













Scottish Institute for Research in Economics

Annual report to the Scottish Funding Council

For the period 1 Oct 2008 to 30 Sept 2009



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General introduction

This is the second Annual Report from the Scottish Institute for Economics Research (SIRE). It covers the period from 1st October 2008 through to 30th September 2009. While previous reports have covered in some detail the recruitment and appointment to SIRE Professorships and Lectureships, reflecting the early focus of SIRE efforts, the bulk of recruitment was complete by October 2008. The coverage of recruitment and appointments in the current report is therefore more limited, providing an update on recruitment, appointments and staff turnover during the reporting period. In reflection of the progression of SIRE efforts, the current report focuses more on the development of research activities, events, outputs and impact in line with the SIRE mission.

As is indicated in the ensuing sections, SIRE has continued to make considerable progress. The new appointments are having a substantial impact: raising the quality and quantity of research publications; providing research leadership, for example by planning and organising a number of significant and highly successful international mini-conferences and workshop series; developing new and exciting collaborative research networks; and enhancing the liveliness and excitement of the research environment. More generally, SIRE has given rise to a significantly enhanced international profile for economics research in Scotland. This was clearly reflected in the substantial improvement in the performance of Economics in Scotland in RAE 2008 compared to RAE 2001. There has been a notable step increase in quality. This quality change has been accompanied by a healthy expansion of the PhD programme across Scotland, in quality as well as quantity, and a significant increase in the number and size of research grant awards. A further healthy sign is the gradual emergence of a number of exciting inter-institutional and, in some cases, also inter-disciplinary, research networks, and increased engagement with users groups through e.g. the SIRE Policy Forum and liaison with the David Hume Institute. Fostering and encouraging the development of these networks as well as working strategically towards the REF are important elements of SIRE's plans for the coming year.

SIRE Executive and International Advisory Board

- 2.1 From 1st October until December 31st 2008 the SIRE Executive Committee comprised:
 - o John Moore (SIRE Director, and Director of BIC)
 - o Stuart Sayer (SIRE Executive Director)
 - o Ronald MacDonald (Director of MFLR)
 - o Martin Chalkley (Director of WW)
 - o Mark Schaffer (SGPE PhD Director)
- John Moore demitted office as SIRE Director and Director of the BIC programme at the end of December 2008. John Moore's recent prestigious achievements were the key factor underlying this change. His other commitments arising from his FP7 ERC Advanced Investigator grant and his election to the Presidency of the Econometric Society (which themselves considerably enhance SIRE's international reputation and impact) limited the time he was able to devote to his SIRE directorial roles. Although demitting office as Director, John Moore will continue to make a highly valuable contribution to BIC and SIRE.
- 2.3 Ed Hopkins, a SIRE appointee based at the University of Edinburgh, took over the role of BIC Programme Director on 1st January 2009. The post of overall SIRE Director has remained unfilled throughout 2009. We anticipate moving to fill this vacancy at the beginning of 2010. Thus, from 1st January 2009 until the end of the reporting period the Executive Committee comprised:
 - o Stuart Sayer (SIRE Executive Director)
 - o Ed Hopkins (Director of BIC)
 - o Ronald MacDonald (Director of MFLR)
 - o Martin Chalkley (Director of WW)
 - Mark Schaffer (SGPE PhD Director)
- 2.4 Ronald MacDonald will be demitting office as Programme Director of MFLR on September 30th 2009. His proposed successor is Gabriel Talmain, a SIRE appointee at the University of Glasgow.
- 2.5 The members of the Executive Committee communicate frequently, through a mix of face-to-face meetings, teleconferences and emails. Meetings or teleconferences are roughly monthly, though frequency varies somewhat, depending on the volume of business and the season.
- As discussed in section 3 below, the three SIRE programmes have each established Programme Steering Committees to assist the respective Programme Director in designing, developing and implementing the programme strategy.

- 2.7 The core executive team draws on the experience and expertise of other senior SIRE researchers as and where relevant. In particular, to assist in the important task of developing efficient and effective knowledge exchange with government and corporate sectors, the Executive has harnessed the leadership and experience of Professors David Ulph and Richard Harris.
- 2.8 SIRE is a regular standing item at the (roughly quarterly) meetings of the SGPE Heads of Departments of Economics, where SIRE is represented by the Executive Director. These meetings provide a valuable opportunity to discuss and obtain feedback on SIRE developments and help to promote effective integration and coordination of developments. We plan to extend this in future, by holding an annual meeting focusing on SIRE, in conjunction with preparation of the SIRE annual report.
- 2.9 As set out in the SIRE proposal, the International Advisory Board (IAB) of SIRE comprises:
 - o Manuel Arrellano (CEMFI, Madrid)
 - o Richard Blundell (UCL)
 - o Naryana Kocherlakota (Minnesota)
 - o Tom McGuire (Harvard)
 - o George Mailath (Pennsylvania)
 - o Andrew Rose (Berkeley)
 - o Larry Samuelson (Yale)
 - o David Canning (Harvard)
 - o Harald Uhlig (Berlin)
- 2.10 Relevant members of the IAB have provided advice and guidance on short-listed candidates for SIRE Chair appointments. This additional and insightful input from outstanding international researchers, alongside the normal role of external assessors, was an extremely valuable contribution to the appointment process. SIRE owes a considerably debt of gratitude to IAB members for their guidance and advice along with their more general support and enthusiasm for SIRE.
- 2.11 Towards the end of the current reporting period, in line with the monitoring procedures outlined in the SIRE letters of award, two members of the IAB (Richard Blundell and Larry Samuelson) were tasked with reviewing SIRE's progress to date. We look forward with interest to receiving their reports.

Executive & Programme Directors' overviews and future plans

3.1 SIRE Centre

- 3.1.1 The SIRE Centre maintains the SIRE website at www.sire.ac.uk including a frequently updated digest of news and events, and an extensive diary of SIRE and other activities throughout Scotland. This is supplemented by an (approximately) monthly newsletter to the SIRE mailing list, along with targeted mailings for more focused activities. Despite the best efforts of the SIRE Administrator, Gina Reddie, building and strengthening effective two-way communication channels remains a challenge, and we continue to explore new and creative ways of enhancing effective two-way communication between the SIRE Centre and participating universities (see e.g. 3.1.9 below).
- 3.1.2 As the web-based diary indicates, there is a wealth of high quality events and activities taking place throughout Scotland. These include regular seminar series at all the participating universities. Seminar presenters include an impressive array of leading international researchers, as well as SIRE-based researchers. It is particularly pleasing to note the frequency with which new SIRE appointees, junior as well as senior, appear on seminar or workshop schedules at universities around Scotland.
- 3.1.3 While it is, in many respects, a positive feature, the wealth of events and activities also presents a challenge. There continues to be a need to improve the coordination and targeting of events and activities, linked to the communication issue noted above, so as to maximise their effectiveness and reap the gains of research pooling. Coordination through the SIRE Centre helps to avoid timing clashes between major events aimed at similar clusters of researchers.
- 3.1.4 As noted in the various programme reports, mini-conferences, organised within or jointly between SIRE research programmes provide one effective means of targeting and overcoming the fixed costs of travel between universities. A number of such events have been held over the reporting period and, as is indicated in the relevant programme sections below, have been highly successful.
- 3.1.5 There are also some important established and emerging research clusters, which do not fall neatly within SIRE Research Programmes. Here the SIRE Centre has continued to provide support and encouragement to the SIRE Econometrics Workshop Series and the SIRE Forum for Young Researchers (see section 5.1), and fostered the early development of the SIRE Environmental and Energy Economics Workshop, subsequently subsumed under the W&W Programme (see section 5.3). These focused workshop series are proving highly effective and we envisage further developments along these lines, for example the SIRE Economic History Workshop, which plans to hold its inaugural meeting in December 2009.
- 3.1.6 Alongside fostering high quality research, the SIRE Centre also aims to enhance research dissemination and knowledge exchange. We have valued the participation of Scottish Government economists and other practitioners at a number of SIRE events.

Building on this, we have established the *SIRE-Scottish Government Joint Policy Forum*. The initial meeting of the Forum was held in May 2008 and was highly successful (see section 5.1). Four further Forum meetings are planned for 2009-10. Each Forum meeting has a jointly agreed theme, with invited attendees comprising approximately 10 academic researchers and 10 government economists with interests relevant to the meeting's theme. There are short presentations by a mix of academic and government economists to set the scene, with plenty of opportunity for formal and informal discussion and subsequent follow up. Provisional themes planned for 2009-10 include, health issues, climate change, and the implications of behavioural economics for policy appraisal.

- 3.1.7 In a similar spirit, SIRE has continued to strengthen its liaison with the *David Hume Institute* (DHI). There are regular discussions between the SIRE Executive Director and the Director and Deputy Director of the DHI to coordinate themes and ideas, and potential SIRE participants at DHI events, which provide a valuable opportunity to network and disseminate SIRE and its research activities. The DHI generously allows a limited number of SIRE members free access to DHI events, and SIRE has agreed to sponsor a major DHI Public Lecture in November 2009, to be given by Professor Tim Besley.
- 3.1.8 As a further aid to dissemination and knowledge exchange, the SIRE Centre is also in the process of developing a series of two page briefs on SIRE research activities and outputs (*SIRE Focus Papers*). The format enables the briefs to be collated in a regular newsletter, or as stand alone research briefs.
- 3.1.9 The SIRE Centre is working with the JISC funded ERIS Project (Enhancing Repository Infrastructure in Scotland) which is looking to provide approaches and services on a national basis to deal with issues identified around the collection, recording and dissemination of institutional research outputs. The project will support the increasing number of institution and funder level mandates for Open Access now in place, and through providing a critical mass of information about research produced, support the continuing development of research activities in Scotland. As part of the projects overall aim, ERIS is paying particular attention to the requirements of research pooling, which has been widely credited for having substantially contributed to Scotland's RAE 2008 successes. In this regard, the project will seek to create virtual repository spaces for research pools, and look at how these aggregations of data about cross institutional research can be used together with research administration systems to reduce the overhead of data collation for reporting and analysis. The project is being led by the University of Edinburgh with a total of 13 partners made up of Scottish HEI and Research Pools. The work has been funded for 2 years and is scheduled for completion by the end of March 2011

3.2 Behaviour, Incentives and Contracts

- 3.2.1 There has been a change in personnel in the administration of the Behaviour, Incentives and Contracts (BIC) programme, with Prof Ed Hopkins (Edinburgh) taking over from John Moore as Director of the programme in January 2009.
- 3.2.2 John Moore's recent prestigious achievements were the key factor underlying this change. His other commitments arising from his FP7 ERC Advanced Investigator grant and his election to the Presidency of the Econometric Society (which themselves considerably enhance SIRE's international reputation and impact) limited the time he was able to devote to programme direction. Although demitting office as Director, John Moore will continue to make a highly valuable contribution to BIC and SIRE.
- 3.2.3 When the original SIRE proposal and business plan were drawn up, the key research themes within the BIC programme were geographically concentrated in Edinburgh, at the University of Edinburgh and Heriot-Watt University. Subsequent developments and appointments have led to a broader and more geographically dispersed, as well as considerably strengthened, pool of BIC researchers with additional concentrations, in particular, at Aberdeen and St Andrews.
- 3.2.4 To reflect this greater geographical dispersion, a BIC steering group has been established, consisting of Prof Hopkins, Prof Nick Feltovich (Aberdeen), Dr Marco Faravelli (St. Andrews) and Dr Atanas Christev (Heriot-Watt). The group consults regularly to coordinate visits by external researchers and other research activities.
- 3.2.5 The strengthening of the BIC research team received a significant boost in the reporting period, with the appointment of two quality researchers, Marco Mariotti and Paola Manzini, to SIRE Chairs at St Andrews (see section 4.3). Their work on economic theory (bounded rationality, choice and decision theory, bargaining theory and game theory) adds to these core strengths within BIC.
- 3.2.6 Cooperation across universities and across programmes has continued and strengthened. Cross-listing of events on the SIRE website and publicity through a SIRE email list have improved information flows. Travelling to attend a seminar at another university does, however, remain limited. While maintaining regular seminar and workshop series remains an important ingredient of a vibrant research environment, they do not appear the best vehicle for attracting large scale participation by more dispersed BIC researchers. More substantial events, of the mini-conference type, are a more effective attractor, better able to overcome the costs of travel.
- 3.2.7 In the light of this, BIC plans to develop more mini-conference style events, with a focus on presentations by SIRE researchers. Current plans include a BIC mini-conference in 2009-10, bringing together SIRE researchers in economic theory and experimental economics. It is hoped that such events will improve networking and communication of the wide range of research currently taking place under the BIC theme.
- 3.2.8 As well as supporting local interactions, the BIC programme has continued to support a series of international profile research activities. These include a number of individual visits by leading overseas based researchers, such as: Torsten Persson

(Stockholm), John Duffy (Pittsburgh), Giovanni Gallipoli (UBC), Fiona Scott Morton (Yale), Per Krusell (Princeton), Jorgen Weibull (Stockholm) and Luis Cabral (NYU) (see section 5.2.2 for further details).

- 3.2.9 BIC has also organised and hosted two significant international conferences during the 2008-09 reporting period:
 - The first, a conference on *Firm-Level Data Analysis in Transition and Developing Economies*, was co-organized at the University of Edinburgh with the Upjohn Institute for Employment Research. It took place on April 23-24, 2009.
 - The second was a conference on *Relativity, Inequality and Public Policy*, which took place in Edinburgh, June 5-7, 2009, and was co-organized by Ed Hopkins (Edinburgh) and Ravi Kanbur (Cornell).

Both conferences were highly successful, bringing together strong groups of international researchers and SIRE participants, with very positive feedback from participants on the organization and intellectual content. (See section 5.2 for further details).

- 3.2.10 It is noteworthy that both the conferences represented excellent value for money in that they were only partially funded by the BIC activities budget. The workshop on firm-level data was also supported by the COST Programme of the European Commission and from Canada's International Development Research Centre (IDRC). The conference on inequality and relativity had substantial funding from Cornell University and from the British Academy. A very valuable feature of the BIC activities budget is that it provides a funding base, which enables us to explore and develop such collaborative opportunities.
- 3.2.11 The practical organization of the conferences was greatly facilitated by the SIRE administrator, Gina Reddie. It is a small but important aspect of SIRE that there is an administrator dedicated to research support.
- 3.2.12 A further indication of the success of SIRE, reflected in SIRE milestones, is the continued growth of the PhD programme. Using Edinburgh as an illustration, the typical pre-SIRE intake was two new PhD students per year. The intake increased to 4 in 2007-08, rising again to 6 in 2008-09, and currently stands at 7 for 2009-10. This would represent a net increase of 11 above the pre-SIRE norm for Edinburgh alone (the milestone target being 10 for the whole of SIRE). As noted in last year's report, this increase in quantity has been achieved alongside an increase in quality.
- 3.2.13 Grant income continues to be healthy and well ahead of SIRE milestones. Jonathan Thomas's (Edinburgh) £342,976 (ESRC grant, joint with Andy Snell and Ric Holt, both Edinburgh), announced in last year's SIRE Report, is ongoing. John Moore's approx. £1,250,000 (FP7 ERC Advanced Investigator Grant) commenced in September 2009 and runs for 5 years. David Ulph (St Andrews, with Yannnis Katsoulacos) has been awarded an ESRC grant of £167K over 3 years. Stuart Sayer (Edinburgh), in collaboration with the University of Edinburgh Business School and School of Geosciences successfully bid to host a Chevening Fellows Programme, bringing anticipated funding of approx £1 million over 5 years. (See section 5.2)
- 3.2.14 The RAE results were announced during this reporting period. While the RAE reporting arrangements make it difficult to directly measure BIC's performance, it is clear that this performance was strong. Of particular note is Edinburgh's very high

proportion of 4* outputs (approx. 30%), which was significantly boosted by the new SIRE appointees. Researchers within the BIC programme also made a significant contribution to the marked improvement in RAE performance at Aberdeen. Unfortunately Rodriguez Mora, one of the new Edinburgh SIRE Chairs, was not in post by the RAE census date. Had we been able to include him plus fill the two remaining SIRE Chairs in time, our results would have been substantially better given the high quality threshold we apply to appointments. Despite this cause for regret, the RAE results have had a direct and marked impact on our research income, making a significant contribution to the sustainability of our SIRE investments in posts (as envisaged in the SIRE business plan). Moreover, SIRE itself was explicitly praised in the written reports by the RAE Panel. Since the RAE BIC has continued to produce a healthy stream of publications in top 30 journals, in line with SIRE milestones. (See section 5.2).

3.2.15 While BIC will continue to emphasise high quality research outputs and activities, it is also responding to the growing demand for knowledge exchange and impact. Of particular note, in this context, is John Moore's work (with Nobuhiro Kiyotaki, Princeton) on cycles, systemic risk and liquidity, which has received wide-ranging international attention from central banks and the media in the context of the 'credit crunch'.

3.3 Work and Well-being

- 3.3.1 Previous W&W Programme Director's reports have quite naturally focused upon hiring and the challenges that arise from that. We are now into a period of consolidation in respect of staffing in the Work and Wellbeing Programme and whilst there are still challenges Dundee continues to engage in a search for one SIRE professor (post re-advertised May 2009) and both Aberdeen and Dundee have had resignations over the last year (Gerdtham from Aberdeen and Love from Dundee; a replacement for Love will be in post from January 2010 and Gerdtham's replacement has been advertised) the focus of this report will be on developments in our research; its focus, organization, funding and impact.
- 3.3.2 In particular the Programme Steering Group, whose role and composition was described in our last report (October 2008), has had two key concerns: how to ensure greater engagement with a broader community of researchers who can contribute to the Work and Wellbeing themes; and how to promote sustainability of the Work and Wellbeing Programme following the run-down of SFC support. Our discussions regarding research focus and organization have been driven by those concerns. As will be detailed below we see the Work and Wellbeing Programme developing from its initial focus on groupings of researchers with interests in 'health' and 'work' to a number of research *clusters*, linked by methodology (applied, policy-relevant and empirically focused) and a focus on the impact upon wellbeing/welfare.
- 3.3.3 The definition of research clusters is at present embryonic and will naturally evolve indeed we believe that the title of the Programme may usefully evolve to reflect this but in the future we see the organization of our programme reports as reflecting the research activities of the clusters. The following sections of this programme report outline the key developments in terms of research focus, organisation, funding and impact. Programme events are reported in section 5.3 and are not detailed further here.
- 3.3.4 As we have previously identified, a key challenge for the programme is in engaging with researchers across a broad range of institutions. Whilst hiring on the Work and Wellbeing Programme has been focused on the Universities of Aberdeen, Dundee and Stirling, the Programme has potential contributors from most universities in Scotland. A number of the hires by Edinburgh under the auspices of the BIC Programme have interests that are closely aligned with Work and Wellbeing, and a strong body of researchers at the University of St Andrews are likewise focused. Whilst the terms 'work' and 'wellbeing' are broad it has been our experience that some researchers are discouraged by a, in our view mistaken, belief that their research does not 'fit' into these boxes.
- 3.3.5 The Steering Group has been of the view that the only way to achieve engagement is from the "ground-up" attempts at prescribing what research is desirable are counterproductive. We have thus sought a more natural and user-friendly way of engaging in Work and Wellbeing than the perceived requirement to sign up to a Programme.
- 3.3.6 From within our own institutions and using our SIRE contacts we have sought to identify areas of research and associated groupings of researchers that, both through a concern with impacts on wellbeing and an applied /policy focus, fit within the Work and Wellbeing Programme. We have termed these areas/groupings *research clusters* and are currently engaged in a dialogue with the community of researchers in Scotland to agree working titles for these and to identify a coordinator for each.

- 3.3.7 If successful, we hope that in future research clusters will evolve, that they will serve as the vehicle for developing research collaborations and will generate ideas for promoting events and new methods for joint working. The clusters presently identified and with already well-developed links with the Work and Wellbeing themes are:
 - Health and Healthcare
 - Work, Remuneration and Job Satisfaction
 - Unemployment, Skills and Training
 - Entrepreneurship
 - Family / Household and intergenerational welfare
- 3.3.8 We have also identified two further clusters in which Scotland is developing considerable capacity for internationally excellent research and where there is a clear resonance with the concerns of policy-makers in Scotland as well as globally. These are:
 - Environment
 - Energy
- 3.3.9 The research methodology and focus of these two additional clusters fits more closely with Work and Wellbeing than with other SIRE programmes. A workshop series in Environment and Energy has received support from the Work and Wellbeing programme (see section 5.3). One important issue to consider is whether to integrate this research area into the programme, perhaps amending the programme title to reflect this broadening of scope, or whether to move towards creating a new thematic programme in Environment and Energy. We are thus raising these options with the SIRE Executive and governance structure.
- 3.3.10 Further details of events which have been organised by or have received funding support from the Programme are set out in section 5.3. Three highlights were:
 - a highly successful Health Econometrics advanced training workshop, which was jointly funded out of an ESRC grant to the Scottish Graduate Programme in Economics, hosted in Dundee in March;
 - a PhD training workshop in "Economics of Entrepreneurship", led by Professor Scott Shane from Case Western University, hosted by the University of Aberdeen;
 - the establishment of a workshop series in Energy and Environment.
 - 3.3.11 The last of these illustrates the responsive approach that the programme takes in order to encourage wider participation and this approach is continuing with our agreement to partially fund a new Economic History seminar that will initially focus on lessons from the unemployment experiences of the Great Depression for the current recession.
 - 3.3.12 Looking forward we anticipate that *impact* will form an important element in the assessment (and hence core funding) of research through the Research Excellence Framework. The growing importance of impact in the REF also aligns with the government's strategic developments at Scottish and UK levels.

- 3.3.13 A characteristic of research in Work and Wellbeing is that it facilitates close contact with users and this is witnessed by the broad range of interactions that have been made over the last year. Researchers in our programme have, for example:
 - served on Pay Review Bodies,
 - advised up to and including ministerial level,
 - given presentations to key policy-making bodies such as NHS Boards, HM Treasury,
 - served on and written reports for Commissions and Public Bodies and
 - appeared in the media and commented on key economic developments such as increasing unemployment.

Further details of these contributions are set out in section 5.3.

- 3.3.14 One key piece of context over the last 12 months has been the RAE 2008 results. Attracting core funding for internationally excellent research is one key element in achieving sustainability. We have thus been greatly encouraged by the success of the SIRE collaborating institutions in RAE 2008 and note the numerous comments that Panels made regarding both the nature of the SIRE Work and Wellbeing investments in posts and the role of SIRE in enhancing research environments at our respective institutions.
- 3.3.15 Sustainability also requires that non-SFC funding streams be generated. Since, as with the other SIRE programmes, the Work and Wellbeing Programme is a vehicle for promoting collaboration it is often difficult to isolate its value added in generating income. However we have one example that very clearly illustrates the very practical benefits that pooling has. A recently awarded research grant in the area of Income Related Health Inequalities is a direct consequence of a research collaboration initiated and subsequently supported by the Work and Wellbeing Programme.
- 3.3.16 The initiating role in this project arose out of a SIRE workshop on health inequality. The purpose of this was specifically to encourage dialogue between the then new SIRE professor in Aberdeen (Ulf Gerdtham) and fellow researchers in Dundee. Following that workshop a research collaboration was initiated on "health and income inequality" involving Ulf Gerdtham, Dennis Petrie (SIRE Lectureship appointment at Dundee) and Paul Allanson (Dundee). The Work and Wellbeing Programme supported this collaboration through offering funding for travel for meetings of the researchers. SIRE resources also facilitated a file sharing facility so that these researchers could securely access data from their respective institutions. This research collaboration then gave rise to a research paper and a research grant proposal to the Chief Scientist Office (CSO) of the Scottish Government. The proposed research is applied in nature and particularly relevant to policy that has a long-term focus on understanding and mitigating health inequalities. Following a process of peer review and revision this research has now been funded by CSO to the value of £60k. It would seem fair to say that this stream of research funding has flowed as a direct result of the support of the Work and Wellbeing Programme of SIRE.
- 3.3.17 The Programme has also been instrumental in supporting a number of other research collaborations that have resulted in substantial external funding. The sources for these research projects are becoming increasing diverse; as well as traditional research funds such as ESRC (Hvide, £80k Ulph £167k Hart £51k) EU (Hanley as part of FP7 3.4mEUR) and Rowntree (Bell £7k) researchers in the Work and Wellbeing programme have received substantial funding from government agencies (Farrar -

- Department of Health (England) 240k, Chalkley CSO £50k, Petrie and Allanson CSO £60k). Further details of these various grants are set out in section 5.3.
- 3.3.18 We hope that the concept of research clusters discussed above will facilitate a way of both promoting and reporting on the impact of SIRE funding for other externally funded research projects.
- 3.3.19 Details of selected publications are summarised in section 5.3. Researchers in the Work and Wellbeing Programme have published in leading economics journals such as the *Economic Journal* and *Economica*, leading field journals in health economics such as the *Journal of Health Economics* and *Health Economics* and in journals that have considerable impact beyond economics such as the *British Medical Journal*.

3.4 Macroeconomics, Financial Linkages and the Regions

- 3.4.1 Two of the professorial appointments at the University of Glasgow Guido Cozzi and Klaus Wälde have now resigned and taken up positions in other universities. Professor Ronald MacDonald will be standing down as the Director of MFLR from the first of October 2009. His proposed successor is Professor Gabriel Talmain, a SIRE appointee based at the University of Glasgow.
- 3.4.2 The original SIRE proposal and business plan indicated the key research themes within the MFLR programme were geographically concentrated in Glasgow, St Andrews and the University of Strathclyde. This has broadly stayed the same, although as noted under the BIC overview, there has been something of a move away from MFLR towards BIC in the recent professorial appointments at the University of St Andrews. The MFLR steering group, comprising Profs Charles Nolan, Ronald MacDonald, Hassan Molana, has continued to meet on a twice-yearly basis.
- 3.4.3 As in the other programmes, cooperation across universities and across programmes has continued and strengthened as a result of the SIRE initiative. Cross-listing of events on the SIRE website and publicity through a SIRE email list has improved information flows. In common with the other programmes, we find that not many of our colleagues are prepared to travel to attend a seminar at another university, unless it is for a high profile international speaker. Clearly, retaining regular seminar and workshop series remains an important ingredient of a vibrant research environment, they do not appear the best vehicle for attracting large scale participation by other MFLR researchers. We have found that more substantial events, such as the miniconferences we have now regularly organised, are a more effective attractor to our colleagues.
- 3.4.4 In the light of the above, MFLR plans to continue to host at least two miniconferences per year, with the main focus on presentations by SIRE researchers but also including contributions from overseas researchers with an international reputation. Current plans include a MFLR mini-conference in 2009-10 on the topic of the financial crises. We believe that such events will improve networking and communication of the wide range of research currently taking place in the MFLR programme and further our desire to connect with policy makers and the financial sector in Scotland.
- 3.4.5 In addition to supporting local interactions, the MFLR programme has continued to support a series of international profile research activities. Of significant note this year were the visits of Professors Alberto Alesina (Harvard) and Elhanen Helpman (Harvard). The MFLR programme also funded the sixth annual conference organized by the Centre for Dynamic Macroeconomic Analysis at St Andrews. This brought together 20 prominent macroeconomists from the UK and further afield, with a strong attendance of local macroeconomists. (See section 5.4 for further details of these events).
- 3.4.6 A further indication of the success of SIRE is the continued growth of the PhD programme. For example, at Glasgow the typical pre-SIRE intake was two new PhD students per year and has now risen to, on average, 10 per year since the advent of SIRE, with an overall figure of 40 PhD students in place. It is also important to note that this increase in quantity has been matched by an increase in quality with only the very best students being accepted onto the programme.

- 3.4.7 The MFLR programme continued to attract a significant number of grants over the period: Bernie Fingleton: Funding through the ESRC Spatial Economics Research Centre of £69,282 over 3 years; Karen Turner: ESRC Climate Change Fellowship, Investigating the Pollution Content of Trade Flows and the Importance of Environmental Trade Balances in Addressing the Problem of Climate Change commencing October 2008, £ 249,227 over 2 years; Kim Swales: An award of 500k euros, funded by the EU and the Crown Estates, over 3 years of a total 4-year programme (total programme 6 million euros); Peter McGregor: PI in an EPSRC Supergen HiDEF Research Consortium: £200k over 2 years (from October 2009); Robert Wright: ESRC Centre for Population Change: £100,000 over 1 year in the first instance starting in 2010. This is part of a £6 million ESRC Centre hosted at the University of Southampton and a consortium of Scottish Universities, including Strathclyde; Ronald MacDonald – ESRC postdoctoral fellowship, £147K; Guido Cozzi - Great Britain Sasakawa Foundation, £1.6K; Gregg Huff: ESRC grant of £350,000.
- 3.4.8 SIRE has clearly had a highly significant effect on the research rating of the departments participating in MFLR. Of particular note is the impact the new SIRE appointments had on the University of Glasgow, which achieved a commendable GPA of 3 and had a very high proportion of 4* outputs (approx. 30%). Members of the MFLR group continue to publish in the leading economics journals and this suggests we will be able to improve on our RAE performance even further at the next research assessment exercise.

3.5 Scottish Graduate Programme in Economics (SGPE) PhD programme

- 3.5.1 The Scottish Graduate Programme (SGPE) is collaboration between the eight pre-1992 Scottish universities. The first year of the SGPE is a taught MSc in Economics (or Economics (Finance)), which is currently based in Edinburgh. Teaching on the programme is delivered by academic staff from all eight participating universities, with staff travelling to Edinburgh to deliver their lectures. There are currently approximately 70 students registered on the one year MSc.
- 3.5.2 For the PhD stage of the SGPE, students move to the university where their primary supervisor is based. Direct entry to the PhD stage of the SGPE is also possible for students who have previous training in economics equivalent to the SGPE MSc. There are currently roughly 100 students in the PhD stage of the SGPE. This group is distributed fairly evenly over the eight participating universities.
- 3.5.3 A common goal of both the SGPE programme and SIRE is to generate healthy growth in the quantity and quality of PhD students on the programme. As is noted above, the creation of SIRE and the increased profile this has already given to economics in Scotland is already helping to achieve this goal.
- 3.5.4 There is, however, very strong global competition to attract economics PhD students. To enhance our ability to compete effectively at the upper end of this market there is a growing recognition that we need to enhance the advanced research training, post MSc, provided for PhD students. In effect, we need to move towards a 2+2 model for a PhD, closer to the structure of a North American PhD and the model more recently adopted by the top graduate programmes in England and continental Europe. The extant collaborative frameworks provided by the SGPE and SIRE mean that we are exceptionally well placed to provide such advanced research training.
- 3.5.5 This advanced training continues to be developed, and is profiting from the association with SIRE. Since its inception the SGPE has held a highly successful annual conference of PhD students and academic staff (along with MSc students), at which PhD students make a presentation of their research. The PhD conference now includes master classes by leading academics. At the 2009 workshop, one of these master classes was offered by Yosuke Yasuda (National Graduate Institute for Policy Studies, Japan), a SIRE academic visitor; the other master class was taught by one of the new SIRE hires, Prof. Bernard Fingleton (Strathclyde).
- 3.5.6 A further major step in the provision of advanced research training was the award in 2006 of £107,914 from the ESRC Research Development Initiative for the SGPE PhD Training Sequence. Although this award pre-dated the formal creation of SIRE, the research collaboration envisaged by SIRE played a key role in the bid for ESRC funding. The ESRC-funded PhD Training Sequence, directed by Robert Wright (Strathclyde), provides three workshops per year for a period of three years (2006-2009).
- 3.5.7 In 2008-09, the three workshops held were:
 - o *Workshop 7* Economics of the Family (Aberdeen) February 2009, with presentations from John Ermisch (Essex), Helmut Rainer (St. Andrews), Sascha Becker (Stirling), David Bell (Stirling) and Ian Smith (St. Andrews).

- o *Workshop 8* Health Economics (Dundee) March 2009, the main speaker for which was Prof. Matt Sutton (Manchester).
- Workshop 9 Computable General Equilibrium Modelling (Strathclyde) June 2009, the principal speaker for which was Professor Alejandro Cardenete, University of Pablo de Olavide, Seville.

For further information about the PhD Training Sequence see http://www.strath.ac.uk/economics/sgpe/phdtraining/

- 3.5.8 There is scope to add further focussed collaborative PhD workshops, and this is happening. Thus in 2008-09, St. Andrews ran a series of 9 PhD workshops in mathematical methods in economics and finance with the support of the Economics Learning Network of the Higher Education Academy. A second series is being run in 2009-10 in quantitative methods, this time with financial support from SIRE. A one-day workshop on 'Choice Modelling', organised by Nick Hanley (Stirling), took place at Stirling in September 2008. A two-day workshop on Entrepreneurship was held in Aberdeen in September 2009, organised by Hans Hvide and with keynote presenter, Scott Shane (Case Western). Further workshops are planned for the upcoming academic year (2009-10). More extensive advanced training courses in quantitative techniques and macroeconomics were available at, respectively, Edinburgh and Glasgow and open to PhD students from other SGPE universities.
- 3.5.9 Starting in 2009-10, the syllabi of 3 of the SGPE MSc advanced options (Advanced Macroeconomics, Advanced Microeconomics and Advanced Quantitative Methods) have been rewritten so that they double as first-year advanced training courses for PhDs. These courses will be podcast, i.e., video-captured and available by a secure internet link for later viewing by SGPE PhD students. Podcasting (video capture for later reply) is likely to be an important mechanism for delivery of PhD advanced training. The collaborative PhD workshops in 2009-10 will also be podcast.
- 3.5.10 The ESRC is reorganising the structure of its support for postgraduate training, and is calling for applications to establish "Doctoral Training Centres" (DTCs). Discussions are currently taking place regarding a Scotland-wide consortium application for a DTC. The SGPE is expected to be a part of the consortium, and is represented on the steering group putting together the application. The application deadline is March 2010.

SIRE Appointments

- 4.1 At the time of the last SIRE Report, covering the period up to 30 September 2008, there were 4.8 (FTE) SIRE Professorships unfilled: two at Edinburgh, one at Heriot-Watt, one at Dundee and 1.8 at St Andrews; and one vacant SIRE Lectureship at Aberdeen.
- 4.2 The vacant Heriot-Watt Professorship has been filled by Tooraj Jamasb. Professor Jamasb's (formerly Cambridge) research interests are: competition and regulation issues in energy sector reforms; comparative performance analysis; energy in developing countries; energy R&D and energy-environment issues. He has been a consultant to energy regulatory agencies in several countries and the World Bank on electricity sector reform in developing countries.
- 4.3 The Chair vacancies at St Andrews have been filled by Professors Paola Manzini and Marco Mariotti (formerly Queen Mary University of London). Their research interests include: Bounded rationality, choice and decision theory, axiomatic methods in individual and collective choice, bargaining theory and game theory. The Lectureship vacancy at Aberdeen has also been filled.
- 4.4 Despite substantial recruitment effort and several near misses the two Chairs at Edinburgh and one at Dundee have not yet been filled. While this is in some respects disappointing, it reflects the high quality threshold we have applied to SIRE appointments. High quality appointments at senior level are particularly difficult: there is strong global competition and limitations on mobility of potential appointees. In the light of this we have been giving serious thought to proposing variations in the level of these appointments.
- 4.5 The senior SIRE hire at Stirling, Sascha Becker, was initially appointed to a Readership. As anticipated in the 2008 SIRE report he has been rapidly promoted to a Chair.
- 4.6 Ulf Gerdtham has resigned his SIRE Chair at Aberdeen. Following discussion with the SIRE Executive it was agreed with the SFC that this post would be re-advertised at Professor/Readership level. This vacancy is currently being advertised.
- 4.7 Guido Cozzi and Klaus Wälde have resigned their SIRE Chairs at Glasgow. These vacancies are currently being advertised.
- 4.8 Tom Love has left his SIRE Lectureship at Dundee to return to New Zealand. The Lectureship has been filled by Andrzej Kwiatkowski, a graduate student at Autonoma Barcelona, whose research interests encompass both game theory and econometrics.
- 4.9 Jakub Steiner has left his SIRE Lectureship at Edinburgh to join the very strong group of economic theorists at Northwestern. Although it is disappointing to lose him, his move to one of the world's leading economic theory departments is a signal of the high quality of SIRE appointments. The Lectureship vacancy is currently being advertised.

SIRE events, activities and achievements

5.1 SIRE Centre

5. 1. 1 Major events during reporting period

SIRE Forum for Young Researchers

Four SFYR meetings took place during the reporting period. The first two were organised, hosted and co-funded by the University of Stirling, the latter two by the University of Strathclyde.

September 30th 2008, Stirling:

Invited speaker:

• Professor Andrew Oswald (Warwick, Cornell and ESRC Professorial Fellow). "Happiness and Health and the Future of Economics".

SIRE presenters:

- Ian Lange (Stirling) "Contract Parameters' Impact on Coal Prices".
- Helmut Rainer (St Andrews) "Good Intentions, Unintended Outcomes? The Effects of Tax-benefit Policy on the Behaviour of Divorced Parents."

26 participants from Glasgow, St Andrews, Stirling, Strathclyde, Edinburgh, Dundee and Aberdeen.

November 25th 2008, Stirling:

Invited speaker:

• Professor David Ulph (St Andrews and SIRE) "Too Much of a Good Thing? Some Thoughts on Charities."

SIRE presenters:

- Céline Azémar (Glasgow) "International Corporate Taxation and US Multinationals' Behaviour: An Integrated Approach".
- Colin Jennings (Strathclyde) "A Model of Political Agency with Emotional Voters"

24 participants.

February 11th 2009, Strathclyde:

Invited speaker:

Hylke Vandenbussche (Université Catholique de Louvain)
 "Heterogeneous Responses of Firms to Trade Protection"

SIRE presenters.

- Alex Dickson (Strathclyde) "Of the Nature of Cournot Competition"
- Gonzalo Forgues Puccio (St Andrews) "Can Foreign Aid Help Countries Escape from Poverty Traps?"

14 participants from Glasgow, Napier, Strathclyde and Dundee

13th May 2009, Strathclyde:

Invited speaker:

 Mark Schaffer (Heriot-Watt and SIRE) "Exogamy and the Evolution of Cooperation"

SIRE presenters:

- Rodolphe Desbordes (Strathclyde) "Global and Diplomatic Political Risks and Foreign Direct Investment"
- Ioana Moldovan (Glasgow) "Optimal Monetary Policy in a New Keynesian Model with Habits in Consumption".

15 participants from Glasgow, Stirling, Strathclyde, Heriot-Watt, St Andrews and Dundee.

SIRE Econometrics Workshop

December 3rd 2008, St Andrews (organiser Rod McCrory): Recent Developments in Econometric Time Series Analysis

Two leading experts gave keynote talks, followed by questions and answers and lively discussion.

- Robert Taylor (Professor of Econometrics and Director of the Granger Centre of Time Series Econometrics at the University of Nottingham, Co-Editor of the journal "Econometric Theory"), in a paper entitled "Testing for Unit Roots in the Presence of Uncertainty over the Trend and Initial Condition", gave an overview of the thorny problems that continue to affect unit root econometrics, and offered his own resolution to them.
- Giuseppe Cavaliere (Professor of Econometrics, University of Bologna), in a talk entitled "Testing for Co-integration in Vector Autoregression with Non-Stationary Volatility", gave an overview of multivariate aspects of the analysis of non-stationarity, focusing on how this can be done under weaker and more realistic assumptions than have been offered in the literature to date. He also discussed the application of a statistical method, the bootstrap, in this context.

27 participants from St Andrews, Edinburgh, Glasgow, Aberdeen, Strathclyde, Stirling, Heriot-Watt and Dundee.

March 18th 2009, Strathclyde (organiser Gary Koop): Bayesian Econometrics

Three keynote speakers:

- Gael Martin (Monash) "Modelling and Predicting Volatility and its Risk Premium: a Bayesian Non-Gaussian State Space Approach"
- Mark Steel (Warwick) "On the Effect of Prior Assumptions in Bayesian Model Averaging with Applications to Growth Regression"
- Gianni Amisano (European Central Bank) "A Nonlinear DSGE Model for the Term Structure with Regime Shifts"

25 participants from St Andrews, Strathclyde, Glasgow, Heriot-Watt, and West of Scotland. While the prime focus was on econometrics, the empirical applications were drawn from macroeconomics, finance and growth, and it was healthy to see some applied economists from these fields as well as specialist econometricians at the workshop.

SIRE- SCEME workshops

April 25th 2009, Stirling "Culture and Economic Performance"

Keynote speaker: Roberto Scazzieri (Bologna) "House of Mirrors or Congruence by Reasoning? Perspectives of the *Theory of Moral Sentiments*"

21 participants, including 8 from SIRE, and international participants from Barcelona, Nijmegen, Hohenheim, Groningen, Athens, Hamburg, Bologna.

September 11th 2009, Stirling "Cultural Economics and the Economics of Culture"

The keynote presentation was given by Ruth Towse (Bournemouth) on 'Progress in Cultural Economics. The second talk, 'Creativity in the Age of the Internet', was given by Alan Freeman (Greater London Authority and University of Manitoba), with Brian Loasby (University of Stirling) as respondent. In the final session on 'Economics in Culture', Jens Hölscher (Brighton Business School) gave a presentation 'On the Arrival of Modern Economics in the Germanic Culture' with Mark Blaug (Amsterdam School of Economics) as respondent. A total of 11 participants took part in the day.

SIRE-Scottish Government Joint Policy Forum

May 28th 2009, Edinburgh, Fiscal Autonomy

The inaugural Joint Policy Forum focussed on the topic of increased fiscal autonomy for Scotland. The invited participants comprised approximately 10 SIRE academics (including Julia Darby, Peter McGregor and Kim Swales, Strathclyde; Simon Clark and Stuart Sayer, Edinburgh; Ronnie MacDonald, Glasgow; and David Ulph, St Andrews) and 10 economists from the Scottish Government. David Ulph who, along with Julia Darby, was a member of the Independent Expert Group appointed to advise the Calman Commission, presented a short overview of fiscal autonomy. This was complemented by an outline of key elements of Scottish Government thinking on fiscal independence and its links to the broader economic strategy by Dominic Munro of the Scottish Government. The presentations were followed by an open, insightful and animated discussion under Chatham House rules. The format of the event, which began with a buffet lunch and concluded in a local hostelry in the early evening, provided a very valuable opportunity for extended discussion and knowledge exchange. Feedback from academic and government economists was strongly positive, with enthusiasm on both sides for further similar events.

5.1.2 Forthcoming developments and events

SIRE Econometrics Workshop

December 11th 2009, Edinburgh (organiser Andy Snell) Panel Data methods. Keynote speakers: Hashem Pesaran (Cambridge) and Costas Meghir (UCL).

March 2nd 2010, *Strathclyde* (*organiser Gary Koop*) Keynote speakers: John Geweke (Sydney) Sylvia Fruhwirth-Schnatter (Johannes Kepler University)

SIRE-Scottish Government Joint Policy Forum

October 30th 2009, New St Andrew's House Health Economics Issues

January 25th 2010, Edinburgh, Climate Change post Copenhagen COP15

Further meetings for 2009-10 are planned.

SIRE Forum for Young Researchers

The University of Dundee is hosting the Forum in semester 1 2009-10, with the University of Edinburgh becoming host in semester 2. The plan is to continue with 2 events per semester, with the first 2009-10 event being:

November 4th 2009, Dundee

- Invited speaker: Professor Andrew Street (York)
- SIRE presenters: Sascha Becker (Stirling), Yin Zhang (Dundee)

SIRE Economic History Workshop

A new workshop series, organised by Bob Hart and Sascha Becker (Stirling) drawing together SIRE's geographically dispersed researchers actively engaged in high quality work on economic history. The inaugural event is taking place on December 4th 2009, with presentations by: Luis Angeles (Glasgow), David Greasley (Edinburgh), and Bob Hart (Stirling). The format of the all-day event, will give all participants an opportunity to outline their own research interests and plan the future development of the workshop.

5.2 Behaviour, Incentives and Contracts (BIC)

5.2.1 Major events during reporting period:

October 2nd- 4th Visit of Daniel Hungerman (Edinburgh and Heriot-Watt)

Daniel Hungerman (Notre Dame and NBER) is an intellectual leader of a new wave of researchers in the economics of religion, with influential publications (with Jonathan Gruber) in the *Quarterly Journal of Economics* and the *Journal of Public Economics*.

Professor Hungerman began his visit with a public seminar on "Understanding Religious Competition" in New College, Edinburgh. The event was jointly hosted by SIRE and the University of Edinburgh School of Divinity. It was an interesting and fruitful interdisciplinary engagement, with Professor Hungerman demonstrating an impressive ability to rise to the challenge provided by such a broad interdisciplinary audience. In his talk Professor Hungerman surveyed much of the work that claimed to explain competition in religion in terms of strategic interaction between congregations, arguing that such work needed more secure theoretical foundations. He then reviewed his own contributions, which focus on competition between religious and secular activities. Among other things, he analyzed the impact of reduced restrictions on Sunday trading on religious participation.

Professor Hungerman then gave the keynote address and participated in the 2nd Annual Workshop of the *European Network for the Economics of Religion* hosted at Heriot-Watt University and co-organised by Robbie Mochrie and John Sawkins of SIRE. The workshop attracted 25 participants from 10 countries. (For further information on the Workshop: http://www.ener-online.org/Edinburgh.htm)

November 7th 2008 Visit of Torsten Persson (Edinburgh)

Torsten Persson is the Director of the Institute for International Economic Studies in Stockholm and, at the time of his visit, was the President of the Econometric Society. He is a member of the Royal Swedish Academy of Sciences and serves on the Prize Committee for the 'Nobel' Prize in Economics.

Professor Persson presented a paper on *The Incidence of Civil War: Theory and Evidence* (joint with Tim Besley). His paper put forward a canonical model of civil war and used the model to derive testable predictions. The most novel empirical finding of the paper is that variation in world market prices of exported and imported commodities are strong and significant predictors of the within-country incidence of civil conflict.

April 23rd-24th 2009: COST Conference - "Firm-level Data Analysis in Transition and Developing Economies" (Edinburgh)

The COST network on comparative analysis of firm-level data brings together research using enterprise micro data from transition and developing economies. The purpose of the research is to examine the effects of major structural reforms on firm behaviour and performance. Topics of interest include: industry dynamics,

productivity, innovation and R&D, corporate governance, competition, employment and wages, adjustment costs, entrepreneurship, privatization, FDI, and business and policy environment.

The Conference, based in the University of Edinburgh, was co-organized by SIRE and the Upjohn Institute for Employment Research (Michigan), with David Brown (Heriot-Watt and SIRE) and John Earle (Upjohn Institute, formerly Heriot-Watt and SIRE) as the academic organizers. As well as sponsorship from SIRE, the conference was also funded by the COST Programme of the European Commission, with support from Canada's International Development Research Centre (IDRC), and coordination from the Central European University Labor Project.

The Conference brought together researchers analyzing firm-level data from a wide range of emerging market economies to share results and ideas and to stimulate comparative work in this area. Currently, researchers tend to be quite isolated, working on data from only a single economy. Much is to be gained, however, by comparative analysis of micro-data from countries with different policies and institutions. The Conference contributed to breaking down the barriers across countries, including between researchers who focus on transition and those who focus on development, to enrich the set of comparative possibilities. When combined with due attention to important contextual differences across (and within) countries, the comparative research agenda of the Workshop promises to enhance our knowledge of the relationship between economic behaviour and outcomes, on the one hand, and the policies, institutions, and aspects of economic systems that may drive them, on the other. (For further information see: http://web.ceu.hu/labor/cost/)

June 5th -7th 2009 Conference on Relativity, Inequality and Public Policy (Edinburgh)

This focussed international conference was co-organized by Ed Hopkins (Edinburgh and SIRE) and Ravi Kanbur (Cornell). In addition to SIRE sponsorship, it received substantial funding from Cornell University and the British Academy.

In economics, "relativity" is the idea that it is position relative to others that motivates behaviour and determines individual and therefore social wellbeing. This idea has a distinguished pedigree, going back in modern times to Duesenberry's relative income hypothesis, and even further back to Adam Smith's claim that "a creditable daylabourer would be ashamed to appear in public without a linen shirt". However, in the last two decades research has accelerated on relative concerns and their interactions with inequality, and their implications for public policy. Conventional welfare economics with interdependent preferences has progressed alongside new departures in theoretical and experimental behavioural economics, and in the economics of happiness. Progressivity in taxation can be seen in a new light if inequality interacts with relativity to produce socially inefficient outcomes. At the same time, the debate between paternalism and libertarianism is also sharpened if people have feelings of envy towards their fellow beings because of their relative positions in society.

Sessions were organised thematically, with the session topics being Happiness Studies, Theory, Experiments, Field Experiments, Inequality, Evidence from Emerging Economies and the Public Economics of Relative Concerns. Evidence was presented from empirical work in China, field experiments in the UK, a natural experiment in Spain, surveys in France and Latin America and laboratory experiments in Germany, Israel and the US. Theorists presented new work on how reference points are formed, how people may interact over networks, and how to

design labour contracts and income taxes when workers have relative concerns, amongst many other topics.

There were a range of speakers and attendees. Senior, established researchers such as Matthew Rabin (Berkeley), Andrew Oswald (Warwick) and Aldo Rustichini (Cambridge/Minnesota) presented alongside newcomers such as Leonardo Boncinelli (Siena) and Ro'I Zultan (The Hebrew University) and rising stars like Imran Rasul (UCL) and Lise Vesterlund (Pittsburgh). There were 20-30 further participants, many from within Scotland, but also others that had come from as far as the US to attend. Presentations were kept relatively short but there was plenty of time available for discussion, which was lively and very constructive. The feedback we received from participants about the conference was extremely positive, with one participant stating that this was the best organised conference he had ever attended. (For further information see: http://www.sire.ac.uk/funded-events/relativity/index.html).

5.2.2 Seminar highlights during the reporting period include:

2008

- 3 October, Dan Hungerman (Notre Dame and NBER, USA) "Understanding Religious Competition" Heriot-Watt
- 13 October, Maitreesh Ghatak (London School of Economics) "Marry for what? Caste and Mate Selection in Modern India" Edinburgh
- 13 October, John Duffy (University of Pittsburgh) "Competitive Behaviour in Market Games Evidence and Theory" Aberdeen
- 10 November, Antonio Cabrales (Universidad Carlos III de Madrid) "Implementation in Adaptive Better-Response Dynamics" Edinburgh
- 11 November, Giovanni Gallipoli (University of British Columbia) "Household Responses to Individual Shocks: Disability, Labour Supply and Marriage" Edinburgh
- 19 November, Ignacio Palacios-Huerta (London School of Economics) "Field Centipedes" Aberdeen
- 21 November, Fiona Scott Morton (Yale) "Differentiated to Death?" Edinburgh
- 1 December, Balazs Szentes (University of Chicago) "Definable and Contractible Contracts" Edinburgh

2009

- 19 January, Bruno Biais (Toulouse University) "Risk, limited liability and dynamic moral hazard" Edinburgh
- 16 February, Joseph P. Ferrie (Northwestern University) "Healthy, Wealthy, and Wise'? The Link Between Conditions in Childhood and Physical, Economic, and Cognitive Outcomes After Age 65 in the U.S., 1895-2005" Edinburgh

- 23 February, Per Krusell (Princeton University) "Asset Trading and Valuation with Uncertain Exposure" Edinburgh
- 16 March, Fuhito Kojima (Cowles Foundation, Yale University) "Asymptotic Equivalence of Random Priority and Probabilistic Serial Mechanisms" Edinburgh
- 26 March, Sir John Vickers (Oxford) "A Model of Delegated Project Choice" St Andrews
- 23 April, Jörgen Weibull (Stockholm) "Kinship, incentives and evolution" St Andrews
- 15 May, Luis Cabral (Stern School of Business, New York University) "Dynamic Price Competition with Network Effects" Edinburgh
- 20 May, Navin Kartik (Columbia University) "Implementation with Evidence: Complete Information" Edinburgh
- 21 May, Michael Whinston (Northwestern) "Dynamic Merger Review" St Andrews.
- 8 June, Berthold Herrendorf (Arizona State University) "Transportation and Development: Insights from the U.S. 1840-1860" Edinburgh
- 22 September, Enrico Moretti (Berkeley) "Real Wage Inequality"

5.2.3 Forthcoming seminar highlights include:

- 1 October, David Myatt (Oxford)
- 2 and 5 October, Claude d'Aspremont (Université Catholique de Louvain and CORE)
- 7 & 8 October, Hervé Moulin (Rice)
- 12 October, Florian Heider (ECB)
- 15 October, Martin Sefton (Nottingham)
- 19 October Maria Guadalupe (Columbia)
- 2 November Leonardo Felli (LSE)
- 6 November, Olivier Bos (Paris)
- 10 November Tom Hubbard (Northwestern)
- 19 November, Imran Rasul (UCL)
- 26 November, Martin Ellison (Oxford)
- 7 December Juanjo Dolado (Carlos III)
- 10 December Marc Fleurbaey (Paris)
- 11 January John Hassler (IIES Stockholm)
- 22 February John van Reenen (LSE)
- 19 March Larry Samuelson (Yale)
- 22 March Steffen Huck (UCL)

5.2.4 Recent major achievements and impact include:

Santiago Sánchez-Pagés (Edinburgh) has been awarded Abbey Research Funding for his joint work with biologist Dr Enrique Turiegano of Universidad Autonoma, Madrid on the effects of individual characteristics on economic behaviour.

Jakub Steiner (Edinburgh, now Northwestern) received the ESRC First Grants Scheme for his research on Prevention of Coordination Failures. First Grants enable high potential new researchers at the start of their careers to gain experience of managing and leading research projects.

David Ulph (St Andrews, with Yannis Katsoulacos, Athens) have been awarded an ESRC grant of £167K over 3 years to look at "Optimal Decision and Enforcement Structures for Competition Policy" and will be working closely with both the Office of Fair Trading (OFT) and the French Competition Authority.

Maia Güell (Edinburgh) has been elected Executive Committee Member of the European Association of Labour Economists for 3 years starting September 2008.

Stuart Sayer (Edinburgh), in collaboration with the Edinburgh University Business School and School of Geosciences, successfully bid to host a Chevening Fellows Programme on "Finance and Investment in a Low Carbon Economy". The programme, financed by the UK Foreign Office, brings 14 'high-fliers' from around the globe for an intensive 3 months of study based at the University of Edinburgh. The inaugural programme ran from January to April 2009, and included Fellows from China (2), India, Australia (2), Kazakhstan, Malaysia, Canada, USA (2), South Africa, Brazil, Turkey, and Indonesia. The majority of Fellows were senior policy makers or advisers, including the Vice President of the China Development Institute. The inaugural programme received strongly positive feedback and the award has been renewed for an anticipated further 4 years, drawing in funding of approx £1 million.

Kohei Kawamura (Edinburgh) had a series of 8 short articles in *Nikkei* (the Japanese equivalent of the FT with a daily circulation of 3 million) on the economics of information; a web article for the Research Institute of Economy, Trade and Industry (a funded think tank for METI) in Japan; and an article on economic principles in LifeTimes, the magazine for the employees of Scottish Widows.

The work of Ed Hopkins (Edinburgh) has been cited in publications by HM Treasury and (joint work with Tatiana Kornienko, Edinburgh) the Inter-American Development Bank.

John Moore's (Edinburgh) joint work with Nobuhiro Kiyotaki received plaudits from Paul Krugman in a prominent article in the New York Times on the current state of economics. Moore has also been interviewed by networked Chinese TV in Shanghai and given invited talks to: the Bank for International Settlements, Banque de France, Sveriges Riksbank, Banco Central de Uruguay, Deutsche Bank, Bank of England, Banco de Espana, the Central Bank of Iceland, and the Shanghai Advanced Institute of Finance.

John Moore (Edinburgh) gave the prestigious Leo Hurwicz Lecture at the Latin American and Caribbean Economic Association (LACEA) and Latin American Meeting of the Econometric Society (LAMES).

Simon Clark was interviewed by and quoted in the Washington Post 23 April 2009

Maia Güell is advising the Spanish government on unemployment.

5.2.5 Major Publications in reporting period include:

A permit allocation context for a tradable pollution permit market (2009) *Authors*: **Kornienko**, T. with Mackenzie, I., **Hanley**, **N**. *Energy Policy*

A Theory of Participatory Democracy based on the Real Case of Porto Alegre (2009) *Authors*: **Sánchez-Pagés**, **S**. with Aragones, E. *European Economic Review*

Status, affluence and inequality: Rank-based comparisons in games of status (2009) *Authors*: **Hopkins, E., Kornienko, T.**

Games and Economic Behaviour

A theory of agreements in the shadow of conflict: the genesis of barganing power (2008) *Authors*: **Sákovics**, **J**. with Esteban, J. *Theory and Decision*

Conflict as a part of the bargaining process (2008) *Authors*: **Sánchez-Pagés**, **S**. *Economic Journal*

Contracts as Reference Points (2008) *Authors*: **Moore**, **J. H.** with Hart, O *Quarterly Journal of Economics*

Edinburgh, City of Funds: Investment management in Scotland's capital city (2008) *Authors*: **Fransman, M.** Kokoro (ISBN 978-0955771002)

Enjoy the Silence: An Experiment on Truth-Telling (2008) *Authors*: **Sánchez-Pagés, S.** with Vorsatz, M. *Experimental Economics*

Inequality, happiness and relative concerns: What actually is their relationship? (2008) *Authors*: **Hopkins, E.** *Journal of Economic Inequality*

Job Reallocation, Unemployment and Hours in a New Keynesian Model (2008) *Authors*: **Holt, R.** *B.E. Journal of Macroeconomics*

Learning in games with Unstable Equilibria (2008) *Authors*: **Hopkins, E.** with Benaim, M., Hofbauer, J. *Journal of Economic Theory*

Money and Inflation in a Nonlinear model (2008) *Authors*: **George, D.** with Oxley, L.T. *Mathematics and Computers in Simulation*

Queues, not just mediocrity: Inefficiency in decentralized markets with vertical differentiation

(2008) Authors: **Sákovics**, **J.** with Ponsati, C. International Journal of Industrial Organization

The optimal initial allocation of pollution permits: A relative performance approach (2008) *Authors*: **Kornienko**, **T.** with Mackenzie, I., **Hanley**, **N.** *Environmental and Resource Economics*

Unemployment Insurance Design: inducing moving and retraining (2008) *Authors*: **Rodríguez Mora,** J. with Hassler, J. *European Economic Review*

5.3 Work and Well-being

5.3.1 Major events during reporting period:

SIRE Environmental and Energy Economics Workshop

The SIRE Environmental and Energy Economics (EEE) Workshop is a regular meeting of the community of environmental and energy economists in Scotland to share knowledge, present research and discuss relevant issues. It is led by a Steering Committee of Ian Lange (Stirling), Peter McGregor (Strathclyde), and Mark Schaffer (Heriot-Watt). The main activity the steering committee undertakes is to put on three workshops per annum. Each workshop features between three and six papers presented by academic economists, graduate students, and economists working in the private and government sectors while most speakers are based in Scotland, we also plan to invite prominent external contributors.

March 11th 2009 (Stirling)

The format of this, the inaugural workshop, gave an opportunity for the SIRE universities to outline the relevant skills and areas of interest of their staff, with presentations from Aberdeen, Dundee, Edinburgh, Stirling and Strathclyde. In addition, there were two presentations of research papers:

- Joe Swierzbinski (Aberdeen) "Long Term Option Contracts for Carbon Emissions."
- Shawn Mu (Dundee) "Fuel Tax and Gasoline Consumptions: A Panel Data Analysis of Major EU Countries."

Attendance approx. 40

May 22nd 2009 (Strathclyde)

Presentations were given by:

- Ariel Bergmann (Edinburgh Napier), "The Optimal Use of Policy Instruments for Tradable Green Certificates."
- Ian Lange (Stirling), "Economics in Environmental Policy Making: Stories from the U.S. Environmental Protection Agency."
- Stephanie Gorman (Jacobs Ltd), "A Valuation of England's Terrestrial Ecosystem Services"
- Karen Turner (University of Strathclyde) "Do Productivity Improvements Move us Along the Environmental Kuznets Curve?"
- Laura Malaguzzi Valeri (ESRI Ireland) "Investment in Electricity Infrastructure in a Small Isolated Market: The Case of Ireland."

Attendance approx. 25

A noticeable feature of attendance at both events was the active participation of PhD students and economists from the public and private sectors.

Health Econometrics Workshop (Dundee) March 26-27, 2009

This workshop, primarily targeted at PhD students, was supported by the ESRC as part of the SGPE PhD Training Sequence. There were 16 participants from Dundee, Aberdeen, Glasgow, Heriot-Watt, St Andrews and Stirling.

Keynote presenter: Professor Matt Sutton (Manchester) SIRE presenters:

- Martin Chalkley (Dundee)
- Paul Allanson (Dundee)
- Tom Love (Dundee)
- Dennis Petrie (Dundee)
- Colin Tilley (NHS Education for Scotland)

Overview: Health economics which embraces both the analysis of the determinants of health and, increasingly, a focus on the organisation and performance of health care systems offers excellent opportunities for the application of econometric methods. Health care systems, particularly publicly funded systems such as those in the UK, generate large volumes of routine data whilst many panel data sets contain health-related data. The economics of health and health care has been a fast growing area of empirical research and offers many opportunities for PhD students.

This workshop will focus on three related aspects of empirical health economics:

- o Identifying research questions amenable to empirical investigation:
 - Topics covered will include: questions concerning resource allocation, medical decision making and incentives, health and income inequality
 - Topics will be illustrated with examples of research undertaken by the workshop contributors
- O Understanding health data sources and how to use them to address economic issues
 - Topics will include: Assessing the validity and reliability of administrative data, issues of confidentiality and anonymity with health data dealing with ethical approval, use of survey data the BHPS in health econometrics
 - These will be illustrated by reference to actual data sets.
- Econometric and statistical methods relevant for analysing health and health-care data:
 - Topics will include: Data manipulation and sampling of very large scale and complex data sets, multi-level models and 'patient-doctor' matched data, numerical methods for bootstrapping standard errors.
 - There will be practical demonstrations of these methods

Economic Analysis of the Family Workshop (Strathclyde) February 5-6, 2009

This workshop, primarily targeted at PhD students, was supported by the ESRC as part of the SGPE PhD Training Sequence.

Keynote presenter: John Ermisch (ISER, Essex)

SIRE Presenters:

- Helmut Rainer (St Andrews)
- Ian Smith (St Andrews)
- David Bell (Stirling)
- Sascha Becker (Stirling)

Overview: Family economics is the application of the analytical methods of microeconomics to family behaviour. It aims to improve our understanding of resource allocation and the distribution of welfare within the family, investment in

children and intergenerational transfers, family formation and dissolution and how families and markets interact. It lifts the lid on the "black box" of the family, within which non-market interactions are crucial for family behaviour and individual welfare. It analyses how markets affect family behaviour and on how family context affects market behaviour, such as labour supply and consumer demand, thereby linking family economics with traditional fields of economics. The course focuses on four main topics:

- (1) intra-household allocation: conflict and cooperation in the family;
- (2) economic theories of fertility;
- (3) transfers between generations;
- (4) divorce and transfers between parents.

The analysis is relevant to family behaviour in rich and poor countries. It provides insights into why important aspects of families have been changing in recent decades and how public policy affects them. Medical and social sciences indicate the importance of nutritional, cognitive and emotional development during childhood for a person's lifetime health and prosperity, and these developments are a product of parents' actions, including family break-up. Acquiring a better understanding of family formation and dissolution and about decisions within the family, particularly as these are affected by elements of people's budget constraints, is an important prerequisite for understanding how public policy can influence these.

Health at Work Meetings

The Health at Work project aims to review current knowledge and issues related to the economic impact of health at work to assemble, organise, analyse and synthesise data from national projects and surveys, and to recommend future actions for research and policy development aiming at improving health and safety at work in a changing labour market environment in the European Union in an era of ageing populations, feminised labour markets and increased incidence of Small and Medium Enterprises. The project is coordinated by Professor Ioannis Theodossiou (Aberdeen and SIRE) and encompasses 19 research institutions from across Europe. The project is supported by the European Commission through the 7th framework programme, with euro 1.05 million. (For further information see: http://aberdeen.ac.uk/haw/index.html)

October 18 2008 Project planning meeting (Aberdeen) 25 participants, 6 from SIRE

June 19-20 2009, Project meeting (Warsaw) 22 participants, 5 from SIRE

Entrepreneurship workshop (Aberdeen) September 25-26, 2009

This workshop, primarily targeted at PhD students was organized by Hans Hvide (Aberdeen). It attracted over 20 PhD students from around Scotland.

Keynote presenter: Scott Shane (Case Western)

The focus of the workshop was on theory building and empirical testing of the factors shaping the identification, evaluation, and exploitation of opportunities and the creation of new organizations. The objective was to provide participants with an introduction to the major theoretical threads and controversies in the field. It also examined the methodologies that are important to research in this area. Participants learnt about various perspectives, examined different methodologies, explored some

original empirical research, and made connections between theory and empirical research.

5.3.2 Seminar highlights include:

2008

- 8 October, Peter Dolton (Royal Holloway) "The Effect of the Minimum Wage 10 Years On: Can we get Identification from Geography?" Aberdeen
- 20 October, Michael Elsby (Michigan) "Stepping Off the Wage Escalator: A Theory of the Equilibrium Employment Rate." Edinburgh
- 22 October, Chuck Mason (Wyoming) "Co-optimization of Enhanced Oil Recovery and Carbon Sequestration." Aberdeen
- 23 October, Chuck Mason (Wyoming) "On the Economics of Eco-Labeling and Trade" Stirling
- 11 November, Dirk Rübbelke (CICERO) "Ancillary Benefits of Climate Policy" Stirling
- 11 November, Giovanni Gallipoli (University of British Columbia) "Household Responses to Individual Shocks: Disability, Labour Supply and Marriage" Edinburgh
- 17 November, Alejandro Cunat (Essex), "Volatility, Labor Market Flexibility, and the Pattern of Comparative Advantage" Edinburgh
- 20 November, Mary Rigdon (Michigan) "Trust and Reciprocity in Networks" Edinburgh

2009

- 2 February, Javier Ortega (City and CEP) "Work-Sharing, Firm Heterogeneity, and Efficiency" Edinburgh
- 2 February, Barbara Petrongolo (LSE), "The long-term effects of job search requirements: Evidence from the UK JSA Reform" Edinburgh
- 9 February, Monica Merz (Bonn and IZA) "Changes in married women's labor supply in Germany: 1985-2005" Edinburgh
- 11 February, Eugenia Sanin (CORE) "Trading emission permits under upstream-downstream strategic interaction" Aberdeen
- 16 February, Joseph Ferrie (Northwestern) "'Healthy, Wealthy, and Wise'? The Link Between Conditions in Childhood and Physical, Economic, and Cognitive Outcomes After Age 65 in the U.S., 1895-2005" Edinburgh

- 25 February, Danny Blanchflower (Dartmouth and Stirling) "What should we do about rising unemployment?" Stirling
- 11 March Helene Latzer (Universite Catholique de Louvain) "How do epidemics induce behavioral changes?" Strathclyde
- 17 March Agustin Perez-Barahona (Paris) "Non-renewable energy resources as input for physical capital accumulation a new approach." Aberdeen
- 31 March Lea Kosnik (University of Missouri-St Louis) "The potential of water power in the fight against global warming." Stirling
- 25 May Alwyn Young (LSE) "Real Consumption Measures for the Poorer Regions of the World" Edinburgh
- 1 July David Bloom (Harvard) "Global Population Ageing and Its Economic Consequences time: 1715-1830" Edinburgh Napier

5.3.3 Recent major achievements and impact include:

David Bell and Danny Blanchflower, gave a presentation to members of the House of Commons and House of Lords on prospects for unemployment.

David Bell gave keynote address at Work, Pensions and Labour Economics Study Group (WPEG) in July 2009.

David Bell was reappointed as Budget Adviser to Finance Committee of Scottish Parliament and made numerous media appearances.

Danny Blanchflower gave a presentation on youth unemployment to OECD employment ministers, Sep 29th, Paris.

Danny Blanchflower completed term with Monetary Policy Committee in June 2009 and made numerous media appearances, including regular columns in New Statesman, Guardian and Daily Telegraph.

David Ulph was invited twice to give evidence to Holtham Commission that is investigating tax and spending powers for Wales.

Helmut Rainer has given an invited presentation to HM Treasury on his work evaluating the effects of tax credits on divorced couple.

Monojit Chatterji is a serving member of the School Teachers' Pay Review Body.

John Beath was, until recently, a member of the Doctors and Dentists Review Body.

Martin Chalkley has advised Minister of Justice and is engaged with process of redesigning remuneration mechanisms for very high cost cases in the criminal justice system.

Martin Chalkley and Bob Elliott are engaged by Department of Health (England) to evaluate Policy units with expected funding of £15m.

Martin Chalkley and Colin Tilley advised the review of Statement of Dental remuneration.

Martin Chalkley was invited to advise in relation to dental research programme of NHS Education for Scotland.

Martin Chalkley was invited to give a presentation to NHS Tayside Senior Management Team regarding use of administrative data.

Tom Love was engaged by Public Health authorities in New Zealand regarding preparations for Pandemic Flu

Hans Hvide has been awarded an ESRC grant £80K on entrepreneurial performance.

Peter Davey and Martin Chalkley were awarded a grant of £50k from Chief Scientist Office, Scottish Government for examining MRSA infections in Scottish NHS.

Dennis Petrie, Paul Allanson and Ulf Gerdtham have been awarded a grant of £60k by the Chief Scientist Office, Scottish Government to examine Income related health inequality.

Shelley Farrar, Martin Chalkley and others have a grant of £250k from the Department of Health (England) for an Evaluation of Payment by results.

David Bell was awarded an ESRC Grant as part of the Centre for Population Change based at the University of Southampton. The value of the grant, shared with the Department of Applied Social Science, is £229k.

David Bell was awarded £7k by Joseph Rowntree Foundation to research Social Care and Devolution.

Bob Hart was awarded a new ESRC Grant: "Real Wages and the Great Depression" (£51k)

Sascha Becker was awarded an ESRC/SG studentship to attract a PhD student in the years 2010-2013.

Sascha Becker has won a grant worth 56k EUR together with colleagues at the University of Padova, Italy to study "The Long-Run Effect of Imbalanced Sex Ratios"

Nick Hanley is a member of an EU Framework 7 project on "Hunting for sustainability". This project with partners in the UK and Europe is worth 3.4 million EUR in total.

Nick Hanley has award of £27k for work on economic and environmental impacts of livestock farming in the uplands. He also has an ESRC follow-on fund: £30k for further work on relationships between upland farming, policy change, and biodiversity.

5.3.4 Major Publications in reporting period include:

Barmby, T. and Larguem, M (2009) Coughs and Sneezes Spread Diseases: An Empirical Study of Absenteeism and Infectious Illness" *Journal of Health Economics*, 28, pp 1012-17

Bell, D.N.F., Heitmueller, A. (2009) The Disability Discrimination Act in the UK: Helping or Hindering Employment Amongst the Disabled?, *Journal of Health Economics*, 2009, 28, 465-480

Bell, D.N.F. and **Blanchflower, D.** (2009), What Should Be Done about Rising Unemployment in the UK? *IZA DP* No. 4040 February

Bell, D.N.F. and **Blanchflower, D.** (2009), What Should Be Done about Rising Unemployment in the OECD? *IZA DP* No. 4455 September

Hvide, H 2009 The quality of entrepreneurs. Economic Journal, 119, 1010-35

Elliott, R.F., Sutton, M., **Ma, A.**, McConnachie, A., Morris, S., Rice, N. and **Skåtun, D.** (2009) The role of the staff MFF in distributing NHS funding: taking account of differences in local labour market conditions. *Health Economics*.

Clarke, P., Fiebig, D.G., and **Gerdtham, U-G.** Optimal recall length in survey design. *Journal of Health Economics*. 2008; 27(5): 1275-1284.

Gerdtham, U-G., Ericsson, A., Andersson, L.F., Borg, S., Jansson, S-A., Ronmark, E. and Lundback, B. Factors affecting COPD-Related Costs: A multivariate analysis of a Swedish cohort. *European Journal of Health Economics*. 2008; 9(4): 351-360.

Jarl, J., Johansson, P., Eriksson, A., Eriksson, M., **Gerdtham, U-G.,** Hemström, Ö., Hradilova Selin, K., Lenke, L., Ramstedt, M. and Room, R. The Societal Costs of Alcohol Consumption: An estimation of the economic and human cost including health effects in Sweden, 2002. *European Journal of Health Economics*. 2008; 9(4): 351-360.

Chalkley, M. & McVicar, D., 2008. Choice of contracts in the British National Health Service: An empirical study. *Journal of Health Economics*, 27(5), 1155-1167.

Farrar, S. Chalkley, M et al., 2009. Has payment by results affected the way that English hospitals provide care? Difference-in-differences analysis. *British Medical Journal*, 339(aug27_2), b3047.

Rainer, H "Gender Discrimination and Efficiency in Marriage: the Bargaining Family under Scrutiny." *Journal of Population Economics*, April 2008, 21(2): 305-329

Rainer, **H** and Siedler "Subjective Income and Employment Expectations and Preferences for Redistribution" *Economics Letters*, June 2008, 99(3): 449-453.

Francesconi, **Rainer**, **H** and van der Klaauw "The Effects of In-Work Benefit Reform in Britain on Married Couples: Theory and Evidence" *Economic Journal*, February 2009, 119(535): F66-F100.

Rainer, **H** and Siedler "O Brother, Where Art Thou? The Effects of Having a Sibling on Geographic Mobility and Labor Market Outcomes" *Economica*, July 2009, 76(303): 528-556.

Rainer, **H** and Siedler "Social Networks in Determining Migration and Labor Market Outcomes: Evidence from the German Reunification" *Economics of Transition*, October 2009, 17(4): 739-767.

Rainer, H and **I Smith** "Staying Together for the Sake of the Home? House Price Shocks and Partnership Dissolution in the UK" *Journal of Royal Statistical Society: Series A*, forthcoming.

Kam Ki Tang & **Dennis Petrie** & D. S. Prasada Rao, 2009. "Measuring health inequality with realization of potential life years (RePLY)" *Health Economics*, vol. 18(S1), pages S55-S75.

Martins and **Jin, J.,** 2009 "Firm-level Social Return to Education" *Journal of Population Economics*

5.4 Macroeconomics, Financial Linkages and the Regions

5.4.1 Major events during reporting period:

October 22nd 2008 Credit Crunch or Crisis? - John Kay - Glasgow

A public seminar presented by John Kay, member of the Council of Economic Advisers to the Scottish Government, co-organised with CPPR. Approx 120 attended, including around 35 from the Scottish Government, as well as attendees from the business world and the press. John Kay gave a characteristically wide-ranging, insightful and thought-provoking talk, followed by an extensive and lively question and answer session.

February 11th 2009 visit by Elhanan Helpman - Glasgow

Professor Helpman is the Galen L. Stone Professor of International Trade in the Department of Economics at Harvard University. He has made important contributions to a number of different areas in economics and is best known for his work in international trade, particularly the so-called New Trade Theory in which he played a key role along with Paul Krugman, last year's Nobel laureate.

Professor Helpman presented a paper on "Inequality and Unemployment in a Global Economy" to a sizable gathering of staff and students.

May 26th 2009 visit by Alberto Alesina - Glasgow

Alberto Alesina is the Nathaniel Ropes Professor of Political Economy at Harvard University. He has been Co-editor of the *Quarterly Journal of Economics* for 8 years. His work has covered a variety of topics: political business cycles, the political economy of fiscal policy and budget deficits, the process of European integration, stabilization policies in high inflation countries, the determination of the size of countries, currency unions, the political economic determinants of redistributive policies, differences in the welfare state in the US and Europe and, more generally, differences in the economic system in the US and Europe, the effect of alternative electoral systems on economic policies, and the determination of the choice of different electoral systems.

Professor Alesina presented a paper on "Gender Based Taxation and the Division of Family Chores".

September 2nd-4th 2009 CDMA Conference - St Andrews

This was the sixth annual conference organized by the Centre for Dynamic Macroeconomic Analysis at St Andrews with the support of SIRE. It brought together 20 prominent macroeconomists from the UK or further afield, with a strong attendance of local macroeconomists. The presenters included: George Evans (Oregon and St Andrews), Roger Guesnerie (College de France), Neil Rankin (York), Patrick Minford (Cardiff), Parantap Basu (Durham), Nicola Dimitri (Siena), Peter Sinclair (Birmingham) and Tony Yates (Bank of England).

5.4.2 Seminar highlights include:

2008

- 16 October, Elisa Faraglia (LBS) "In search of a theory of debt management" St Andrews
- 6 November, Michael Arghyrou (Cardiff) 'A New Solution to an Old Puzzle: Risk Aversion, Exchange Rate Uncertainty and the Law of One Price' Glasgow
- 17 November, Alejandro Cunat (Essex) "Volatility, Labor Market Flexibility, and the Pattern of Comparative Advantage" Edinburgh
- 20 November, Charles Goodhart (LSE) "The Continuing Muddles of Monetary Theory: A Steadfast Refusal to Face Facts" (Royal Society of Edinburgh Finance and Investment seminar programme event)
- 18 December Wouter Den Haan (Amsterdam) "Anticipated Growth with Business Cycles in Matching Models" Glasgow

2009

- 14 January, Maria Abreu (Cambridge) "Hither or Thither? Migration Patterns among UK Graduates and the Implications for Regional Economic Disparities" Strathclyde
- 29 January, Lars Ljungqvist (Stockholm) "A Life Cycle Model of Trans-Atlantic Employment Experiences" Glasgow
- 5 February, Ulrich Woitek (Zurich and Glasgow) 'Technology Shocks and Aggregate Fluctuations in an Estimated Hybrid RBC Model' Glasgow
- 16 February, Mark Roberts (Penn State) "R & D investment, exporting, and productivity dynamics" Heriot-Watt
- 19 February, Massimo Guidolin (Manchester) 'Regime Shifts in Empirical Pricing Kernels: A Mixture CAPM' Glasgow
- 25 February, Skerdilajda Zanaj (Luxembourg) "On tax competition, public goods differentiation and jurisdictions' size" Strathclyde
- 4 March, Debasis Sengupta (Indian Statistical Institute) "Consistent estimation of spectral density through uniform sampling" St Andrews
- 5 March, Oliver Linton (LSE) "Efficient Estimation of a Multivariate Multiplicative Volatility Model" St Andrews
- 12 March, Max Gillman (Cardiff) "Tax Evasion and Growth: A Banking Approach" St Andrews
- 13 March, Omar Licandro (EUI and CEPR) 'The Child is Father of the Man: Implications for the Demographic Transition' Glasgow
- 19 March, Karl Walentin (Swedish Central Bank) "Introducing Financial Frictions and Unemployment into a Small Open Economy Model" St Andrews

22 April, Dane Rowlands (Carleton) "The Analysis of Catalysis: The IMF and Private Capital Flows" – Strathclyde

7 May Florin Bilbiie (Paris) Fiscal Policy, Endogenous Entry and Product Variety' – Glasgow

14 May, Richard Baillie (QMC): 'Some approaches for modeling economic and financial time series with long memory and nonlinearity' – Glasgow

15 May, Michael Artis (Manchester) "The UK Intranational trade cycle" – Heriot-Watt

5.4.3 Recent major achievements and impacts include:

Celine Azémar (Glasgow) was invited to present at the European Tax Policy Forum workshop, and a joint conference of the European Tax Policy Forum and Institute for Fiscal Studies on the incidence of labour taxes.

Jeanette Finlay (Glasgow) co-produced (with colleagues from Strathclyde and Glasgow) the latest report for the Scottish Government on student income, expenditure and debt.

Campbell Leith's (Glasgow) joint work on a proposal to replace the UK government's current fiscal rules with an independent fiscal authority, commissioned by the European Commission and published in *European Economy*, no. 275) has been cited by the UK's Conservative party and largely adopted as party policy.

Campbell Leith's (Glasgow) joint work on monetary and fiscal policy interactions has been presented at a conference organised by the Bank of England.

Ronald MacDonald (Glasgow) has on-going consultancy work for the IMF, and is an advisor to two gulf state countries on their exchange rate regimes.

Ronald MacDonald (Glasgow) is a member of the Scottish Government's National Economic Forum.

Gabriel Talmain (Glasgow) has been interviewed on radio and by the press on the financial crisis.

Grant Allan (Strathclyde) gave an invited presentation to Scottish Government Economists and Statisticians on multi-sectoral modelling.

Brian Ashcroft (Strathclyde) was a panel member of the 5 member panel conducting an Independent Review if Economic Policy for the Northern Ireland Department of Enterprise, Trade and Investment.

Anton Muscatelli (Heriot-Watt now Glasgow) chaired, and Julia Darby (Strathclyde), David Bell (Stirling), Alex Kemp (Aberdeen) and David Ulph (St Andrews) were members of the Expert Group convened to support the work of the Calman Commission.

Bernard Fingleton (Strathclyde) is scientific advisor to the World Bank on the economic impact of infrastructure development in China, and scientific advisor to the European Commission on the analysis of the main factors of regional growth.

Kim Swales (Strathclyde) has been an expert witness to the House of Lords Select Committee on the Barnett Formula and has presented to the Scottish Funding Council on "The overall impact of Scottish HEIs on the Economy of Scotland".

Kim Swales (Strathclyde) is a member of the technical subcommittee to Tripartite Agreement Group (SFC, Scottish Government and Universities Scotland).

Robert Wright (Strathclyde) is a senior external demographic expert at the Office of National Statistics, London.

Anton Muscatelli (Heriot-Watt, now Glasgow), David Bell (Stirling), David Ulph (St Andrews), Richard Harris (Glasgow), Tim Barmby, Euan Phimister, Robert Elliott (Aberdeen), Peter McGregor and Iain McNicoll (Strathclyde) co-authored a report for Universities Scotland "What Was/What Next: What the Evidence Tells Us About the Next Steps for Scotland's Economic Strategy", Universities Scotland, 2009.

5.4.4 Major Publications in reporting period include:

Angelopoulos, K. and Economides, G. (2008). 'Fiscal policy, rent seeking and growth under electoral uncertainty: theory and evidence from the OECD', *Canadian Journal of Economics*, vol. 41(4), (November), pp. 1375-1405.

Angelopoulos, K., Philippopoulos, A. and Tsionas, M. (2008). 'Does public sector efficiency matter? Revisiting the relation between fiscal size and economic growth in a world sample', *Public Choice*, vol. 137(1-2), (October),

Babalos, V., Caporale, G.M., **Kostakis, A**. and Philippas, N. (2008). 'Testing for persistence in mutual fund performance and the ex post verification problem: Evidence from the Greek market', *European Journal of Finance*, vol. 14(8), (December), pp. 735-753.

Byrne, J.P., Darby, J. and MacDonald, R. (2008). 'US trade and exchange rate volatility: a real sectoral bilateral analysis', *Journal of Macroeconomics*, vol. 30(1), pp. 238-259.

Caporale, G.M. and **Cerrato, M**. (2008). 'Black market and official exchange rates: long-run equilibrium and short-run dynamics', *Review of International Economics*, vol. 16(3), pp. 401-412.

Harris, R. and Li, Q.C. (2008). 'Evaluating the contribution of exporting to UK productivity growth', *The World Economy*, vol. 31(2), (February), pp. 212-235.

Leith, C. and von Thadden, L. (2008). 'Monetary and fiscal policy interactions in a New Keynesian model with capital accumulation and non-Ricardian consumers', *Journal of Economic Theory*, vol. 140(1), (May), pp. 279-313.

Leith, C. and Wren-Lewis, S. (2008). 'Interactions between monetary and fiscal policy under flexible exchange rates', *Journal of Economic Dynamics and Control*, vol. 32(9), (September), pp. 2854-2882.

Malley, J. and Molana, H. (2008). 'Output, unemployment and Okun's law: some evidence from the G7', *Economics Letters*, vol. 101(2), (November), pp. 113-115.

Angeles, L. and Neanidis, K. (2009). 'Aid effectiveness: the role of the local elite', *Journal of Development Economics*, vol. 90(1), (September), pp. 120-134.

Angelopoulos, K., Philippopoulos, A. and Vassilatos, V. (2009). 'The social cost of rent seeking in Europe', *European Journal of Political Economy*, vol. 25(3), pp. 280-299.

Arghyrou, M., Gregoriou, A. and **Kontonikas**, **A.** (2009). 'Do real interest rates converge? Evidence from the European Union', *Journal of International Financial Markets, Institutions and Money*, vol. 19(3), (July), pp. 447-460.

Azémar C. and Corcos, G. (2009). 'Heterogeneity of foreign firms and asymmetry in tax responsiveness: the role of transfer pricing', *The World Economy*, vol. 32(9), (September), pp. 1291-1318.

Boucekkine, R., **Desbordes, R.** and Latzer, H. (2009). 'How do epidemics induce behavioural changes?', *Journal of Economic Growth*, vol. 14(3), (September), pp. 233-264.

Byrne, J.P., Fazio, G. and Fiess N. (2009). 'The global side of the investment-saving puzzle', *Journal of Money, Credit, and Banking*, vol. 41(5), (August), pp. 1033-1040.

Byrne, J.P., Fazio, G. and Piacentino, D. (2009). 'Total factor productivity convergence amongst Italian regions: some evidence from panel unit root tests', *Regional Studies*, vol. 43(1), (February), pp. 63-76.

Damjanovic, T and Ulph, D. (2009) 'Tax Progressivity, Income Distribution and Tax Non-Compliance' *European Economic Review*

Damjanovic, T. and Nolan C. (2009) 'Seigniorage-maximizing inflation under sticky prices', *Journal of Money, Credit and Banking*

Damjanovic, T. and Nolan C. (2009) 'Relative Price Distortions and Inflation Persistence', *Economic Journal*

Damjanovic, T., Damjanovic, V. and Nolan C. (2008) "Unconditionally Optimal Monetary Policy" *Journal of Monetary Economics*, 55, 491-500.

Darby, J and Melitz, J. (2008) "Social expenditure and automatic stabilizers in the OECD", *Economic Policy*, pp 715-756

Darby, J. and Hart, R. (2008) "Wages, productivity and work intensity in the Great Depression" *Southern Economic Journal*, Vol 75 pp 91-103

Fingleton, B. (2009) "Prediction using panel data regression with spatial random effects" *International Regional Science Review* vol. 32 pp. 173-194

- **Fingleton, B. and Le Gallo, J.** (2008) Estimating spatial models with endogenous variables, a spatial lag and spatially dependent disturbances: Finite sample properties. *International Regional Science Review* vol. 32 pp. 173-194
- Gregoriou, A. and **Kontonikas, A.** (2009). 'Modeling the behaviour of inflation deviations from the target', *Economic Modelling*, vol. 26(1), (January), pp. 90-95.
- **Hanley, N.**, Tinch, D., **Angelopoulos, K.**, Davies, A., Barbier, E. and Watson, F. (2009). 'What drives long-run biodiversity change? New insights from combining economics, paleoecology and environmental history', *Journal of Environmental Economics and Management*, vol. 57(1), (January), pp. 5-20.
- **Harris, R.** and Li, Q.C. (2009). 'Exporting, R&D and absorptive capacity in UK establishments', *Oxford Economic Papers*, vol. 61(1), (January), pp. 74-103.
- **Harris, R.**, Li, Q.C. and Trainor, M. (2009). 'Is a higher rate of R&D tax credit a panacea for low levels of R&D in disadvantaged regions?', *Research Policy*, vol. 38(1), (February), pp. 192-205.
- Kirsanova, T., **Leith, C.** and Wren-Lewis, S. (2009) 'Monetary and fiscal policy interaction: The current consensus assignment in the light of recent developments', *Economic Journal*, vol. 119(541), (November), pp. F482-F496.
- **Koop, G.**, **Jochmann, M.** and Strachan, R. (2009) Bayesian Forecasting using Stochastic Search Variable Selection in a VAR Subject to Breaks *International Journal of Forecasting* 2009
- **Koop, G., Leon-Gonzalez, R and Strachan, R** (2009) On the Evolution of the Monetary Policy Transmission Mechanism *Journal of Economic Dynamics and* Control vol. 33 pp. 997-1017 2009
- **Koop, G., Leon-Gonzalez, R and Strachan, R** (2008) Bayesian Inference in a Cointegrating Panel Data Model *Advances in Econometrics* vol. 23 pp. 643 2008
- **Koop, G.** (2008) Parametric and Nonparametric Inference in Equilibrium Job Search Models *Advances in Econometrics* vol. 23 pp. 643 2008
- **Koop, G., Potter, S. and Strachan, R.** (2008) Re-examining the Consumption-Wealth Relationship: The Role of Model Uncertainty *Journal of Money, Credit and Banking* vol. 40 pp. 341-367 2008
- **Koop, G., Garratt, T. and Vahey, S.** (2008) Forecasting Substantial Data Revisions in the Presence of Model Uncertainty *Economic Journal* vol. 118 pp. 1128-1144 January 2008
- **Malley, J.**, Philippopoulos, A. and Woitek, U. (2009). 'To react or not? Fiscal policy, volatility and welfare in the EU-3', *European Economic Review*, vol. 53, pp. 689-714.
- **McCrory, R.** (2009) "Estimating continuous time models on the basis of discrete data via an exact discrete analog," *Econometric Theory* 25

McCrory, R. (2008) "The role of Skorokhod space in the development of the econometric analysis of time series," *Theory of Stochastic Processes* 14, 82-94.

Melitz, J. (2008) "Language and Foreign Trade", *European Economic Review* 52 667-699 (awarded an Emerald Management Review Citation of Excellence as one of the 50 best papers in Business in 2008)

Mitra, K. (2009) "Anticipated Fiscal Policy and Adaptive Learning" (with George Evans and Seppo Honkapohja), *Journal of Monetary Economics*.

Nolan, C. and Thoenissen, C. (2009) "Financial shocks and the US business cycle" *Journal of Monetary Economics*

Senay, O. (2008) "Disinflation and Exchange Rate Pass-Through" *Macroeconomic Dynamics*, Vol. 12, 2, pp. 234-256.

Senay, O. (2008) "Interest Rate Rules and Welfare in Open Economies" *Scottish Journal of Political Economy*, Vol. 55, pp. 300-329.

Thoenissen, C. (2009) 'Exchange rate dynamics, asset market structure and the role of the trade elasticity', *Macroeconomic Dynamics*

Thoenissen, C. and Benigno, G. (2008) "Consumption and real exchange rates with incomplete financial markets and non-traded goods", *Journal of International Money and Finance*, vol. 27, pp 926 - 948.

Trew, A. (2008) 'Efficiency, Depth and Growth: Quantitative Implications of Finance and Growth Theory', *Journal of Macroeconomics*, 30(4), pp. 1550-68.