

<p>Institution: University of Bristol</p> <hr/> <p>Unit of Assessment: 18 Economics and Econometrics</p> <hr/> <p>a. Overview</p> <p><i>The Department of Economics</i> Economics at Bristol has a distinctive focus and reputation: we combine innovative research in public policy with high-level advances in economic theory, structural modelling and econometrics. This is achieved through specialisation, careful recruitment, and the generation of research income. We have a strong record of high-quality research, and also wider impact, especially in public policy. The university is committed to significant expansion of the Department over 2013-18.</p> <p><i>Institutional structure and research groups</i> The Department is one of three academic units that form the School of Economics, Finance and Management, itself located within the Faculty of Social Sciences and Law. The Head of Department coordinates research in economics and econometrics, and leads on strategic planning and recruitment, working closely with the Department's strategy committee. Teaching and administration are managed primarily at School level; this allows the Head to focus on research and strategy, and leads to economies of scale in the organisation of teaching and administration.</p> <p>Our research groups are public organisation (leaders: Burgess, Grout, Propper, Smith); labour economics (Burgess); econometrics (Windmeijer); macro, growth and development (Temple); and economic theory (Grout, Park, Xiong). Many staff members also belong to a research centre, the Centre for Market and Public Organisation (CMPO). The centre's research spans education, health economics, organisational structure, and the third sector. It was established in 1998 with two large grants from the Leverhulme Trust, and became an ESRC research centre in 2004.</p> <p><i>Research students and collaboration</i> A new development since RAE 2008 is the ESRC-funded South West Doctoral Training Centre (SWDTC) which coordinates doctoral provision, including ESRC studentships, across its three institutions – Bristol, Bath and Exeter – with Bristol as the lead institution. Our work on public policy involves interdisciplinary collaborations with departments in education, geography, law and social medicine, and these links have been strengthened by the SWDTC. In 2013 the university formed a regional alliance (GW4) with the other two SWDTC institutions and Cardiff University.</p> <hr/> <p>b. Research strategy</p> <p>Our ultimate goals are:</p> <ul style="list-style-type: none"> • to make outstanding research contributions • to help to inform policy choices and contribute to debate • to train a new generation of researchers <p>In pursuing these goals, much of the strategy and vision established ahead of RAE 2008 has been successfully advanced during the current REF period. We have maintained our distinctive focus, a combination of high-level technical research and innovative, high-impact research in public policy. But we have also developed new research themes and strengthened the research environment, including the research student programme.</p> <p>The strategy has been developed and implemented by the Head of Department and the Department's strategy committee. It is integrated with Faculty and University strategies and monitored by the University and Faculty research committees, headed by the PVC for Research and the Faculty Research Dean respectively. Formal School Reviews in 2008 and 2012 included external assessors and evaluated all aspects of the School, including research strategy.</p> <p><i>Strategy from RAE 2008</i> At the time of RAE 2008, our strategy emphasised (1) specialisation in core areas of strength; (2)</p>

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recruitment to ensure we span a range of high-level technical skills; and (3) external research income. These elements remain central to our strategy, and we discuss each in turn.

1. Specialisation in core areas of strength

We emphasise specialisation, partly to ensure critical mass. At senior level, we combine the expertise needed for advances in theory and econometrics (Grout, Park, Windmeijer and Xiong have all published in *Econometrica*, two in the review period) with expertise in innovative, high-impact empirical research, especially in public policy (Burgess, Grout, Propper, Smith, Temple).

2. Recruitment

Our hiring policies have been led by our strategic goals. At senior level, we seek the technical skills needed for high-level research, and for the professional development of early-career staff and research students. At all levels, we also emphasise the need to draw in researchers with talents in applied research, who can address important practical or policy questions in innovative ways. We aim to have a mix of senior and early-career staff in each area, ideally with the intellectual flexibility and skills to contribute to several areas. Since RAE 2008, we have recruited early-career researchers from top PhD programmes, with strong technical skills. This has led to a young and dynamic environment, with almost a third of submitted staff coming from this early-career cohort.

3. External research income

Some of our research breaks new ground by using large-scale, non-standard datasets, for which external funding can be important, to fund facilities, support and research assistants. One strategic objective in the review period was to renew the status of the CMPO as an ESRC research centre. This was achieved in 2009. Over the review period we won more than 20 other grants, including major awards with researchers in other institutions and disciplines. Propper, Simpson, Temple and former staff member Postel-Vinay won prestigious awards in nationwide competitions.

Strategic developments since RAE 2008

Since RAE 2008, we have sought to balance continuity with the need for evolution. To this end, our recent strategy maintains the above three elements, and also emphasises:

4. Research student provision

Since RAE 2008, we have developed the research student programme. We continue to restrict recruitment to high-quality students, but have taken advantage of opportunities opened up by the South West Doctoral Training Centre. This includes an economics pathway with ESRC-funded 1+3 and +3 studentships. Advanced training has increased, primarily in the form of intensive workshops offered through the SWDTC. We sometimes co-supervise with academics from other disciplines, partly through new income streams. Students are strongly encouraged to publish their doctoral research, and many now hold lectureships at other UK Departments, as we document below.

5. Strengthening the research environment

Since RAE 2008, we have strengthened the research environment. Dedicated research days are ensured within the teaching schedule, and staff can increase time for research through grant income and by achieving prestigious publications. The personal research budget has been raised to a minimum of £1750, and is substantially higher for early-career staff in their first two years. Funds from alumni have also increased travel allowances for early-career researchers. Staff members and research students were previously spread across several sites within the university precinct, but are increasingly co-located on one site, promoting collaboration and cohesiveness.

Outcomes

The success of our strategy can be seen partly in the research outputs. Our research staff in all areas published in leading journals, including two papers in *Econometrica* (Windmeijer, Xiong), one

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in the *Journal of Political Economy* (Propper), two in the *Journal of Labor Economics* (Burgess, Simpson), one each in the *Journal of the American Statistical Association* (Windmeijer), *Review of Economics and Statistics* (Jolivet), *Journal of Econometrics* (Yates), *Journal of Economic Theory* (Xiong), *AEJ: Economic Policy* (Propper), *American Journal of Political Science* (Eguia); four papers in the *Journal of Public Economics*; six papers in the *Economic Journal* (5 submitted); and two each in *Games and Economic Behavior* (Eguia, Xiong) and the *Review of Economic Dynamics* (Jolivet, Temple). Staff contributed to three North-Holland Handbook chapters and won prestigious fellowships and prizes (section c.i below). Our PhD students also publish well (section c.ii). We have an impressive record of user engagement: the Department includes experts in major areas of public policy, notably education and health, and their advice is regularly sought by government.

Future strategy

Our future strategy will retain the above elements and build on past success. The Department is thriving, and the university has agreed to a formal growth plan which will see a significant expansion of staff numbers over 2013-18. This will promote a vibrant research environment and critical mass; increase international visibility; enhance robustness; and extend capacity for PhD supervision and advanced training. The co-location of researchers in a single building will progress further. We will draw on university-level initiatives to promote wider impact: the Centre for Public Engagement, PolicyBristol, and new institutes for research in health and in environmental change.

As well as developing our core strengths, we will seek new lines of enquiry. We are renewing the CMPO's research agenda for the five years following the REF. Themes include public service markets; individual motivation and institutional design; and communities and participation. Cutting across these will be the development of policy and field experiments, pushing forward the use of administrative data in research, and innovations in quantitative methods. This builds on, for example, major field trials run by Burgess (a £1.5 million trial of incentives in schools) and CMPO's innovative use of pupil-level censuses and health episode data. We will collaborate with Abigail Payne, who directs the Public Economics Data Laboratory (PEDAL) at McMaster, a facility for analysing administrative and organisational data in a secure setting. Some of the larger-scale initiatives rely on a further renewal of five-year ESRC Centre funding; in its absence, we would build on our track record of securing grant income from multiple sources (see Section d below).

c. People, including:**i. Staffing strategy and staff development****Staffing strategy**

The research strategy has guided our recruitment policy. The University is committed to a plan for staff numbers in the UoA to increase by 50% over 2013-18. We will continue to seek a balance of researchers with outstanding technical skills and those with the capacity to make innovative contributions to applied research. At senior level, we ensure that we span a range of skills and expertise, especially technical skills. Continuing a Bristol tradition, we have expertise in theoretical and applied econometrics, advanced economic theory, and applied theory, led by Grout, Park, Windmeijer and Xiong, and also involving an emeritus visiting professor, Binmore. This is complemented by expertise in innovative applied research (Burgess, Grout, Propper, Smith, Temple and Windmeijer) often directed towards questions of major public policy interest.

As in the run-up to RAE 2008, the review period saw some significant departures. Among the full Professors in post at the last RAE, two left before the REF 2014 census date: Gregg and Postel-Vinay. During the review period, Bhalotra and Smith were promoted to chairs, but the former left before the census date. Bhalotra and Postel-Vinay were in post for the entirety of the environment assessment period (Jan 2008 – July 2013).

Our response has been to renew the Department through recruitment at all levels. At senior level, the appointment of Xiong at chair level, from Rice, strengthens the Department in theory, together with Eguia, hired from NYU as a reader. In macroeconomics, Kara was hired from the National Bank of Belgium as a lecturer (now senior lecturer) and Yates from the Bank of England as a reader. In January 2014 Hebllich will join from Stirling as a reader.

We have also taken advantage of the current possibilities for strong recruitment at early-career level, through the international job market for assistant professors. Senior Bristol staff held initial interviews at the AEA/ASSA meetings in the US in 2011, 2012 and 2013. This led to the recruitment of Berg, Fossati, Hiller, Lalé, Pacini, Sokullu, and Stouli. All but Berg were recruited straight out of their PhD from leading institutions: EUI (Hiller), Sciences Po (Lalé), Toulouse (Pacini, Sokullu), UC3M (Fossati) and UCL (Stouli). The additional hiring of Valente, along with Berg and Fossati, strengthened the macro/growth/development group. The other early-career hires strengthened the labour group (Lalé), theory (Hiller) and econometrics (Pacini, Sokullu, Stouli).

Career development

Early-career researchers are mentored formally and informally by senior staff. We have considerable expertise in our main research areas at senior level, and specialisation helps new appointments to integrate. Early-career staff members are allocated a senior colleague as mentor, Park for Fossati and Hiller, Windmeijer for Pacini, Sokullu and Stouli, Turon for Lalé and Temple for Berg and Valente. Mentors provide guidance on research and professional development in one-on-one meetings. The university-wide Staff Review and Development programme provides a more formal opportunity for staff to discuss their goals and future development with a senior colleague. The expectation is that early-career researchers will initially progress within the lectureship grade, on clearly-defined criteria for progression, with an “up-or-out” tenure-track structure. Promotions to reader/chair level are considered by a Faculty committee, drawing on external assessors.

The policies of the Department seek to promote career development. Early-career (first post) researchers typically have 0.50 teaching loads for the first two years. Each week, research-active staff should have at least two days free of teaching, with scope for teaching to be concentrated in a single term; their research time can be increased further by research income or high-quality publications. Early-career researchers are encouraged to co-author papers with senior colleagues, and to participate in grant applications. The Department, CMPO and University provide support for this, especially for those new to the process. Grant applications are reviewed internally at School and University level before submission. The School Research Ethics Committee considers ethical issues raised by research projects, especially those involving individual-level data or participation. University-level support includes courses on grant writing, management and leadership. The University will develop its support and policies further as part of its commitment to the Concordat to Support the Career Development of Researchers. In recognition of an action plan, the University was awarded the HR Excellence in Research badge by the EU Commission in October 2010.

Staff success

The review period saw several awards of prestigious research fellowships or prizes in nationwide, multidisciplinary competitions: an ESRC Professorial Fellowship (Propper), an ESRC Fellowship for then staff member Postel-Vinay, a Philip Leverhulme Prize (Simpson) and a British Academy Mid-Career Fellowship (Temple). The Philip Leverhulme Prize is awarded to “outstanding scholars who have made a substantial and recognised contribution to their field of study”. Propper won the 2011 Arrow award for the best paper published worldwide in health economics (with Van Reenen), and the Australian Health Economics Society Research Prize 2011 (with Johnston and Shields). Jolivet won the (then biannual) 2010 EALE prize for the best paper in *Labour Economics*. Two staff members secured visiting positions at Princeton: Hiller, the Robert Solow Fellowship in 2012, and Park, a Richard B. Fisher Member of the IAS and affiliated faculty at the Economic Theory Center.

Ensuring vitality and sustainability

The Department and CMPO promote an atmosphere of enthusiastic collaboration and exposure to frontier research, through three separate seminar series, an active international visitor programme, and the hosting of conferences and workshops. Joint research has been central, especially in public policy, where papers often have multiple Bristol authors. Some of these projects involve research assistants or research students as part of the team. External interactions are made easier by the personal research budget, often enhanced by grants and funds linked to MSc supervision.

Long-term success relies on preserving the time and space needed for scholarship and research excellence, while maintaining and improving the quality of our teaching programmes. A key

component has been the recruitment of teaching fellows, appointed on a separate, teaching-only career pathway with scope for promotion. We have consistently been able to recruit dedicated, talented staff members who contribute to high-quality teaching programmes.

The Department has long been committed to equal opportunities. Over the review period, female representation at senior level increased: Bhalotra and Smith were promoted to professorships (joining Propper), and Simpson and Turon to readerships. Smith serves on the RES Women's Committee and has advised at mentoring events organised by the RES and EEA. In addition to statutory requirements, we have supported part-time working for family reasons; Grout, Simpson and Temple had periods of part-time work. The University's promotion procedures consider equality issues, with formal allowances for maternity leave, part-time work, and career breaks.

ii. Research students

Our strategy is to maintain and develop a high-quality research student programme while seeking gradual expansion in student numbers and continued diversity. This fits well with the Department's culture, which is one of close supervision. We have a strong record of publications by students, sole-authored or co-authored with supervisors. Students have won prestigious scholarships (including three RES Junior Fellowships) and taken up post-doctoral or lectureship positions.

Support and training

Specialisation and a span of technical skills help to create a supportive and knowledgeable environment for the development of research students. Co-supervision is the norm, with early-career supervisors paired with senior colleagues. Progress is formally reviewed every six months. Students are strongly encouraged to attend advanced workshops and courses, and the SWDTC has increased access to advanced training. One-day workshops in Bristol, each attended by 15-25 students from a range of UK institutions, have been led by Park, Temple and Windmeijer on reputation and repeated games; applied econometrics; and GMM methods for panel data. A further workshop covered the design of field experiments, while others have been organised by Exeter and open to Bristol students. SWDTC workshops are regularly advertised nationally, through the National Centre for Research Methods. These events are complemented by a reading group co-organised by staff and students. External courses taken include CEMMAP "masterclasses" and Easter, Summer and Autumn Schools (e.g. RES). The costs of attending workshops and conferences, and additional research expenses, are typically met by a combination of funds from the CMPO (depending on the research area), ESRC studentships, and the Department.

Most students gain teaching experience, but workloads are restricted and usually complement research interests. Internships are coordinated by the SWDTC placements officer. For current students, internships gained included the Bank of England (Sin), Cabinet Office (Chande, Kettle, Sanders), and IMF (Sin). Visiting positions included Harvard (Macmillan) and Wisconsin (Marini).

Research student career paths

Of the 20 economics research students registered as of 1 Jan 2008, all successfully completed the PhD. Destinations included the Institute of Education (Macmillan), Leicester (Rockey, now senior lecturer), Reading (Rawlings), Sheffield (Ratcliffe) and York (von Hinke Kessler Scholder). Von Hinke Kessler Scholder won an MRC Early Career Fellowship. Carter won an RES Junior Fellowship and then a British Academy Post-Doctoral Fellowship, both held at Bristol. Among more recent intakes, Sanderson and Martins won RES Junior Fellowships.

We strongly encourage students to publish in leading journals, through an emphasis on good research design, close supervision, and advice on submission strategy. Dissertations often include some co-authored work, usually with supervisors. During the review period, projects begun during PhD research at Bristol have appeared in the *American Economic Review*, *European Economic Review*, *Journal of Applied Econometrics*, *JEBO*, *Journal of Public Economics*, *Journal of the Royal Statistical Society (Series A)*, *Review of Economic Dynamics*, *Review of Economics and Statistics (2)*, and the *World Bank Economic Review*. Some of the research was undertaken before the review period, but published during it. If needed, bibliographic details can be audited at <http://www.bristol.ac.uk/economics/research/phd-pubs/>

Interdisciplinary collaboration

Since RAE 2008, co-supervision across Departments and Schools has increased, partly via the SWDTC. Burgess, Grout, Simpson, Smith, Temple and Windmeijer have all co-supervised interdisciplinary PhDs, including with Social Medicine, the Bristol Complexity Science Centre/Dept of Mathematics, and the School for Policy Studies. (Not all will be listed on REF4.) New income, notably from a Capacity Building Cluster (Sep 2009-Aug 2013, see Section e) has promoted this.

Future plans

The strategy is to enhance the programme and promote its distinctive approach. Co-supervision is likely to increase, and advanced training will be enhanced. An SWDTC doctoral conference for economics students is likely. We will seek grant income to fund extra PhD studentships. From 2013, aspects of research student provision will be coordinated by a university-wide doctoral college, bringing together DTCs, and promoting collaboration and the use of external expertise.

d. Income, infrastructure and facilities

Research income

We have a successful track record of using external funds to strengthen our research and the research environment, to support early-career researchers, and to inform policy debates. While at Bristol, current or former staff won more than 20 awards in peer-reviewed competitions; some have been allocated to other UoAs or income types for HESA purposes, and not listed as expenditure in REF4. The Third Sector Capacity Building Cluster (CBC) - £800K, not on REF4 - was led jointly by Smith (Econ) and White (Management). As well as CMPO, Burgess directs the Centre for Understanding Behaviour Change, funded by the Department for Education, bringing together researchers from multiple universities and disciplines; see section e below. Former staff member Gregg was the PI on an ESRC large grant award (£3.6m, 2007-2012) to examine the impact of socio-economic status on outcomes in late childhood and adolescence. This was a major, Bristol-focused initiative, including Bristol co-applicants from economics, psychology, social medicine, and multilevel modelling. Other awards included four fellowships/prizes, discussed in Section b above.

Further awards and major collaborations include a multidisciplinary European Research Council grant (2.49m Euros, Bristol: 430K Euros; PI James Heckman) on understanding health across the life-course, on which Windmeijer is a co-applicant and one of his former research students (with Social Medicine) is a post-doc; there are members in Dublin, Essex, and at Social Medicine in Bristol. Temple is a co-applicant (with Rodrik and Timmer) on an £850K ESRC-DFID award to fund research and data collection on structural change in sub-Saharan Africa, with PI McMillan (Tufts).

We regularly draw on the staff and resources of the university-wide Research and Enterprise Development (RED) group, which identifies funding opportunities, advises on research proposals, coordinates large collaborative bids, negotiates research and consultancy contracts, and works to increase impact. Further, the University's Centre for Public Engagement provides support in developing "pathways to impact" and works to communicate research to a wide audience.

Facilities and infrastructure

The Department has all the facilities required for high-quality research, both theoretical and applied, including an IT support team, and desktop access to electronic journals, statistical and mathematical software, datasets and databases. IT services facilitate efficient collaboration via dedicated servers, use of shared drives and folders, and Google-managed calendars and email.

Over the review period, the university invested in facilities and infrastructure. The CMPO gained dedicated space with high-quality seminar and meeting rooms, and workspaces for research students and RAs. The CMPO helps to structure collaboration, with economies of scale and scope in research-related administration, management of projects, and the use of large-scale, non-standard data sets. These structures benefit research in the Department as a whole. An example is our expertise related to the Avon Longitudinal Study of Parents and Children (ALSPAC), a population-based multi-generational birth cohort study which has generated unusually rich data. All full-time research students have allocated desks and PCs. The SWDTC also has dedicated

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study and seminar spaces in a refurbished building. This promotes collaboration, including multidisciplinary work. The university's Arts and Social Sciences library has a collection of more than 18000 books in the School's core disciplines, and a specialist librarian for economics, who regularly consults with staff and research students. Many resources are available online. Researchers have online access to a supercomputer for high-performance computing, utilised by Windmeijer and Carter in their research; related training courses are available (e.g., in Python).

e. Collaboration or contribution to the discipline or research base***International links and collaborations***

Our international links are strong: published work involved researchers at Amsterdam, Carnegie Mellon, CREST, Georgetown, Mannheim, MIT, Princeton, Rome, Stanford, Tilburg, Toulouse, UCSD, Wisconsin, the World Bank, and Yale. Leading co-authors included Albrecht, Andreoni, Bonhomme, Bun, Crépon, Florens, Gaynor, Ivaldi, Jackson, Moscarini, Newey, Redding, Van den Berg, Van Soest, and Vroman. Visitors, from three days to six weeks, included Doug Almond, Siwan Anderson, Patrick Francois, Oliver Hart, Lakshmi Iyer, Bhashkar Mazumder, Grant Miller, Parag Pathak, Abigail Payne, Kjell Salvanes, Chris Skeels, and Gerard Van den Berg.

CMPO events included a 2013 London conference on public service reform and many smaller-scale conferences/workshops in Bristol (roughly six a year). Other notable conferences included the inaugural conference of the Search and Matching research group, held in Bristol in July 2011. Led by Postel-Vinay, this brought together an international network of researchers for the first time, and was attended by two 2010 Nobel Laureates in the field, Mortensen and Pissarides.

Special conference sessions were organised at the AEA meetings in Chicago and Denver, RES conferences, and the ASHE conferences. The Econometric Study Group met in Bristol three times in the period, drawing world-class econometricians; in 2013 the invited speakers were Victor Aguirregabiria, Stephane Bonhomme and Peter Hansen. Staff affiliations include major networks and research centres: CEPR (Burgess, Grout, Propper, Simpson, Temple), CEMMAP (Pacini, Sokullu, Windmeijer), IZA (Burgess, Turon, Valente, Windmeijer) and CESifo (Kara, Temple).

Other contributions to the discipline

Propper was chair of the ESRC Research Grants Board, and Council Member, 2005-2009. Department members served on the ESRC Peer Review College and Research Seminars commissioning panels; the MRC/ESRC National Prevention Research Initiative research grant panels (phases 2-4); programme committees including the EEA, RES, iHEA and the Econometric Society, including the World Congress of the latter; the Understanding Society Scientific Advisory Committee; and the Public Economics UK organising committee. Four staff members served on the Royal Economic Society Council within the review period, with two serving on the Executive Committee (Grout, Smith). In June 2010, Propper was made CBE for services to social science.

Current or former staff served as associate editors or board members for (among others) *Annales d'Economie et de Statistique*, *Economic Journal*, *Empirical Economics*, *Health Economics*, *Journal of Applied Econometrics*, *Journal of Development Economics*, *Journal of Economic Growth*, *Journal of the European Economic Association*, *Journal of Health Economics*, *Journal of Labor Economics*, *Journal of Productivity Analysis*, *Journal of the Royal Statistical Society Series A*, *Labour Economics*, *the New Palgrave Online Dictionary of Economics*, *Oxford Bulletin of Economics and Statistics*, *Quantitative Economics* (2), and the *World Bank Economic Review*.

Keynote addresses and invited talks by current or former staff included the Econometric Society European Meeting (Malaga, 2012); the International Panel Data Conference (Amsterdam, 2010); the EEA Meeting (Glasgow, 2010); the Festival of Economics (Trento, 2011); the GES annual conference (2008); development economics conferences (Sussex, 2008; Bergen, 2011); four regional or national health economics conferences including Australia (Darwin, 2012); the Nordic Econometric meeting (Bergen, 2013); the Global Political Economy Network (QMUL, 2013); and the World Bank (2011). In the review period, Propper, Simpson and Temple were all commissioned to contribute to surveys for North-Holland Handbooks in Economics.

Major collaborations

We have made a success of multidisciplinary research and capacity-building, with established links with the Bristol departments of education, geography, law and social medicine. Interdisciplinary work (not all submitted) is published or forthcoming in *Nature*, *American Journal of Political Science*, *British Medical Journal*, *Journal of the American Statistical Association*, *Epidemiology*, *Transactions of the Institute of British Geographers*, *Biostatistics*, and *Natural Hazards*. Co-supervision of students across Departments is increasingly common, partly through the SWDTC. The university's new Elizabeth Blackwell Institute for Health Research, established in 2012 with links to local NHS Trusts and overseas centres of excellence, promotes interdisciplinary research, aiming to translate expertise in the university's non-medical faculties into better health outcomes.

Major collaborations included the multidisciplinary ESRC large grant led by former staff member Gregg, the CUBeC research centre led by Burgess, and other awards noted in Section d above. CUBeC seeks to inform policy using expertise on behaviour change, drawn from economics, psychology, neuroscience, sociology, education, and social research, with members at Bristol, IFS, Imperial, IoE, LSE, NatCen, Oxford and UCL. Further, Burgess is collaborating with Levitt and List on a large-scale (£1.5m) randomised trial covering 60 schools and around 10,000 students, funded by the Education Endowment Foundation. The trial will relate GCSE performance to incentive schemes, building on work by Burgess on student effort, and incentive RCTs led by List and Levitt.

Funded by the ESRC, the Office for the Third Sector and the Barrow Cadbury Trust, the Third Sector Capacity Building Cluster (CBC) has funded a range of collaborative projects, involving 20+ partnerships with local, regional and national organisations. This has included PhD studentships, placements and smaller research "vouchers"; partners include umbrella bodies (CAF, NCVO, Big Lottery), national charities (Shelter) and smaller, local organisations (Tree Aid, Bristol Green Doors, Frank Water). The CBC has funded research students to carry out multidisciplinary research, with long-term input from outside organisations. Research carried out in partnerships enabled by the CBC grant has already led to publications in the *Economic Journal* (partner: JustGiving) and the *Journal of Public Economics* (partner: Big Lottery).

Impact, user engagement, and capacity building

We have a strong record of policy advice and user engagement. Advice to government bodies and organisations has included HM Treasury, Department of Health, Ministry of Justice, Competition Commission, Department for Education, Cabinet Office, European Commission, the Financial Services Authority, and the OECD. Grout has been a non-executive director at Ofgem since Oct 2012. Burgess has served on multiple advisory boards. Beyond the impact case studies, research in the UoA has influenced policy in areas such as tax relief for charitable giving.

As part of our work on public policy, we have successfully established a model of large-scale, team-based research projects, often making innovative use of non-standard data. The team approach contributes to capacity building, and research assistants attend workshops and training designed specifically for RAs. They frequently gain publications, and most go on to further postgraduate study at leading institutions, or other prestigious destinations such as the IFS.

In terms of wider capacity building, the University of Bristol hosts the Economics Network, providing nationwide support for teaching in the discipline, with backing from the Royal Economic Society, the Scottish Economic Society, the LSE and the University of Exeter, and subscriptions from economics departments across the UK. The network's website is a leading resource for economics education worldwide.

Summary

Overall, the strength of our research since RAE 2008 testifies to a vibrant research environment. We continue to balance advances in econometrics and economic theory with innovative, high-impact applied research. We have successfully recruited early-career staff from leading PhD programmes, attracted by our distinctive focus and strengths. And we have laid the foundations for a larger, advancing Department, with increasing prestige and international recognition.