the latter is a member of the Standing Committee.

On the **journal editing** front, we have a Joint Managing Editor of the *Review of Economic Studies* (**Kircher**), two Founding Editors and a Co-editor of the *Journal of Economic Surveys* (**Roberts, Sayer** and **George**, respectively), and the following editorial board members: **Elsby**: *Review of Economic Studies*; **Fransman**: *Industry and Innovation*; *Innovation and Development*, *International Journal of Technological Learning, Innovation and Development*; *Journal of Evolutionary Economics*; *Journal of Free Software & Free Knowledge*; *Telecommunications Policy*; **Güell**: *Investigaciones Económicas* (2006-9), *Journal of the Spanish Economic Association* (2010-12), *Spanish Economic Review* (2006-9); **Hopkins**: *Journal of Economics*; *Journal of Economic Behavior and Organization*; **Kircher**: *Review of Economic Dynamics* (2010); **Rodríguez-Mora**: *Macroeconomic Dynamics*; **Sákovics**: *Bulletin of Economic Research* (2000-9); *Journal of Industrial Economics*; **Thomas**: *Scottish Journal of Political Economy*. **Worrall** was guest editor of *Games* for the special issue on "Contract Theory" in 2013.

Finally, **Hopkins** ("Price dispersion") and **Sákovics** ("Hold up problem") were invited contributors to the *New Palgrave Dictionary of Economics* 2nd Edition (2008).