

Institution: University of Sheffield

Unit of Assessment: 18 Economics and Econometrics

#### a. Overview

Since RAE2008, we have experienced continuity and further growth, reflecting both our sustainability and our vitality as a Department committed to excellence in research. We remain a relatively small department with highly complementary research interests focused on applied economics/econometrics and policy evaluation. Our research is focussed around four research clusters: (i) the economics of the firm and industrial economics; (ii) health economics and the economics of wellbeing; (iii) labour and education economics; and (iv) macroeconomics, finance and development. These provide a forum for advice and support, and facilitate collaboration. Research cluster members include academic and research staff, our PhD students, and other researchers from throughout the University with related research interests.

# b. Research strategy

Our strategy is to recruit and retain excellent academic and research staff, and PhD students, and to provide them with a first-class infrastructure to support delivery of high quality research. This enables both staff and PhD students to develop their full potential through training, support and a stimulating research environment. This strategy requires: acquiring funding to support our research and to sustain the infrastructure; applying our research to real world problems; and engaging with end-users of our research (see REF3a).

#### (i) Reflection

Comparing our current position to that of RAE2008 we have seen: expansion in terms of academic staff numbers and PhD students (see below); both new and extended engagement with outside users; and the establishment of a research institute. Contributions to the discipline include methodological developments in applied theory and econometric techniques as well as innovative applications. Examples include:

- Brown and Taylor, in collaboration with international co-authors in the US and Australia, have developed a latent class panel model which incorporates non-normality and heteroscedasticity. This has been applied to the economics of charitable giving in the US.
- Dickerson and Popli have developed a multi-dimensional approach to investigate persistent poverty using data from the UK Millennium Cohort Study. This has subsequently attracted extensive media coverage, e.g. *The Guardian* and the National Children's Bureau; and interest from government departments and agencies, e.g. the Department for Business Innovation and Skills (BIS) and the Child Poverty Unit.
- Gregory-Smith uses unique firm level data for the UK to investigate executive remuneration and issues surrounding corporate governance including CEO gender pay differentials, which has generated impact (see REF3a).
- Taylor was involved with other colleagues at Sheffield in modelling the sensitivity of individuals' consumption of different types of alcohol to unit prices, and investigating the impact of alcohol pricing policies on health and economic outcomes. This research, funded by the Department of Health (DoH), was published in *The Lancet* and has subsequently had significant impact (see REF3a/b).

We have also contributed to the research base more widely for instance through key-note lectures. For example: Brown gave a keynote address at a workshop on 'Household Finance and Consumption' held at the Bank of Luxembourg in 2013; she also organised a session on 'Econometric Analysis of Financial Decision-making at the Household Level' at the 'New Directions in Welfare' conference for economists and policy makers at the University of Oxford in 2009; and Risa Hole gave an invited keynote lecture at the 2011 Danish Choice Modelling Day (an annual meeting of researchers working in the area of discrete choice methods).

Evaluating our achievements in light of the strategic aims and objectives outlined in RAE2008:

research outputs – we continue to ensure our research achieves a high level of originality, significance and rigour comparable to the best work in the field. Particular strengths are in applied economics and econometrics including: the economics of the firm and industrial economics; education and labour economics; health economics; and macroeconomics, finance and development. Examples of peer-reviewed journal publications in the census period include: Canadian Journal of Economics; Economic Journal; Journal of Applied



Econometrics; Journal of Economic Behavior and Organization; Journal of the European Economic Association; Journal of Human Resources; Journal of Monetary Economics; Journal of Money Credit and Banking; Journal of Public Economics; Journal of Royal Statistical Society, Series A; and Oxford Bulletin of Economics and Statistics.

- <u>increasing research income from key funders</u> (£1,433,838 overall grant capture in the census period) we have reacted to the changing HE environment by attracting funding not only from conventional sources such as the Economic and Social Research Council (ESRC) and the Leverhulme Trust, but also diversifying to other key funders e.g. Engineering and Physical Sciences Research Council (EPSRC), by developing links with other social science disciplines and beyond. For example, Roberts has secured two large grants from the EPSRC for 'Reflect: Experienced utility and travel behaviour' and a 2 year project 'Creating and Exploring Digital Empathy' (CEDE). We have also continued to secure funding from government departments, e.g. BIS, and charities, e.g. the Joseph Rowntree Foundation (JRF).
- research institute after a major investment of £409k via the University's Strategic Development Fund, a new research institute was created in 2013 'the Institute for Economic Analysis of Decision-Making' (InstEAD). Directed by Brown and Roberts, it includes external international researchers in areas such as behavioural economics, economic psychology, health economics and labour economics as well as fellows from the Department of Economics. It also houses two Research Fellows, a Research Associate and a PhD student.
- <u>increasing staff numbers</u> overall academic staff numbers have risen through a number of high-quality appointments at all levels. We have particularly sought to develop capacity in Research Fellows/Assistants both via specific research projects and through InstEAD.
- ECR staff successfully completing probationary period and given full support in developing their research careers all ECR staff from post RAE2008 have completed probation in the allocated time of three years or earlier. Within the REF period, ECR staff have also achieved promotion, e.g. Risa Hole to Senior Lecturer (SL). All ECR staff receive teaching discounts during their probationary period to help them develop their research and we continue to offer this to incoming ECR staff, see c(i).
- increasing the number of PhD students to approximately 3 per lead supervisor; to include joint funded ESRC Collaborative studentships via our strong links with external users of our research such as UK Commission for Employment and Skills (UKCES). The number of PhD students has increased from 20 in RAE2008 to 35 today, around 2.7 per lead supervisor, and we are now part of the ESRC White Rose Doctoral Training Centre (WR DTC), leading the Economics pathway, see c(ii).
- <u>further developing engagement with outside users</u> we have maintained strong links with the Department for Work and Pensions (DWP), with their continued financing of the Work Pensions and Labour Economics Study Group (WPEG), and with BIS; we are also working on large-scale policy evaluations funded by BIS and the National Lottery, see REF3a.

#### (ii) Vision

Our vision for the next five years (2014-2019) is to further enhance the quality, impact, depth and breadth of our research activities with particular focus on applied economics/econometrics and policy-relevant analysis. We seek to achieve international excellence in all areas of our research activity via rigorous method, relevant application and appropriate dissemination. In order to achieve these goals we aim to:

- further develop the excellence of research publications in particular the number and proportion of 3\*/4\* published outputs post REF2014;
- generate additional research grant capture in a highly competitive environment from a range of sources including charities, the EU, government departments and RCUK;
- ensure that our research continues to have an impact beyond academia (see REF3a);
- continue the gradual growth of academic staff numbers through further recruitment of staff who can demonstrate or have the clear potential for research excellence; and
- sustain the quality of PhD student numbers and submission rates, see c(ii).

Academic developments are being supported by a major investment in 2014 of £3.1M for refurbishment of the physical environment of the Department located at 9 Mappin Street (see



d(ii)). We will continue to monitor research outputs, grant applications and research publications for their potential for impact via our individual biannual research planning meetings and the annual Staff Review and Development Scheme (SRDS) appraisal. In respect of grant capture, we will build on our existing synergies to develop inter-disciplinary projects such as Robert's two EPSRC projects ('Reflect: Experienced utility and travel behaviour' and CEDE) and the £1.8M evaluation of the National Lottery 'Fulfilling Lives' programme (see REF3a).

## c. People:

# i. Staffing strategy and staff development

Staff are recruited at all levels for their research performance, external profile and future potential. In addition we endeavour to provide stimulating, research-led teaching across all our programmes, whereby students experience a curriculum delivered by staff working at the frontier of academic enquiry, exposing students to relevant contemporary developments in the subject. We now have a productive mix of experienced staff, mid career and ECRs. Two staff have been promoted to personal chairs and three to senior lecturer in the REF census period. The distribution of staff across grades in 2013 (2008) is: Professors 31% (25%), Readers 12% (15%), Senior Lecturers 15% (5%), and Lecturers 42% (55%), including 5 ECR staff.

We have seen some changes in staffing due to recruitment, turnover and retirement, and the Department is now more balanced in terms of its breadth of research and ability to cover teaching both on core and specialist modules, and we now have a more even mix of micro and macro economists.

All staff members have a Research Mentor who advises on research strategy as well as commenting on written papers; a process overseen by the Research Mentoring Group. We actively encourage less experienced staff to work with more experienced researchers. Mentoring is supportive and encouraging. Critically, mentoring is separate from annual appraisal via SRDS, which sets objectives for all aspects of work. The one-to-one research mentoring scheme, the biannual individual research plans audit and the University-wide SRDS ensure that individuals' research plans are compatible with both Departmental and University aims and objectives.

ECR staff are given particular enhanced support, including: a reduced teaching load for the first three years; no significant administrative duties; increased workload credits for successful research grant capture; gradual introduction to PhD supervision via pairings with experienced supervisors (all PhD students have 2 supervisors); and a probationary advisor who helps with all aspects of academic work. In 2012/13 the Department introduced a 'research investment fund' scheme which is a pump-priming initiative to fund a post-doctoral Research Fellow to support future large external grant applications, and is particularly targeted at ECRs. The progress of our ECR and junior staff reflects the effectiveness of our policies, e.g. both Cuestas and Risa Hole were promoted to SL between RAE2008 and REF2014.

The Department operates a Workload Allocation Framework (WAF) which is available on the staff intranet and which decomposes academic activities over the year into research, teaching and administrative components. The WAF has been adopted more widely by the Faculty of Social Sciences (FSS). All academic staff are allocated a protected 40% of time for research with the remainder then allocated for all other activities. Additional research time is allocated for research grant income in excess of a given threshold, which varies by grade of staff to the benefit of ECR and junior colleagues.

Study leave is an important component of career development and the University allows one semester in every seven. Plans are formulated with the Director of Research and often involve external study visits. Wherever possible, staff may concentrate their teaching responsibilities in one semester to facilitate concentrated research activity. 5 staff have taken study leave since 2008 to develop new or significant areas of research, e.g. during his study leave Dickerson was involved in developing occupational skills profiles for UK CES.

Departmental initiatives are complemented by excellent University support. The development of research careers is at the heart of the Research Leaders Programme which provides a coherent framework of support for researchers at all levels. Training on grant capture includes workshops using previous applications, and the handbook (and website) 'Top Tips' is particularly targeted at ECR researchers, containing advice based on collective staff experiences. Department staff contribute to capacity building efforts within the FSS, e.g. peer review of grant applications, and Roberts, Taylor and Tsuchiya have contributed workshops on developing funding applications.



A professorial member of staff is responsible for research ethics and is a member of the Research Committee. The role includes: advising researchers, at all levels from staff to undergraduates, of the procedures required to conduct research in a manner which satisfies the University's ethics guidelines; to ensure that the necessary ethics approval is always obtained; to produce an annual review and reflection of the Department's ethics procedures and applications; and to coordinate the periodic review by the University's Quality and Governance Team.

In terms of prestigious personal research fellowships, Brown has been awarded a Leverhulme Trust Major Research Fellowship 2012-2014 for a project entitled 'Household Finances, Intergenerational Attitudes and Social Interaction' and Pogrebna has received an Early Career Leverhulme Fellowship to work on a project 'Pregnancy, Parenting and Risk Attitudes'. Roberts and Tsuchiya have both been awarded two year Faculty Advanced Research Fellowships in 2012. These are aimed at facilitating grant capture and impact, and so far have helped to secure more than £2M in external funding. We expect these to generate outputs in peer reviewed journals and to have impact beyond the census period.

#### ii. Research students

PhD matters are coordinated by the Director of Postgraduate Research (DPR) with general student support from the PhD tutor. We currently have 35 PhD students, distributed across the full range of staff research interests, and we have had 25 PhD students graduate in the census period. Training for all PhD students, irrespective of funding source, is organised through the ESRC White Rose DTC (WR DTC) which was established in January 2011. The WR DTC is a strategic collaboration between the Universities of Leeds, Sheffield and York and is one of the UK's largest doctoral training centres for postgraduate researchers in the social sciences. The aim of the WR DTC is to deliver excellent supervision, first class training and a vibrant intellectual environment for postgraduate research students. The Economics Pathway is led by Sheffield. We attract high calibre students with a high proportion of our intake having achieved merit/distinction in MSc Economics or equivalent programmes before commencing their PhD. Taylor lectures Advanced Quantitative Methods to Doctoral Development Programme (DDP) students at the WR DTC and McIntosh is the FSS Postgraduate Director.

From September 2010, all new PhD students in the FSS have enrolled on the DDP which has been designed to be more flexible in terms of training provision. The aim is not only to provide the skills that students need to complete their theses, but also a wider range of professional skills which their future employers will value. Via the DDP, students may take modules from our own MSc programmes as advised by their supervisors. Students are also required to take three compulsory modules from outside of the Department to give them a wider appreciation of the social sciences and also to develop generic skills. All new students complete a Training Needs Analysis (TNA) with advice from their supervisor, a DDP Development Plan which is used for prioritising, developing and recording student-specific training needs and training plans. Progress is monitored in 6 monthly reports and annual updates to the TNA. New PhD students also have a FSS level induction as well as a specific Departmental induction with the DPR.

PhD students are integral to our research activities and attend research cluster meetings (which take place at least twice per semester). All students have a dedicated desk within the Department; and are provided with their own PC as well as specialist software and desktop access to the internet and library facilities. They also have access to the Department's travel, conference and training funds. PhD students also attend the weekly external and internal seminars and each year they make at least one presentation on their own research at our annual PhD conference. Students also have the opportunity to attend specialist courses, e.g. those provided periodically by the Centre for Microdata Methods and Practice (CEMMAP) at the Institute of Fiscal Studies (IFS).

We also hold master-classes for PhD students which have recently been delivered by Andrew Clark (Paris School of Economics), Conchita D'Ambrosio (Université du Luxembourg), and Matt Greenwood (University of Melbourne). These classes have focused on the economics of well-being, on inequality, and macro-econometrics and have been attended by PhD students across the White Rose DTC, as well as junior academics. Staff have also delivered master-classes for PhD students at overseas institutions, e.g. Cuestas and Taylor at Tallinn Institute of Technology, Estonia.

PhD students are supported by a variety of external sources including: the ESRC and Medical Research Council (MRC) where 9 awards have been made; collaborative PhDs e.g. with UK CES;



and overseas governments and universities. Since 2011/12 the Department has also provided PhD scholarships and has offered 3 Graduate Teaching Assistantships covering fees and stipends at RCUK rates. In addition, we typically provide 1 PhD fee waiver per year.

We are proud of our record of a 100% submission rate of PhD students within 4 years for every single year since RAE2008, which is high for the discipline of economics and also within FSS and the University more generally. The drop-out rate of PhD students has also been extremely low with only 1 (part-time) student withdrawing post RAE2008.

During the census period, PhD students have co-authored 22 of the Department's discussion papers and have published papers in a number of peer reviewed journals (e.g. *Economics of Education Review, Journal of Economic Psychology, Journal of Health Economics, Journal of Risk and Insurance, Scottish Journal of Political Economy, Southern Economic Journal and World Development*). They have also made conference presentations, for example at the Royal Economic Society (RES); the WPEG annual conference; the Money, Macro and Finance (MMF) conference; and the Health Economics Study Group. They can also publish their research in the ESRC White Rose DTC Working Papers series which are listed in RePEc (Research Papers in Economics).

More than half of our PhD graduates since 2008 are employed as lecturers or research staff in the UK and overseas. Examples include: lecturer in economics University of Bristol; lecturer in health economics Newcastle University; and senior research associate Lancaster University. PhD graduates have also taken postdoctoral positions e.g. University of Nottingham, and University of York; and other research positions e.g. World Bank, and Office for National Statistics (ONS).

# d. Income, infrastructure and facilities

#### (i) Research income

Over the census period we have attracted £5.1M in new awards from external sources of which £1,433,838 is directly attributable to the Department. Contributions to the latter include grants from: (i) RCUK (30%) e.g. the ESRC; the EPSRC and the MRC; (ii) government departments (52%), e.g. BIS, the Department for Environment Food and Rural Affairs (DEFRA), DoH; (iii) charitable trusts (13%), e.g. the JRF, the Leverhulme Trust, and the National Lottery Fund; and (iv) other sources, e.g. the British Academy, and overseas funding (5%).

Recently secured funding is linked to our priority areas in behavioural economics and decision theory which ultimately has the potential to lead to outputs and impact beyond REF2014. This includes: (i) Dickerson, McIntosh and Roberts: £500,000 from BIS for a 5 year evaluation of 'Employer Ownership Pilots' - a £250M scheme to improve training; (ii) McIntosh and Roberts: £1.8M grant with the Research Exchange for the Social Sciences (RESS) to evaluate the National Lottery Fund 'Fulfilling Lives' programme; and (iii) Roberts: EPSRC award of over £750k for the CEDE project.

All external grant applications, regardless of the funding body, have the case for support peer reviewed and approved within the Department. This is to ensure that the research proposed is of high standard and also to identify potential impact as early as possible. All RCUK applications are also subsequently reviewed by the FSS Peer Review College before submission. Individuals are also encouraged to discuss the case for support with their Research Mentor and within the appropriate research clusters.

Staff receive support to compete for external funding. As well as financing the direct costs of research, the WAF and our financial incentive structures mean that grant income facilitates teaching buy-outs, reduced teaching loads and supports our general research infrastructure. Staff have benefited from FSS research pump-priming funds, which is targeted at ECR researchers, e.g., Gregory-Smith received support from the Faculty Network Fund in 2012.

# (ii) Infrastructure and Facilities

Our research environment is supported by excellent infrastructure and mutually reinforcing formal and informal structures. All staff are provided with high quality facilities, including: high specification PCs; desktop access to library facilities, software (including a STATA site license with automatic upgrades to newer versions) and data (including FAME, Datastream and access to the Secure Data Service); and secretarial, dedicated IT and administrative support. Other specialist software is also provided as required e.g. Gauss, MATLAB, LIMDEP/NLOGIT and RATS.

Research management forms an integral part of the Department's governance. Research



strategy is overseen by the Research Committee (comprising senior and junior staff) which has responsibility for all research activity, including: the PhD programme; external funding; impact; ethics and mentoring. The Director of Research is a member of the Department's Management and Strategy Group and of the FSS Research Committee. Departmental research strategy is a core component of the annual Strategic Planning Round in which the University reviews our plans and achievements in all areas of activity.

The organisation of our research into clusters provides a supportive environment for advice and facilitates collaboration and the development of shared interests. Activities include responding to referee reports, writing grant applications and the formulation of early stage ideas. Our research culture is sustained by a minimum of two seminars per week: an external series attracting eminent speakers from the UK and abroad (including Rachel Griffith, Manchester and IFS; Stephen Jenkins, LSE; Steve Machin, UCL and CEP; Erik Plug, Amsterdam; and Martin Weale, MPC), and an internal seminar for staff to present their own research. Both seminar series are attended by all staff and PhD students.

We have an active discussion paper series that is listed in RePEc. As well as publicising our work and inviting outside comment, the series is refereed in-house to maintain quality and ensure constructive criticism is given before journal submission.

Support in research activities is provided by our Departmental Manager, IT Manager, and Communications Officer, as well as our administrative, finance and clerical team. Departmental support is supplemented by excellent FSS and University assistance. This includes the Faculty Director of Research and Innovation and the Directors of the University Cross Cutting Research Themes providing pump-priming money for research developments. For example, the 'Digital World' - one of the University's three cross-cutting themes - funded a workshop led by Roberts on 'Behaviours and Information'. This subsequently led to her attendance at the 'Digital Personhood Ideas Sandpit' in late 2012, culminating in the CEDE project October 2013-15.

An initiative of significant strategic importance is the forthcoming refurbishment of the physical environment. Economics will subsequently have significantly increased office space across three adjacent floors to enable further growth. This includes 41 individual staff offices enabling us to accommodate visiting academics and post-doctoral fellows within the Department, a dedicated social area for staff, research fellows, visitors and PhD students, and an integrated graduate student space to accommodate up to 50 PhD students.

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

#### (i) Affiliations, collaborations and external links

A number of individuals within the Department have external affiliations. For example: Brown and Taylor until 2010 were Research Associates at the Institute for Social and Economic Research (ISER) at the University of Essex; since 2009 they have both been Research Fellows at the IZA Institute for the Study of Labor Bonn; Brown was a visiting Research Fellow in 2012 in the School of Economics and Finance, Curtin University Australia; Pogrebna is an honorary member of the interdisciplinary 'Decision Research at Warwick' (DR@W) in the University of Warwick; Risa Hole is a Research Associate of the Rokkan Centre, University of Bergen; Roberts and Risa Hole are external affiliates with the Health, Econometrics and Data Group (HEDG) at the University of York; Thoenissen is an academic fellow at the Reserve Bank of New Zealand, Programme Director at the Centre for Applied Macroeconomic Analysis at Australia National University (ANU), and an external research affiliate at the Centre for Dynamic Macroeconomic Analysis at the University of St Andrews; Van Landeghem is an IZA Research Fellow; and Wright is an external fellow at the Leverhulme Centre for Research on Globalisation and Economic Policy (GEP) at the University of Nottingham.

We have a range of international co-authors including: (i) from the US – William Greene (New York University), Glenn Harrison (Georgia State University), and Charles O'Reilly III (Stanford); (ii) from Europe – Ignacio Abásolo (Universidad de La Laguna, Spain), Henrik Andersson (Toulouse School of Economics, France), Paulo Bastos (World Bank)), and Mikael Svensson (Karlstad University, Sweden); (iii) from Asia – Pulak Ghosh (Indian Institute of Management, Bangalore); and (iv) from Australia – Alan Duncan (Curtin University), Denzel Fiebig (University of New South Wales), Mark Harris (Curtin University), Stephanie Knox (University of Technology Sydney), and Preety Srivastava (RMIT, Melbourne).

(ii) Conferences, seminar series and journal involvement



All staff are encouraged to present their on-going research at seminars across the UK and abroad. Examples include: the RES; the European Economic Association (EEA), European Meeting of the Econometric Society (ESEM); the European Association of Labour Economics (EALE); the Society of Labor Economics (SOLE); and the European Society of Population Economics (ESPE). In 2014 Van Landeghem will present his research at the American Economic Association (AEA) having organised a session which will be chaired by the Nobel Laureate James Heckman from the University of Chicago. Since 2011 Taylor has been convenor of WPEG, with Brown and Dickerson members of the steering group. Dickerson is an editor of the *British Journal of Industrial Relations*, while a number of staff are editorial board members of peer reviewed journals, e.g.: Cuestas and Taylor (*Economic Issues*); McIntosh (*Journal of Education and Work*); and Roberts (*Health Economics*). Brown has recently been invited onto the editorial board of the *Bulletin of Economic Research*.

- (iii) External visitors and keynote events
  - Since 2012 we have held an annual Knoop Lecture established in memory of Professor Douglas Knoop (1883-1948) who was the founding member of the Department. The inaugural lecture was given by Paul Collier, Professor of Economics at the University of Oxford while the 2013 lecture was given by Jonathan Portes the Director of the National Institute of Economic and Social Research (NIESR). Academic visitors have included: Luis Gil-Alana (Navarra, Spain), Kit Baum (Boston College, US), Andrew Clark (Paris), Alpay Filiztekin (Turkey); Mark Harris (Curtin, Perth), Andrew Oswald (Warwick, IZA), Preety Srivastava (RMIT, Melbourne) and Karsten Staehr (Tallinn Institute of Technology and Estonian Central Bank).
- (iv) Professional associations and learned societies

Brown is: a member of the RES Women's Committee which aims to promote the role of women in the UK economics profession; an elected member of the RES council; on the steering group of the Conference of Heads of University Departments of Economics (CHUDE); on the Research Excellence Framework Economics and Econometrics Sub-Panel; and on the ESRC Grant Assessment Panel C. Dickerson and McIntosh are members of the recently formed Academic Panel at BIS advising on skills strategy. Dickerson was a member of the Assessment Panel for the Philip Leverhulme Prizes in 2011 and 2013 and a member of the Board of Examiners for the ESRC Research Studentship Competition for 2008 and 2010. A number of staff are members of learned societies such as the RES, AEA, EEA, ESEM, ESPE and EALE.

- (v) Collaborations with research users
  - The nature of our research means that we have strong links with end-users, see REF3a. Impact and Knowledge Exchange is overseen by the Departmental Impact Coordinator and we are supported by RESS. In terms of national and international collaboration, McIntosh has worked on the 'Youth project' which is a cross-European team of researchers investigating youth unemployment, reporting to the European Commission. Tsuchiya has undertaken consultancy work for DEFRA on 'The impact of the natural environment on wellbeing', for the Home Office on 'Quantifying the wellbeing impact of violent crime on victims' and for the DoH and EuroQol Group on 'Valuing health states worse than dead'. Roberts has been the economics member of two NICE public health guideline groups, has been an advisor on the impact of regeneration for the Department for Communities and Local Government, has advised BIS on behavioural approaches to career decision making and is currently carrying out an advisory study for HEFCE on the behavioural aspects of student choice.
- (vi) Interdisciplinary research

McHardy is a member of the White Rose Consortium on Agricultural Sustainability; Tsuchiya was a founding member of, and is now the director of, the Centre for Well-being in Public Policy (CWiPP) which considers how well-being can be defined and measured in order to inform policy; and Brown and Taylor have a research project on 'Intergenerational Analysis of Attitudes towards Finances' with the 'Sheffield Political Economy Research Institute', which brings together leading international researchers in the social sciences to respond to the political and economic challenges posed by the global financial crisis and its legacy. Taylor is involved with a cross faculty initiative 'Project Sunshine' which considers food and energy security in particular the role of price (which builds upon his work for the DoH). He leads the consumption strand of this initiative.