

<b>Institution: University of Surrey</b>
<b>Unit of Assessment: UOA 18 Economics and Econometrics</b>
<p><b>a. Overview</b></p> <p><b>(i) Organisation and structure of the Unit</b></p> <p>The School of Economics (the 'Unit') is situated in the Faculty of Business, Economics and Law (FBEL), having moved from the Faculty of Arts and Human Sciences in August 2011. FBEL is one of four Faculties at the University of Surrey. Research, though often originating at individual level, is organised around a research centre (enjoying some budgetary and administrative autonomy) and three groups, all designed to capture a core area of the discipline and provide balanced critical mass for research, grant bidding and PhD training. The areas covered are:</p> <ul style="list-style-type: none"> <li>• Macroeconomics (the Centre for International Macroeconomic Studies, CIMS)</li> <li>• Applied Microeconomics</li> <li>• Economic Theory</li> <li>• Econometrics</li> </ul> <p>Two further groups (the Surrey Energy Economics Centre, SEEC, and the Health Research Group) have predominantly worked on multidisciplinary initiatives across the University. As befits this position, their research is submitted to other UOAs in REF2014.</p> <p><b>(ii) Key achievements</b></p> <p>We have maintained a collegiate research environment that has helped us to:</p> <ul style="list-style-type: none"> <li>• Expand and develop significantly, with a net increase of 14 FTE enabling us to strengthen in four core areas.</li> <li>• Publish over 400 works in refereed journals, books and research reports.</li> <li>• Regularly advise senior policy makers in international institutions (like the IMF, World Bank and ECB), UK Government departments and agencies.</li> <li>• Increase research income to £418k <i>pa</i> from £149k <i>pa</i> in RAE2008.</li> <li>• Increase PhD completions to 4<i>pa</i> from 2.9<i>pa</i> in RAE2008.</li> <li>• Strengthen our PhD programme by introducing our own self-funded PhD scholarships and starting to implement a new PhD programme in line with the ESRC International Benchmarking Review's (2008) recommendations.</li> <li>• Respond to international priorities in Macroeconomics by offering eight 3-5 day Macroeconomics Modelling Training Courses (based on our research) to 30-50 international PhD students, academics and non-academics.</li> <li>• Contribute to the discipline in the UK by hosting the RES Annual Conference (2009, 2010), and giving our Macroeconomics Modelling Training Course to the Scottish PhD Programme (Glasgow, 2011) and the RES Easter School (Birmingham, 2013).</li> </ul>
<p><b>b. Research strategy</b></p> <p><b>(i) Objectives and strategy</b></p> <p>The Unit values individual scholarship and flexible collaborations and collects much of its research in strategically created research centres and groups to maximise collaboration, grant bidding and PhD support. Research strategy is formulated by the School Research Committee (SRC) that identifies opportunities and monitors performance. It meets each semester and <i>all</i> research-active staff are members. The SRC interacts with the Faculty Research Committee (FRC), internalising and contributing to University initiatives via that channel.</p> <p>In RAE2008, our objectives covered research in macroeconomics and energy economics and a commitment to developing multidisciplinary research opportunities. These objectives were revised in 2010 in anticipation of our change of Faculty in 2011; this has freed resources for expansion and offers new multidisciplinary opportunities. Our revised <u>objectives</u> have been to achieve:</p> <ol style="list-style-type: none"> <li>1. Sustainable growth via a supportive, balanced and coherent research environment.</li> <li>2. International excellence in strategically identified core areas that build on existing strengths, provide balance and promote contributions to the discipline and wider social questions.</li> <li>3. Critical mass necessary to develop new PhD training in line with discipline best practice.</li> </ol>

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4. Significant engagement with multidisciplinary initiatives across our new Faculty and the University.

The strategy to achieve these has involved:

- a. Selection of four areas around which to collect our research. Two of these (Macroeconomics and Applied Microeconomics) build on existing strengths. We have also sharpened our Macroeconomics research by refocusing the pre-existing Surrey Centre of International Economics as the Centre for International Macroeconomic Studies (CIMS); this chimes with our planned emphasis in 2008 and responds to the priorities in the ESRC International Benchmarking Review of 2008. Our two other research groups (Economic Theory and Econometrics) are more recently formed (2011) and provide critical mass in areas that are both fundamental in themselves but also strongly interactive with others, thereby encouraging 'the whole' to exceed the sum of 'the parts'.
- b. Careful recruitment of world-class research leaders and Early Career Researchers (ECRs) with excellent potential in our chosen areas. In addition to outputs and profiles, senior recruitment has favoured team players with strong track records of collaboration with junior colleagues, PhD involvement, research bidding and engagement with non-academic users of research.
- c. With the benefit of enhanced critical mass in a balanced quartet of research areas, we have sought to enhance the quality of our PhD programme by investing £100k *pa* in PhD scholarships and by beginning to implement a restructuring of our PhD training in line with the recommendations of the ESRC Benchmarking Review (supported by continued investment in scholarships). We are also redesigning an MSc stream to support this.
- d. Continuation of our 2008 strategy to identify areas where we have strong multidisciplinary potential by encouraging our Health Research Group's interaction with the University's extensive health research initiatives, and redirected SEEC to deepen its interaction with the University's Centre for Environmental Strategy, following their successful £3m joint ESRC project (RESOLVE) and University's newly created Energy Network. We have also begun to explore, via informal links as well as information shared at FRC and Faculty-advertised seminars, multidisciplinary opportunities presented by our new Faculty.
- e. All staff receive support for research and career development through an annual appraisal process that sets (and monitors) short and medium term research targets in a cooperative way and responds to requests for training needs to support research and career aspirations. Mentors support ECRs, who also benefit from the activities of their research groupings, such as workshops, seminars and research grant advice. A number of mechanisms (such as sabbatical leave, conference grants and pump-priming funds) foster excellent output (Sections c, d).

**(ii) Evidence of success**

A variety of indicators illustrate the success of this strategy and our research environment. To begin, we have comfortably achieved our recruitment objectives (see Section b(i)); and both PhD completions and research income have continued to rise (Sections c(ii), d(ii)). Our output quality has increased markedly; for instance, 11 of this submission's outputs are in the 9 "General Purpose" journals defined by the ESRC International Benchmarking Review, and 16 are in its 13 "Field" journals, compared with 4 and 4 (respectively) in RAE2008.

The activities of our research groupings also confirm our success in establishing a balanced portfolio of important, stimulating and coherent research agendas that are making fundamental contributions, as follows (references relate to outputs):

**(1) Centre for International Macroeconomic Studies (CIMS) (Levine, McAdam, Gabriel, Cantore, Ferroni, Yang, Holden)**

Research has focused on constructing and estimating Dynamic Stochastic General Equilibrium (DSGE) closed and open-economy macro-models. We have explored the gains from commitment (Levine, *JME*), robust policy (Levine, *JEDC*, *EER*), inflation volatility (Ferroni, *JE*), and the effect of fiscal stimuli on unemployment (Cantore, *SJE*). We have adapted standard DSGE models to incorporate capital-labour substitution and fluctuations in factor shares (McAdam, *AER*; Cantore, *JEEA*), and to accommodate emerging economies (e.g. by explicitly incorporating the 'informal economy'), financial frictions and limitations on information acquired by agents (Yang, *EJ*). We are

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also examining new channels for the operation of policy, through embedding endogenous growth within a DSGE framework (Holden, 2013).

CIMS has introduced rigorous training courses on the construction and estimation of DSGE macroeconomic models, and their use for forecasting and policy analysis. These are based on software and research developed by CIMS. Courses have been provided at Surrey, the Scottish PhD Programme (Glasgow, 2011), the National Institute of Public Finance and Policy, New Delhi (2010, 2011), the Universities of Minho and Porto (2012), the Peoples Bank of China (2012) and the RES Easter School (“DSGE Modelling and Financial Frictions”, 2013). Participants have included PhD students and economists from government ministries, the ECB, the Bank of England, and numerous other Central Banks.

(2) Applied Microeconomics (McNally, Oreffice, Witt, Rickman, Jaimovich, Blanden, Mrazova)

The group’s focus is spread across a number of applied areas, and makes analytical and empirical contributions. Strong themes include labour economics – in particular in relation to the family (Oreffice, *JPE*; *JPE*), education (McNally, *JPublicEc*; *JLabourEc*) and social mobility (Blanden, *JRSS(A)*), international trade (Mrazova, *JIE*); Jaimovich (*JEEA*) and law and economics (Witt, *AER*; Rickman, *JLEO*).

(3) Economic Theory (Pascoa, Carmona, Gershkov, Roy, Bozbay)

This recently created group has covered a broad range of topics, from game theory to general equilibrium theory. Some of the members’ most important contributions since 2008 have related to general equilibrium models of collateralized loans, infinite horizon equilibrium and bubbles (Pascoa, *JET*), the existence of equilibria in games with discontinuous payoffs (Carmona, *JET*), and the stability of equilibrium in games with a continuum of players (Carmona, *JET*), mechanism design approaches to dynamic allocation problems under incomplete information (Gershkov, *AER*; *REStud*), elections (Roy, *GEB*) and extending the Kalai-Smorodinsky bargaining solution to endogenous disagreement (Bozbay, *GEB*).

(4) Econometrics (Corradi, Forchini, Martellosio, Dumitru, Srisuma)

This recently created group specialises in econometric theory in relation to Financial Econometrics, Time Series Analysis, Spatial Econometrics, and Structural Estimation of economic models. Importantly for a new research group, there are considerable synergies between the members’ research. Both Corradi and Dumitru specialise in the analysis of high frequency data (Corradi *JASA*, *JE*; Dumitru, *JBES*). Forchini and Srisuma share research interests in the structural estimation of economics models (Forchini, *JSPi*; *ET*); Srisuma works at the innovative frontier between econometrics and empirical industrial organisation and his *JE* paper studies the structural estimation of dynamic Markov games, proposing novel semiparametric estimators. Forchini’s work also overlaps with Martellosio’s expertise in spatial econometrics (*ET*, *ET* and *ER*).

Our strategy has also been successful in identifying and developing multidisciplinary research; although not directly covered in this submission, the presence of such research enhances our environment for both staff and students. Thus, we briefly describe several highlights related to Energy and Health research. In Energy, we were co-investigators on the £3m ESRC-funded RESOLVE project (“Research Group on Lifestyles Values and Environment”) which ended in 2012. This aimed to provide robust, evidence-based advice to policy-makers in the UK and elsewhere on the behaviours and practices of ‘energy consumers’. This is now continued by the University’s Sustainable Lifestyles Research Group (co-funded by DEFRA, ESRC and the Scottish Government) to which we have continued to contribute. In separate projects, we have provided one of the team of lead experts to the Government-sponsored Foresight initiative on Sustainable Energy Management and the Built Environment (SEMBE), and were co-investigators (with UCL, Manchester and others) on the £1m EPSRC Challenging Lock-in through Urban Energy Systems (CLUES). In each case, we have provided rigorous analysis of the costs, benefits and incentive effects of sustainable energy policies. In Health research, we have contributed to evaluation of a number of health interventions and, most significantly, are co-investigators (and health economics lead) on the National Institute of Health Research’s South East Research Development Service, a £1.5m multidisciplinary award with the Universities of Kent and Sussex (renewed for a second five years in October 2013). This provides research advice and support to NHS clinicians. We have also worked with the South Coast Health Policy Support Unit to help seven Primary Care Trusts

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improve value for money in their primary care, in line with NHS policy.

In addition to producing excellent output, our research groupings contribute to our research environment, and achievement of objectives, in other ways.

- All groups hold regular seminars and workshops. For example, CIMS has held eleven workshops and two one-day conferences since RAE2008; with external speakers including Ascari, Canova, Dennis, Ellison, Juillard, Marcet, Monacelli and Wren-Lewis.
- All groups raise research income. For example, the Applied Micro group has raised funds from the Nuffield Foundation to evaluate the impact of early childcare on children's later outcomes (McNally and Blanden), to study how new ways to fund clinical negligence claims affect NHS care quality (Rickman), and racial discrimination in football (Witt).
- There is considerable interaction between the groups. For example, Corradi's research encompasses macroeconomic volatility and stock markets (*JME*), Srisuma's estimation of I.O. models intersects with micro (applied and theory) and Gabriel's work embraces econometric and statistical theory (*CDSA*). This interaction extends to our multidisciplinary groups. For example, Oreffice and Rickman both maintain keen research interests in health economics (e.g. Rickman, *JPART*; *OBES*, both assemble datasets to analyse the effects of NHS policies on the quality of hospital care).

### (iii) Plans for the next five years

- Our aim (supported by the University) is a steady state of 40 FTE staff and we envisage this growth will take place over much of the next five years with a blend of senior/junior appointments in line with our current structure. Priorities include additional senior recruitment in Macroeconomics (partly to succeed Levine as Director of CIMS) and in Labour (to support our Applied Microeconomics plans; see below). We are also conscious, however, of retaining balance across our core areas and, as such, anticipate recruitment to all (including our Energy and Health groupings; e.g., we are currently advertising in Energy Economics).
- We will complete the implementation of a fully revised PhD programme (Section c(ii)).
- Each research group has individual plans, depending on its degree of development. We illustrate two of these below:
  - CIMS: Will continue to develop as a leading exponent of DSGE modelling and training in the UK, extending the framework to incorporate aspects of agent-based methodology, the integration of high and medium frequency cycles and delivering training to a wider international audience.
  - Applied Microeconomics: Will develop an innovative research agenda on household decisions and behaviour, combining our expertise in education, social mobility, matching and labour supply, looking at topics as diverse as children's development and same sex household behaviour. To initiate this, we have seed-funded a two-day international Workshop on Child Wellbeing in 2014.
- We will continue to explore multidisciplinary energy and health research opportunities across the university and, increasingly, within our new Faculty where there are potential synergies with our research on law and economics, international trade, and health. For instance, Rickman is preparing a joint project with the Law School and the Business School's Accountants on effects of recent policy to deregulate the structure of law firms.

### c. People, including:

#### (i) Staffing strategy and staff development

Our recruitment objectives have supported the research strategy in Section b. Excellent staff retention means that we have had to cover only limited departures from 2008 (3.4 FTE), allowing us to focus on expansion. At professorial level, Pascoa, Carmona and Gershkov (Econ Theory), Corradi and Forchini (Econometrics) and McNally and Oreffice (Applied Micro) are all acknowledged leaders in their fields, with strong track records in research, grants and PhD supervision. Their appointments mean that all our groupings have professorial leadership. The breadth and quality of our junior recruitment has been very pleasing; for example, our ECRs have publications in the *Journal of Econometrics* (2), *JEEA*, *GEB*, *JBES*, *Journal of International Economics* and the *EJ* and the vast majority of them, along with all of our mid-level appointments,

are in this submission.

Full-time recruitment has been exclusively to permanent posts. This reflects a strong belief that long-term commitments to, from and between staff are important for coherent expansion, research planning and high quality PhD training. Where short-term teaching gaps have arisen, they have been filled from an 'Associate teaching' budget. While favouring permanence, we have adopted a more flexible approach to 'fractional' appointments which serve an important strategic purpose in terms of providing access to insights, networks and experience that can enhance our research and impact. During the period, these have been used especially effectively by CIMS, where McAdam (ECB), Ferroni (Bank of France) and the Research Director at the State Bank of Pakistan have been employed to contribute to research on robust monetary policy, emerging economies and our training courses. Such appointments are within our appraisal and research support structures.

Staff research needs are supported in a number of ways. All are entitled to conference expenses when presenting papers. During the period, staff have presented at prestigious international conferences such as the AEA, EEA, Econometric Society, RES, SOLE. In addition, Unit- and University-level budgets are available for research support: e.g., we provide each research grouping with £5,000 *pa* to invite visitors or run small workshops, and Cantore and Gabriel both won £5,000 from the University's Institute for Advanced Studies to assist with data collection. We operate a sabbatical policy entitling all staff to eight months' leave on a published rota basis, so that *all* full-time members of the Unit present throughout the REF period have enjoyed at least one sabbatical. We also run weekly seminars to complement the activities of our research groupings.

In addition to these mechanisms, ECRs receive further support. Their three year probation period enjoys substantial teaching and administration discounts in order to guarantee research space. New junior colleagues have a senior mentor who participates in the annual appraisal process by helping to set targets and evaluate performance, and provides continuous support across all aspects of academic work. Junior recruits also receive accredited induction via the Graduate Certificate in Higher Education programme, and attend Economics Network events.

Our discipline-based support is complemented by University initiatives for ECRs and experienced researchers. The Researcher Development Programme is the primary source of University-wide research and transferable skills training. It is delivered by a specialist team working with the Careers Service, Staff Development, Research and Enterprise Services, Languages Centre and the Department for Higher Education. We also benefit from involvement in sector-wide projects and initiatives on a regional, national and international basis (such as hosting the first South-East Regional GRAD School in 2010). A growing workshop programme for researchers at all levels covers topics such as research project management, publication, funding and impact. Additionally, the central Staff Development Service offers the Staff Learning and Development Programme and facilitates attendance at non-accredited courses and award bearing courses.

Recruitment has enhanced our demographic profile. Compared to RAE2008, this submission contains a higher percentage of ECRs, international and female colleagues (including four female professors – up from zero in RAE2008). This is consistent with the University's commitment to meeting its legislative responsibilities under the Equality Act 2010, also evidenced by flexible working policies, active monitoring of diversity in the workplace and securing an Athena SWAN Bronze University award in 2013. Each Faculty has its own HR team who assist in the design, management, execution and monitoring of recruitment, promotion and development.

#### **(ii) Research students**

We offer PhD training within the South East DTC (with Kent, Reading and RHUL). For a second successive assessment exercise, we have made excellent progress on completions: 4*pa* for this submission compared with 2.9*pa* in RAE2008. The size of our PhD community has remained buoyant, with 23 current registrations. Following our investment in staff, we see investment in, and development of, our PhD training as a key target for the future. To that end, we now fund up to four PhD (ESRC-equivalent) scholarships annually (£100k *pa*) and have awarded five since 2011/12; we also offer GTA awards on a competitive basis. In addition, we are implementing a significant restructuring of our PhD programme (see below).

Training takes place within a strong and integrated PhD culture where PhD students are part of the Unit. They have their own desks and computers in designated rooms within the Unit and are

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expected to attend all Unit seminars. All are members of a research centre/group (including Energy and Health) and participate in its activities. Students elect representatives who are members of the School Postgraduate and Staff-Student Liaison committees where they contribute across the agenda, and their standing agenda items carry commitment to minuted responses.

A number of support mechanisms are in place to ensure progress and successful completion. Students have two supervisors (chosen from all staff) and a separate personal tutor. The University requires monthly supervisions and bi-annual reports by supervisors (agreed with students) involving written comment and agreed actions. In addition, we require an annual presentation (and paper) from all students, preceding written feedback and progression decisions. About 70% of students help with tutorials and workshops, which furthers their skills and integration within the Unit. They receive University training for this, Unit-level peer review and attend Economics Network teaching training. Students also benefit from a School research grant of £750pa to cover any costs associated with their research, and additional funding to present papers at international conferences. As in the case of ECRs, the University's Researcher Development Programme (c 200 workshops in 2013-14) complements our discipline-specific provision by offering compulsory generic training and valuable opportunities for engagement with researchers from other disciplines. The intensive two-day Thesis Writing Retreat and the annual University-wide PhD Conference which specifically focuses on knowledge-transfer to broad audiences are two good illustrations of this.

The quality of our students and support can be seen in several ways. We have won three ESRC studentships, and have also trained students from prestigious international institutions such as the IMF, Central Banks of Portugal and Nigeria, the Thai Budgetary Office and the Egyptian Government. These students have returned to enhanced roles, confirming the programme's employability, but our graduates have also gained university positions in the UK (5), China (3) and Ireland and a research position at the IMF. Another measure of PhD quality is prestigious internships won in open competition: during the period our students have won these at the IMF (2), the ECB (3), LSE and the University of Bath (both fixed term roles). Support in publishing has seen 16 of our students author or co-author over 20 journal articles (involving excellent outlets like *JMCB*, *JEEM* and *EJ*). In addition, a number have presented at international conferences, with several receiving awards (e.g. our students won the "Best student paper" award at the International Association of Energy Economics in 2009, 2010 and 2012).

Significant plans are being developed to restructure our PhD programme in line with the best practice identified by the ESRC International Benchmarking of Economics in 2008; this will benefit both students and research staff. Our hiring strategy has approached critical mass across core areas that permit a balanced portfolio of high quality taught/assessed 'PhD-level' modules. Our plans also involve restructuring our MSc programmes to provide a specific pathway onto the new PhD. While we await ESRC approval (given DTC obligations), we have introduced one-year taught/assessed 'PhD-level' modules in Macro, Micro and Econometrics for all PhD students starting in 2013/14. Our plans for the next five years involve a second year of specialist modules and the provision of funding for an additional year of research.

#### **d. Income, infrastructure and facilities**

##### **(i) Infrastructure and facilities**

The Unit enjoys excellent infrastructure and facilities to support its research (and research students). All staff have individual offices on one floor, shared with our PhD and MSc communities, and state-of-the-art computing (upgraded every three years) and printing facilities. Software and data sources commensurate with our international aspirations are available as a matter of course, and there are funds for specific additions (as exemplified by the recent purchase of British Audience Research Board data to further Witt's research on sports broadcasting). We host two online discussion paper series (in Economics and Energy Economics).

We have made significant investments in specialist computing equipment during the period. For instance, Faculty and ESRC funds have been secured to purchase a £40,000 cluster comprising 14 machines and 400 cores. These machines are essential for multiple parallel computations as in empirical macroeconomics, likelihood maximization, Monte Carlo and bootstrapping econometrics, and optimization via grid search.

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Outside the Unit, we enjoy excellent Library facilities with access to a full catalogue of physical and online resources. The Library was enhanced by a £13.2 million refurbishment in 2011 and redevelopment of research space for archives and special collections in 2012. Additional upgrades to researcher training facilities have responded to the increasing scale of these activities and feedback from research students. Our new Faculty also offers excellent infrastructure, making a complete set of financial datasets and the HEFCE/IBM-funded Business Insight Lab available to enhance opportunities for research and engagement beyond academia.

**(ii) Research income**

Research income has increased for a second successive assessment exercise. We have raised £2.1m in the current period, an increase to £418k *pa* from £149k *pa* in RAE2008, with over £500k secured for the future. This includes prestigious sources such as the ESRC (£765k), UK government departments (£669k), charities like Nuffield and the Sutton Trust (£215k), UK industry (£152k) and the EU (£130k). In addition, new colleagues have brought experience of winning grants during the period, from sources including the Australian Research Council, the Israel Science Foundation, the Spanish Ministry of Science and Innovation and the Portuguese Foundation for Science and Technology.

These outcomes result from strategy that mixes individual-level targets and incentives (in terms of research accounts and activity discounts) with research group targets that are overseen by the SRC. SRC also provides a forum for discussion and targeting of funding initiatives while the University offers workshops to disseminate information about these. Research groups, mentors and senior staff also provide feedback on draft bids and any best practice learned is shared at SRC. It should be noted that this strategy was achieving income growth prior to our expansion but, as mentioned elsewhere, our staffing strategy aims to enhance this performance.

Our funded research has generated numerous high quality outputs. CIMS researchers, Gabriel and Corradi have had four ESRC awards graded "Outstanding" since 2008, while Pascoa received the highest grade awarded across all Portuguese Foundation for Science and Technology applications in 2009. Research funding has also led directly to high quality research outputs: Gershkov's *REStud* paper resulted from an Israel Science Foundation grant; while both Pascoa's outputs in *JET* were funded by the Portuguese Foundation. Importantly, junior colleagues have also benefitted from integral involvement in funded research: examples at ECR level include Yang (*EJ*), which resulted directly from ESRC and FP7 funding; and Cantore (*JEDC, SJE*), which arose from his work on an ESRC award.

As well as raising funds within the Unit, we have also been successful in larger, collaborative settings (including larger research consortia); both across the University and with others outside. An example of intra-University collaboration is Levine and Holden's ongoing £600k grant from the ESRC to bridge the gap between agent-based models and DSGE macro models (partnered by Sociology's Centre for Research in Social Simulation). In relation to inter-university collaboration, we were co-investigators on the seven-strong FP7 project that developed DYNARE, while both Blanden and McNally are associates of the Centre for Economic Performance at LSE with whom they have collaborated on bids such as its ESRC Centre Grant 2010-2015 and projects for its Education Endowment Fund. We have previously noted (Section b) the significant interactions between our Energy and Health researchers and DEFRA, the Department of Health, nine UK Universities and at least six disciplines.

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

We strongly encourage work with other researchers outside the Unit and collaboration with external bodies, as is apparent from the sources of our research income and the selected list of staff activities below. Fractional appointments also internalise key external relationships. The success of our approach is evident in the 70% of our submitted outputs with external co-authors, collaborative research grants, and in our ability to respond to national and international priorities. For example,

- ESRC Benchmarking Review: Our development of CIMS, Macroeconomic Training Courses and PhD training plans respond directly to priorities identified by this review.
- Social mobility agenda: Blanden's research on social mobility has been explicitly recognised by the Social Mobility Commission and the Social Mobility White Paper in 2011.

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- The efficacy of early childcare: McNally and Blanden's Nuffield funded research directly addresses government priorities and has attracted Ministerial attention.
- Sustainable Energy and climate change: SEEC's contribution to the University's ESRC RESOLVE programme responds to international priorities.
- Health: Our lead role in the NHIR Research Development Service and Rickman's clinical negligence work responds to NHS priorities for practitioner research and hospital care.

Wider interactions with the research and non-academic communities also indicate an outward-facing and collaborative outlook. All staff (including ECRs) peer review for leading international journals while four are ESRC Peer Review College members. In addition, staff have been grant rapporteurs and reviewers for the ESRC, and for international funders such as the US National Science Foundation, the Canadian Social Sciences and Humanities Research Council, and the Australian Research Council. The selected list below focuses on fellowships, prizes, journal editing, learned society leadership, conference programme committees; membership of significant research networks/centres and keynote lecturing; pleasingly, it includes ECR representation.

**Blanden:** ESRC reviewer for Secondary Data Analysis Initiative, and Future Leaders; member of advisory group for Independent Reviewer of Social Mobility (Alan Milburn); IZA Research Fellow; Visiting Fellow at LSE.

**Bozbay (ECR):** Wallander and Hedelius Foundation research scholar, 2012-13, Lund University; Visiting Associate LSE Centre for Philosophy of Natural and Social Sciences, 2012.

**Cantore (ECR):** Invited (and funded) visitor at the Bank of Spain, April-September 2012; Organiser of the RES Easter School, 2013.

**Carmona:** Associate Editor *Economic Theory* (2009-), Guest editor of Symposium on "Existence of Nash Equilibria in Discontinuous Games", *Economic Theory* 2011; Member of 5 conference committees including Association of Southern European Economic Theorists 2012.

**Corradi:** Associate Editor *Review of Economic Studies* (2005-), *Econometrics Journal* (2007-), *Journal of Banking and Finance* (2013-); Fellow of *Journal of Econometrics*.

**Jaimovich:** Associate Member (only by invitation) of the ThReD (Theoretical Research in Development Economics) network.

**Gabriel:** Research Fellow, NIPE, University of Minho.

**Gershkov:** AEA Prize for Best Paper in *AEJ Micro*, 2009; Editorial Boards *Review of Economic Studies* (2010-), *International Journal of Game Theory* (2011-); Member of 3 conference committees including Econometric Society European Meetings 2012, 2013.

**Holden (ECR):** DPhil thesis nominated for the Edgeworth Prize (Oxford, decision pending); two papers discussed on the NEP-DGE blog (international discussion forum for DSGE modellers).

**Levine:** Invited keynotes State Bank of Pakistan 2009, Central Bank of Nigeria 2010.

**McNally:** Director of Education and Skills Programme (CEP); Editorial Board *Economics of Education Review*; IZA Research Fellow.

**McAdam:** Editorial Board *Scottish Journal of Political Economy* (2010-).

**Mrazova (ECR):** ESRC Postdoctoral Research Fellow, LSE (2009-2011); Associate of the Globalisation Programme, CEP; Visiting Scholar, Stanford (2010).

**Oreffice:** Co-Editor *Review of the Economics of the Household* (2010-); Conference committees include: Society for the Advancement of Behavioural Science 2012, Association of Southern European Economic Theorists 2012; IZA Research Fellow (2009-); Fellow of Becker Friedman Institute for Research in Economics (Family Inequality Working Group), University of Chicago (2011-).

**Pascoa:** Economic Theory Fellow of the Society for the Advancement of Economic Theory; Editorial Board *Economic Theory* (2011-); Organiser of the Society for the Advancement of Economic Theory biannual conference 2011; One of five international adjudicators for Italian Habilitation candidates (2013).

**Rickman:** Chair of RES Conference of Heads of University Departments of Economics (2006-2012), RES Conference Secretary (2012-), Visiting Professor, Erasmus University Law School (2011-), Editorial Board *International Review of Law and Economics*, CEPR Research Fellow.