

Institution: University of Exeter

Unit of Assessment: Economics and Econometrics

a. Overview

Economists at Exeter produce high quality research, in microeconomic and macroeconomic theory, time series econometrics, experimental economics and applied economics. Through a concerted hiring strategy supported by the Business School and the University, the Unit has doubled in size since RAE2008, from 14.2 FTE in 2008 to 30.5 FTE in 2013, increasing the vibrancy of the intellectual environment in the process. Notable features of this expansion include:

- The formation of two internal research groups, known as 'peaks': one in Behaviour, Decisions and Markets (BDM) and the other in Public Economics, Trade and the Environment (PETE).
- Each peak has sought to secure a Centre award. PETE secured the £2.4m ESRC/HMRC
 Tax Administration Research Centre (TARC). BDM has formed the Centre for the Study of
 Risk and Ambiguity (CSRA), which is at the final stage of consideration for an ESRC centre
 award.
- The Unit contributed significantly to the formation of a Doctoral Training Centre (**DTC**), with the Universities of Bath and Bristol: one of only 21 awarded in 2010 by the ESRC.
- The Unit has put in place a strategy to make these developments sustainable, and foster new initiatives. These include the 'Global Uncertainties' theme of Exeter University's Humanities and Social Science (HASS) strategy and the Institutions, Trade, and Economic Development (InsTED) research network.

The BDM group now comprises about 36 percent of the Unit. Research by the BDM group forms a tight link between theory and experiments: theory provides the basis on which experiments are run; experimental work produces evidence on which new theories are built. A particular focus of the group is on explicit and implicit contracting. The PETE group makes up another 21 percent of the Unit. A central theme linking the research of this group concerns strategic interaction over economic policy, whether over fiscal, trade or environmental policy. The remainder of the unit is composed of the econometrics group (16 percent) and the macroeconomics group (27 percent). The econometrics group studies a range of topics in theoretical and computational econometrics, including time series modelling and testing, and bootstrap methods. A dominant theme in the research by the macroeconomics group concerns economic fluctuations, particularly the implications of frictions and market failures for economic policies.

Outpacing staff growth, the Unit's research funding profile has increased as well, having secured 24 awards totalling £1.8m since 2008, with research income increasing from £243K in RAE 2008, to £894k since 2008. In addition, there has been growth in research students from 16.5 FTE to 26.5 FTE over the same period to significantly enhance the vitality of our graduate programme.

b. Research strategy

The principal aim of the Unit continues to be to advance the frontiers in the discipline of economics in a way that will be of value to society. The stated research strategy set out in RAE2008 can be summarised as "... the production of high quality research, primarily in the form of articles in the top international journals ...". This strategy has been adhered to and; by doing so, the Unit has improved its academic publication record over the assessment period. However, as the Unit has expanded over the period, it has refined its research strategy to reflect the specialisms that have emerged. The refined strategy has three components:

1. Increase research capacity and the quality and quantity of research outputs
Over the assessment period, the Unit has assembled a leading group of researchers in BDM.
In the BDM group, Grosskopf, Sarin, and Zamir were hired at the full professorial level; Cobo-Reyes as a senior lecturer; Das, Lindsay and Poen at the lecturer level. Of particular note are:
Grosskopf and Sarin's (AER 2010) work on experimental testing of the effects of reputation; and



Cobo-Reyes' work (Charness et al AER 2012) on the delegation of wage-setting decisions. Both works make important contributions to the understanding of contracting—and hence to BDM and the Unit more broadly. Zamir's work with Kaplan (Kaplan and Zamir ET 2012) forms a theoretical framework for experimental testing of auctions theory. Kaplan and Zamir are now undertaking follow-up experimental research based on their framework, supported by a grant from the Nuffield Foundation (2009-2012, £7k). Poen adds capacity to the group's experimental work on auctions (Kirchamp et al EER 2009). Early career researchers Das and Lindsay bolster the group's capacity on uncertainty and experimentation. The research carried out by the BDM group over the assessment period, much of it published in general-interest theoretical journals, provided the foundations for the establishment of the CSRA.

In order to build capacity not just within the Unit but in the academic community more broadly, BDM also sponsors the £3,000 **Exeter Prize** for the best published paper in the previous year for research in Experimental Economics, Decision Theory and Behavioural Economics. This widely-publicised prize brings recognition not only to Exeter, but also to the top research in the world. The 2012 winner Michel Regenwetter presented his work on "Transitivity of Preferences" at Exeter, while the 2013 winner Daniel Friedman is scheduled to present in the spring of 2014.

The Unit further extended research capacity in experimental economics by continued support of the **Finance and Economics Experimental Laboratory at Exeter** (FEELE), co-directed by Balkenborg and Kaplan. FEELE is a fully-specified computer laboratory for the conduct of experiments in economics and has a dedicated programmer who supports the lab. It was established prior to the assessment period but required on-going support to bring it to the stage where experiments could be undertaken on a regular basis. During the assessment period, the FEELE laboratory ran 439 economics experiments for a total of 31 projects and was also used by 7 academics who are external to the Unit.

Capacity in macroeconomics has been developed by hiring T. Damjanovic at the associate professor level; Cooke as senior lecturer; and Igarashi, Madeira, Neira and Siegel as lecturers. T. Damjanovic contributes to the group's expertise in the causes and implications of price rigidities from the perspective of monetary policy (e.g., Damjanovic and Nolan JME 2008, EJ 2010); as does Cooke from the perspective of open-economy influences (e.g., Cooke JMCB 2010); Igarashi from the perspective of search frictions (Huang and Igarashi JET 2012); and Madeira from the perspective of Keynesian labour market rigidities (ReStat, forthcoming). Early career researchers Neira and Siegel broaden the research horizons of the group, working on long-run issues of fertility decisions and human capital accumulation respectively.

The PETE group has been extended by hiring Zissimos at the associate professor level, and Fernandes and Porcelli at the level of lecturer. Zissimos adds to the department's research capacity in international policy and institutions (e.g., Mrazova et al JIE 2013). Fernandes extends the Unit's capacity into the new area of firm performance and exporting, particularly with regard to developing countries (Fernandes and Tang JDE 2012). Porcelli adds to the Unit's existing expertise in domestic fiscal policy issues (Lockwood and Porcelli AEJ;Econ Policy, forthcoming). The research that PETE have published over the assessment period in general interest and public economics journals, together with the collaborative pieces of work that arose out of Myles' involvement with the Mirrlees Review, the 'Dimensions of Tax Design' and 'Tax by Design' publications (http://www.ifs.org.uk/mirrleesReview), formed the foundations for TARC.

Also as part of the initiative to build capacity, the Unit has established an **academic visitor's programme**. The Unit now has a programme of weekly seminars led by external speakers, including such internationally-renowned academics as Amartya Sen (Harvard University) and Ariel Rubinstein (New York University). One of the features of the programme that has been particularly valued by Unit members, because of the enhanced scope for interaction, is its support of longer-term (typically two-week-long) visits. Scholars who have so far been supported by this programme include: Brian Copeland (University of British Columbia), Edi Karni (Johns Hopkins University), David Schmeidler (Tel Aviv University), John Weymark (Vanderbilt University), Eyal Winter (Hebrew University of Jerusalem), Alan Woodland (University of New South Wales), and Shmuel



Zamir (formerly of Hebrew University of Jerusalem, now University of Exeter). Note that Zamir's participation in the programme was instrumental in the Unit subsequently hiring him as the director of CSRA.

The Unit developed new partnerships and collaborations with other academically excellent departments, and strengthened relationships with existing ones both within Exeter and elsewhere. Within Exeter, the Unit has contributed to joint research bids with other departments such as Finance, Politics and the Medical School. For example, members of the Unit (Balkenborg, Chakravarty, Kaplan, Kelsey, Kotsogiannis and McCorriston) are also members of the Centre for European Governance (CEG), based in the Department of Politics, contributing to their grant writing and research outreach activities through help with conference organisation. (Note that the CEG was referred to as the Centre for Regulatory Governance in the Unit's RAE 2008 submission.) Building on their collaboration in this regard, Balkenborg, Chakrayarty, Kaplan and Kelsey subsequently put forward the bid for CSRA. In addition, members of the Unit are undertaking collaborative research with Psychology (Fonseca), the University of Exeter Medical School (Fonseca), and Finance (Kaplan and McCorriston). A further example of international collaboration by members of the Unit is the ESRC/DfID-funded project to study Ethnic and Religious Fragmentation in India (Chakravarty). This project is run in conjunction with Sugata Mariit at the Centre for Study of Social Sciences, Calcutta, and Sudeep Ghosh at the Hong Kong Polytechnic University.

The Unit's **research outputs** improved in both quality and quantity during the period between 2008 and 2013. This is evidenced by the number of publications in internationally recognised top journals such as American Economic Review (2 articles), Journal of Economic Theory (3 articles), RAND Journal of Economics (2 articles), Games and Economic Behaviour (6 articles), Journal of International Economics (2 articles) and Journal of Public Economics (3 articles).

2. Secure grants that support cutting edge research

Excluding the TARC award outlined above, further details of which are provided below, the value of **research grants** awarded to the Unit increased from £80k in 2008 to over £1.2M in 2013, and the Unit's total research income in this period is £882k. This figure includes the €1m (£800k) **Transparency of Food Pricing Policy (TRANSFOP)** project, which is funded by the EU and led by McCorriston, involving 13 partner universities and research institutes across 10 EU countries (Exeter's component is £139k). It also includes a number of prestigious grants awarded to the Unit by the ESRC (6 awards, £224k), Leverhulme Trust (3 awards, £120k), Nuffield Foundation (3 awards, £16k), British Academy (2 awards, £6k), DEFRA (1 award, £15k), HMRC (2 contracts, £113k) and the European Research Council (ERC, 1 award, £98k).

3. Promote the development of postgraduate students

A major part of our graduate student development objectives were embodied in the Unit's contribution to the establishment and development of the **DTC** during the assessment period. In addition to securing continued ESRC accreditation of its postgraduate programmes, the Unit has invested significantly in further resources to broaden the availability to its postgraduate students of high quality training opportunities and interaction with the wider academic community. For example, the Unit has provided training seminars for research students delivered by internationally renowned scholars such as Eyal Winter (Hebrew University) and John Weymark (Vanderbilt University).

Progress in the three components of the research strategy has been accomplished through sustained effort across, and cross-fertilisation between, all areas of the Unit outlined in the overview section. As two examples: the research grants were awarded to members in all areas of the Unit; and the setting up of the DTC was a collaborative effort across the whole Unit with those giving seminars as evenly distributed as possible across the fields that are represented in the Unit.



Objectives and Plans for Activities in Research

In broad terms, the Unit's objectives over the assessment period remain the same in terms of the three components outlined above. In terms of specific plans over the assessment period to which the Unit has already committed and which entail measurable outputs, these are based around the activities of TARC and CSRA.

The £3.4M collaborative ESRC/HMRC **TARC**, (Exeter's element is £2.4M) is a cross-disciplinary award, led by Myles as Director, which benefits from a breadth of academic expertise. Lynne Oats (Accounting Department, Exeter) and Jonathan Shaw (Institute of Fiscal Studies, IFS) are Deputy Directors; Kotsogiannis and Fonseca are Co-Is based in Economics, and Exeter's Psychology is represented by Kurz, the final Co-I. The work of TARC will deliver an improved understanding for practitioners and policymakers in tax authorities, in the UK and in other countries, of how to enhance tax policies and administrative practices. The results, disseminated through academic publications, policy briefs and social media, will lead to an improvement in the process of tax administration, improved measurement of the tax gap, a reduction of the tax gap, and greater taxpayer satisfaction. The TARC is also committed to building research capacity in tax administration analysis. This will be achieved through the provision of training for PhD students and master-classes for practitioners. There are also plans for TARC to introduce a new Journal of Tax Administration. Finally, TARC held a major conference in January 2013 and is scheduled to hold further conferences and a series of smaller annual workshops.

CSRA will be led by Zamir as Director, with Grosskopf and Kelsey as Deputy Directors. The Centre is at the final stage of a funding decision with the ESRC. Whether or not CSRA is funded by ESRC, the following initiatives will be undertaken. The underlying focus of CSRA is where uncertainty plays a key role in shaping outcomes. CSRA will work to enhance our understanding of how decision-makers perceive these uncertainties, process new information and make decisions. CSRA has already attracted significant interest from industry as well as academia, including the insurance sector. The Met Office and South West Water are project partners who will be involved in the delivery of the CSRA. Zhenyu Wang, who was vice-president in charge of Financial Intermediation of the New York Fed at the time of the 2007-2009 financial crisis, has played an active role in helping to set up CSRA, and has committed to further involvement in the future. The major objectives of CSRA are to: conduct and facilitate research that will enhance the understanding of risk and ambiguity; set a research agenda to produce recommendations that will help shape policy in the UK; expand research capacity on risk and ambiguity by holding workshops and training PhD students.

In terms of broader research objectives, a key aim is to use the experience gained through the funding efforts of BDM and PETE to build greater strength in macroeconomics. In addition, we aim to develop a new competence in development economics by expanding our existing competences in public economics and international trade in that new direction. Hiring Fernandes is an indicative step in that direction. This addresses the RCUK strategic priorities and forms new concentrations around existing staff. We anticipate that the experience gained with developing core competences in BDM and PETE will help us build expertise, attract funding, and build research capacity through training PGRs in these new areas as well. The DTC is still relatively new and the aim is to realise greater benefits for PGR students in the region through coordinated efforts with the other departments involved to run a greater variety of courses.

New and Developing Initiatives

In 2011, Exeter launched its new <u>Humanities & Social Sciences Strategy</u> (HASS) which combines six interdisciplinary themes. HASS focuses on bringing together cross-disciplinary researchers into interdisciplinary teams which address major global challenges and map well into the priorities of major UK and international funding bodies. The University has invested £1.5 million in this initiative: £1m for staffing; £105k for discretionary funding; and £395k for project development funds. McCorriston is leading one of the six strategy themes: 'Global Uncertainties'. It is anticipated that each theme will generate significant capacity for outputs, both in terms of publications and research income.



With the help of seedcorn funding from the Business School, and a grant from the HASS 'Global Uncertainties' strategy theme, the Unit has also set up a **research network** to study Institutions, Trade and Economic Development (InsTED) directed by Zissimos. A launch event for InsTED took place in May 2013, bringing together leading scholars from around the world working in this field. Ongoing collaboration will be supported via the InsTED website and future meetings will be funded externally.

Priority Developmental Areas

A priority area for development in the Unit is the **MRes in Economics**. This essentially constitutes the introduction of a series of taught courses to the first year of the PhD programme. Students entering the MPhil/PhD programme in Economics will be required to enroll in the MRes in their first year, with progression to the PhD proper being conditional upon passing the course assessments. This represents the most effective and efficient method of bringing our PhD students to the frontiers of research in Economics. And it would offer advanced courses to students who desire additional research-focused training after completing their MSc but who do not wish to commit to the three years of a doctorate. This would be a novel offering for the UK higher education sector in Economics.

Research Monitoring

With regard to monitoring progress towards research targets in the department, all members of the Unit are allocated an Academic Lead who acts as a professional mentor. All individuals take part in an annual Personal Development Review with their Academic Lead, and this review also includes individual feedback from the University's Research Output Monitoring process and leads to development actions focused on building individual capacity and capability. Training and development opportunities at Exeter include training for research supervision, funding proposal writing, academic paper writing, research methods development and working across disciplines. All junior members of staff must publish four papers in their first five years at Exeter, at least two of which are assessed as being at the level of 'international excellence' with the others graded at least 'recognised internationally'.

c. People, including:

i. Staffing strategy and staff development

Staffing Strategy

The Unit pursues a vigorous hiring strategy that has proved highly effective throughout the assessment period. The Unit interviews at the annual Allied Social Science Association (ASSA) meeting, which is the main international job market for economists. The strong research ethos of the Unit comes as much from "home grown" as "bought in" talent. A notable feature of the assessment period is the number of staff initially appointed at a lecturer level around 2008 who have been promoted to Senior Lecturer based on their publications in the best general journals or in top field journals. For example, Chakravarty, Fonseca and Halunga were all promoted within the assessment period based on their publication records (e.g., Chakravarty and McLeod RAND 2009, Fonseca and Norman EJ 2008, Halunga and Osborne JE'metrics 2012). The Unit has also progressed probationary lecturers before the completion of their probation, and promoted senior lecturers to associate professor at relatively early stages in their careers (Fonseca in 2013). Two new chairs have been appointed by internal promotion (Kaplan, Kotsogiannis). And the Unit continues to benefit from the policy that there are no limits on the number of promotions every year.

Staff Development

The Business School has an Associate Dean for Research (ADR) and the Unit has a Director of Research (DoR). It is the role of the DoR to ensure that researchers are able to function to the best of their abilities, for example by communicating to staff all Business School and University policies and strategies to support research; raising awareness of funding opportunities; and raising any concerns that staff have about the research environment with the ADR.

Once appointed, new lecturers enjoy at least a 20% teaching load reduction for the first two years, and have only nominal administrative duties. In addition, every effort is made to concentrate the



teaching allocation of each faculty member into a single semester where desired, creating greater scope to achieve a critical mass in research during the other semester. As a consequence of the introduction of teaching fellows during the assessment period, teaching loads for research active members of the Unit have been kept to a level comparable to other top institutions. (The teaching fellows are Cortinhas, V. Damjanovic, Ianulardo, Rogers and Stephenson.)

The Unit is committed to implementing the Concordat to Support the Career Development of Researchers in line with the University's Concordat Implementation Plan (2009). In particular, the plan sets out limited circumstances for use of fixed-term contracts, elaboration of a development lifecycle for research staff, and setting out milestones from 'good researcher' to 'research leader'. The rolling coaching programme envisaged under the plan closely corresponds to the programme of research events and advice sessions held within the Unit and the Business School. Mentoring by Academic Leads ensures fixed-term researchers employed on projects have separate meetings for project development and career development. Fixed-term staff receive advice from Academic Leads and the DoR. The University ensures Equal Opportunities in the recruitment and support of research staff, and in 2010 was recognised as a 2 Ticks employer for its support of disabled people. Following the Equality Act of 2010, the University conducted Equality Impact Assessments on recruitment processes to ensure compliance with best practice. Strategies to support diversity follow the University's Single Equality Scheme and Action Plan (2010-12). This scheme is chaired by the Deputy Vice Chancellor for External Affairs.

ii. Research students

Here further details are provided about the expansion of the Unit's PhD programme, focusing on the DTC. The fact that the Unit secured one of only 21 ESRC DTC awards in the UK is a reflection of the strength of its provision for postgraduate programmes. The DTC has made provision for 12 ESRC studentships in Economics across the participating institutions, with a minimum number of 5 being allocated within Exeter over the lifetime of the award. The ESRC/HMRC TARC has secured funding for a further 2 PhD students. In the past two years, the BDM has also financially supported five PhD students in their experimental theses, with this number expected to increase. The Business School has matched each of the externally funded students to create the potential for a larger body of high quality doctoral students. The first four students supported by these scholarships began in September 2011. In addition, 2 students (Marimo and Vlassis) secured interdisciplinary scholarships offered by the University's Science Strategy. The Unit has a weekly brown bag seminar where each student takes it in turns to present their work and receive feedback from their peers and faculty members. Supervisory relationships often flourish into joint publication by supervisor and student. For example, le Roux subjected to experimental testing a theory developed by her PhD supervisor, Balkenborg, on ambiguity and learning in signalling games. This lead to the publication of Balkenborg and le Roux (2012), with further work in the pipeline. Similar supervisory relationships lead to publications by Myles and Omar Ali (2010), and Herger, Kotsogiannis and McCorriston (2008), Herger and McCorriston (2013).

Two indicators of success of the programme are the extent to which it has grown over the assessment period and the quality of the institutions where our students are employed afterwards. The number of PhD student completions increased by 15% over the assessment period, from 15 FTE in 07/08 to 17.2 in 12/13, and the student cohort has increased 62% from 16.5 FTE in 07/08 to 26.5 FTE in 13/14. In terms of placements in universities, recent examples include, Herger (Bern), Himmels (Manchester), LeRoux (Oxford Brookes), Monticini (Catholic University of Milan), Su (LSE), and Vlassis (Aberdeen). Non-academic placements include Cebi (Central Bank of Turkey), Scagliusi (Italian Ministry of the Economy), Upompol (Thai Ministry of Finance) and Yavuz (Central Bank of Turkey).

d. Income, infrastructure and facilities

<u>Income</u>

Details of the Unit's research awards and income over the assessment period has been provided previously: see above. Here, the intended outcomes of the Unit's research income generation strategy are outlined. To ensure CSRA's sustainability, if it is funded the Business School has



committed to continue to fund it beyond the five-year lifetime of the grant. In addition to this, Exeter's Research and Knowledge Transfer Office are putting a strategy in place that would ensure CSRA's sustainability through generation of additional research funding. The Research and Knowledge Transfer Office is putting in place similar initiatives to ensure the long term sustainability of TARC and the TRANSFOP project.

Infrastructure and Facilities

Home to 50+ professional staff, the University's Research and Knowledge Transfer (RKT) Office provides support for academic colleagues for all aspects of research outputs. This includes dedicated support for the development of funding proposals (e.g., for TARC and CSRA), including appropriate resourcing and bespoke contractual and procurement guidance based on an in-depth knowledge of all relevant funding bodies. It also provides advice on impact and knowledge exchange, business orientated event management and stakeholder relationship management funding opportunities. This support continues into grant delivery in the form of full administrative and financial support for academic colleagues, in addition to support and guidance on the requirements for funders. RKT also acts as a hub through which further extensive external expertise can be accessed from dedicated research accountants and Business Development Managers.

Regarding **financial support**, each research-active Unit member's annual allocation to their **personal development account** is £3,000. The **Business School's seed corn fund** represents an additional source of support for which all School staff are able to bid (usually for up to £10,000 for any single activity). The fund is designed to pump-prime research activities that help to meet one or more of the School's research targets. It provided the funds required to organise the Environmental Protection and Sustainability Forum in April 2011, which brought together the world's leading environmental economists. The event was attended by 70 delegates from more than 20 countries (http://business-school.exeter.ac.uk/events/eps). And, as mentioned above, £10,000 of 'seed corn funds' supported the new InsTED network, with matched funding from HASS. Overall, the Unit received 20 grants, with overall value of £122k, from the seed corn fund.

On a broader scale, the University recognises the importance of the Business School — in which the Unit plays a key role — and has recently invested £24m in the School to improve physical resources. These include a new building housing research centres, dedicated postgraduate student space, lecture theatres and seminar rooms, and the full scale refurbishment of the School's exiting two buildings. In addition, the University's Internationalisation Strategy (2010-15) provides funds for travel to work with international collaborators or to bring overseas researchers to Exeter. For example, the Visiting International Academic Fellowship provided £3k to support a visit by Constantinos Syropoulos (Drexel University) to work with Kotsogiannis for two weeks and the same amount for David Schmeidler (Tel Aviv University) to visit the department for two weeks, both in the academic year 2010/11. Also under the auspices of the Internationalisation Strategy, a scheme of Outward Mobility Fellowships has been introduced, funded by Colleges in order to facilitate dialogue and collaboration with international scholars through short exchange visits. This scheme awarded Chakravarty and Fonseca £5k to go to India in 2011, has recently awarded Cobo-Reyes £5k to visit UC Santa Barbara and Kotsogiannis £3.1k to visit University of New South Whales in 2014.

There are two primary support mechanisms which give people time to develop research activities. These are the allocation of **protected research time** which forms part of the Workload Allocation Model (WAM) and the **study leave** policy. Within the workload model there is an allocation of 40% research time for research-active staff, in addition to time allowed for PGR supervision. The Business School's policy is to look favourably on requests for study leave that fit the overall strategic goals of the School and the Unit: for example developing national or international research links, writing high quality outputs, or developing business engagement routes. Moreover, there is no "sabbatical clock"; study leave is granted as soon as there is a strong research case.

With regard to specific research resources, there is a major collection of economics books, journals, and electronic resources in the **University Library**, which has received £9.5m worth of



investment over the assessment period. The Business School subscribes to a number of databases including Bloomberg, DataStream and WRDS. The Unit has a discussion paper series that published 51 papers over the assessment period. This series is made available on the IDEAS and RePEc online repositories.

e. Collaboration or contribution to the discipline or research base

The Unit has **collaborated actively** with leading scholars over the assessment period both nationally and internationally. Across the Unit as a whole, there were 54 collaborations on published and working papers with scholars at other UK institutions and 99 collaborations on the same basis with scholars outside the UK. The unit also collaborates through its members' involvement with various **research networks**. Particularly noteworthy examples are Grosskopf's election as a member of the Executive Committee of the Economic Science Association (2013-2016), Myles' service to the Royal Economic Society as Conference Secretary, and Zamir's Fellowship of the Econometric Society, and Charter Membership and Council Membership of the Game Theory Society. Other notable Unit memberships include: Centre for Economic Policy Research (Mason), CESifo (Kotsogiannis, Zissimos), Centre for European Governance and Regulation (Balkenborg, Chakravarty, Kaplan, Kelsey, Kotsogiannis, McCorriston), and Institute for Fiscal Studies (Myles).

Members of the Unit interacted with the **wider research community** by giving seminars at university departments (155), presentations at conferences (167), and by organising conferences and conference sessions (23). In 2013 alone, supported by the Business School and other sponsors the Unit hosted seven workshops and conferences across a variety of disciplines: The Inaugural Workshop for TARC in January, an Econometrics Workshop in Honour of James Davidson and the 1st InsTED Workshop, both in May, the 22nd Annual Tax Research Network (joint with Accounting), the 'Developments in Economics Education' conference, a Public Economics conference and a conference on 'Globalisation and Uncertainty', the last four events being held in September.

The department now hosts two **journal editors**: McCorriston is editor of the European Journal of Agricultural Economics; Zamir is editor in chief of the International Journal of Game Theory. Senior colleagues serve as associate **editors on the boards** of numerous journals: European Journal of Political Economy (Zissimos), Fiscal Studies (Myles), Games and Economic Behavior (Zamir), International Journal of Business and Economics (Myles), Journal of Economic Psychology (Grosskopf), Journal of Mathematical Economics (Zamir) Journal of Public Economic Theory (Myles), and Marshall Studies Bulletin (Maloney). As part of conference organisation, some members of the Unit were also invited to put together **special issues** of Journals, serving as **guest editors** in the process at: Environmental and Resource Economics (Kotsogiannis, McCorriston), International Tax and Public Finance (Kotsogiannis), and Journal of Environmental Economics and Management (Kotsogiannis, Mason, McCorriston).

Unit members have offered their expertise in the provision of **consultancy** to various national and international organisations: Department for the Environment, Food and Rural Affairs (Davidson, Halunga, McCorriston), Her Majesty's Revenue and Customs (Fonseca, Myles), International Monetary Fund (Kotsogiannis), Met Office (Kaplan), Organisation of Economic Cooperation and Development (McCorriston, Myles), and the World Bank (Kotsogiannis).

Other **prestigious positions** held by Unit members include: being a Panel Member and a Specialist Member on the Communications Act Panel of the Competition Commission (Mason); fellow of CEPR (Mason); holding a visiting fellowship at the International Monetary Fund (IMF) and World Bank (Kotsogiannis), which resulted in a contribution to IMF's working paper series; contributions to the WTO discussion forum on regional trade agreements (Zissimos); holding a visiting fellowship at CESIfo (Kotsogiannis, Zissimos).