



Scottish Institute For Research in Economics
Annual Report
For the period 1 Oct 2012 to 31 Dec 2013



Contents

Executive Summary

1.	Introduction	p. 1
2.	Collaboration and Engagement Activities	p. 2
3.	SIRE Appointments	p. 7
4.	Other ‘Outputs’ and Performance Indicators	p. 10
5.	Sustainability	p. 15
6.	Pools’ Engagement in European Research (PEER)	p. 16
7.	Restored Funds	p. 16
8.	Events – public lectures, workshops and conferences	p.17
9.	Selected Publications	p. 24

Executive Summary

- E1 The quality, range and scale of SIRE's activities and outputs, together with the quality of new appointments made (both SFC co-funded SIRE appointments and additional appointments by SIRE institutions) clearly indicate the substantial progress that has been made towards achieving the objectives set out in SIRE's mission statement and milestones. Nevertheless, there remain some challenges to be addressed for SIRE to fully capitalise on the progress made to date.
- E2 One of the key roles of the SIRE Executive is to facilitate and foster a wide-range of research-focused events and activities, which provide a major mechanism for within-SIRE and external networking, engagement and collaboration. Brief reports on the extensive range of high quality events taking place over the reporting period are provided in section 8. Such events were rare or non-existent in Scotland prior to SIRE.
- E3 The influx of new high quality researchers into Scotland, combined with the development of SIRE events and the opportunities they provide, has caused a significant and ongoing shift in the economics research culture in Scotland. As the research culture and reputation of Scottish-based economics grows, this feeds back into further improvements in the quality and range of new appointments and research-related events, creating a virtuous circle. This virtuous circle is well-illustrated by the prestige of collaborators and co-funders involved in recent SIRE events, the direct link between a number of recent events and journal publication, and follow-up events planned with international collaborators.
- E4 While SIRE events play a key role in networking, collaboration and engagement, SIRE researchers also play a leading or major role in a wide variety of other substantial collaborative projects. Leading examples include: the development of the 'Longitudinal Survey of Ageing in Scotland'; involvement in the 'Scottish Centre for Constitutional Change' and other closely related work; involvement in 'ClimateXchange', the Edinburgh Centre for Carbon Innovation, and other major projects concerning energy and the environment; and a group of large, multi- country, multi- institution and multi- discipline EU-funded projects in the area of health and well-being.
- E5 There are currently four vacancies at senior level and one at junior level in SFC co-funded SIRE posts arising from recent departures. Such turnover is a normal part of the academic labour market in economics and in two of the senior cases is the outcome of moves elsewhere in Scotland. The departments concerned are actively engaged in a replacement strategy. A noteworthy indicator of the high quality of recent SIRE hires is the award to Philip Kircher of the British Academy's first Wiley Prize in Economics in 2013 for achievement in research by an outstanding early career economist.
- E6 On top of the SFC co-funded SIRE posts, there have been a substantial number of additional high quality senior and junior appointments made by participating universities. The extent and quality of these net additions to the Scottish research base, over and above the SFC co-funded posts, provides a strong signal of the sustainability of the SFC investment in SIRE.
- E7 In addition to the extensive portfolio of general events, SIRE organizes and supports a number of events and activities specifically directed at ECRs and PhD students. These include: The SIRE Young Researchers' Forum; support for ECRs and PhDs to present at

major international conferences; ECR Engagement Grants, utilising SIRE's 'restored funds'; earmarked sessions for ECR presentations at workshops; and a range of advanced training workshops and mini-courses.

- E8 There are currently 80 PhD students on the Scottish Graduate Programme in Economics, and a substantial number of additional economics PhD students not directly registered on the SGPE taking the total number of PhDs well above 100. This represents significant overall growth since the creation of SIRE. There is, however, strong competition from other leading graduate programmes and, despite substantial developments to which SIRE has contributed, our provision of systematic and structured post-MSc training and exchanges with other leading graduate schools lags behind the very top graduate programmes in the UK and internationally.
- E9 In line with SIRE milestones, there has been a substantial increase in publications in highly ranked journals since the creation of SIRE. One simple indicator is publication in the "top 5" journals. Prior to SIRE, such publications by Scottish-based economists were a rarity. In the current reporting period, there were five "top 5" publications by SIRE researchers.
- E10 There have been a healthy number of new major grants awarded to SIRE researchers over the reporting period. Total grant income spent in 2012-13 is estimated to be £3,815,597, showing a strong increase since the creation of SIRE, and this trend looks set to continue with more than £16 million in pending grant bids.
- E11 The substantial enhancements to research personnel, publications, grant income and PhD numbers, together with the dramatic step change, across several dimensions, in the broader research environment, dissemination, collaboration and engagement under the SIRE aegis have had a strongly positive impact on the REF submissions of SIRE's participating departments. There was no appetite among senior management or SIRE researchers for a collective SIRE submission comprising either all, or a subset, of participating universities. This is consistent with the views outlined in the original SIRE proposal.
- E12 The financial sustainability of the SFC co-funded SIRE posts has been assured by the substantial growth in income from research grants, RAE-related income and PGT and UGT fee income achieved since the creation of SIRE. This growth in income has not only provided for the sustainability of the original SIRE posts, but has also allowed for a substantial number of additional new net-hires. More broadly, the substantial step change in research culture and outputs which has taken place is firmly established and provides a virtuous circle encouraging sustainability and, indeed, an ongoing upward trend. At a more detailed level, there are some key challenges concerning the need for ongoing (post 2015) collective funding to support the sustainability of SIRE events and activities, needed developments to the PhD programme, and a strong case for collective investment in applied micro-econometric expertise.
- E13 While SIRE has a good and ongoing track record of obtaining European Research funding, there have been no concrete and successful applications for the SIRE PEER funding. SIRE's restored funds have been used to establish an 'ECR Engagement Grant'. To date there have been four successful applications, and one very effective completed project.

1. Introduction

- 1.1 SIRE's mission statement, set out in the original proposal for funding (see box 1), outlines the main objectives of SIRE. These objectives are reflected in the key milestones in terms of increasing publications in top journals, increasing grant income and enhancement to the quantity and quality of postgraduate activities.
- 1.2 The quality, range and scale of the various activities and outputs outlined below, together with the quality of new appointments made (both SFC co-funded SIRE appointments and additional appointments by SIRE institutions) clearly indicate the substantial progress that has been made towards achieving these objectives.

Box 1: SIRE's Mission Statement

Mission Statement

1. To develop and sustain a reputation for internationally excellent research in major fields of economics, building around and beyond existing strengths, enabling economics in Scotland to compete effectively with leading English and European research centres and attract high quality staff at senior and junior levels.
2. To attract high quality graduate students to Scotland, consolidating and enhancing the growing success of the Scottish Graduate Programme in Economics (SGPE), and building the next generation of research leaders by attracting and developing high potential young researchers at PhD and junior lecturer level.
3. To foster and disseminate high quality economics research among all economists in Scotland.
4. To contribute to the quality of policy-related and other research activities, by providing a forum for interaction between fundamental researchers and policy/applied researchers and through knowledge transfer and CPD activities.

- 1.3 Nevertheless, there remain some challenges to be addressed for SIRE to fully capitalise on the progress made to date. To highlight three:
 - (a) To develop and implement a more structured advanced (post-MSc) training programme for PhD students, which can flexibly meet the differing needs of SIRE institutions, and to build closer links with leading graduate schools in Europe and further afield. While there has been some progress, particularly in core provision at institutions with larger PhD programmes and more general provision of a range of ad-hoc short-courses, there remains a need for further co-ordination and development. Further collective (SIRE-wide) funding beyond the current July 2015 deadline would greatly assist these developments.
 - (b) The wide range of collective SIRE events, summarised below, play a very important role in SIRE's networking activities. Increasingly many of these events are co-funded, but some SIRE-funding typically plays a key part in initial event planning and leveraging external funding. There is a need to source ongoing collective SIRE funding for such events, post July 2015.
 - (c) There is a perceived need in Scotland for an independent source of high level policy analysis, akin to the IFS. While it can take time to build an effective organisation of this kind and build a reputation for quality and independence, a key building block is a collective need

in Scotland for a group of high quality micro-econometricians, with an interest in Scottish data and policy.

- 1.4 In contrast to the previous annual reports produced by SIRE, spanning the years 2007-2012, which separated the coverage of each of the three main programme themes, this report provides a consolidated overview of SIRE. This consolidated approach not only helps to reduce the report's length, but it also reflects the evolution of research and research activities taking place within SIRE. While the three original thematic programmes (Behaviour, Incentives and Contracts (BIC); Work and Well-being (W&W); and Macroeconomics, Financial Linkages and the Regions (MFLR) still play an important role, a number of the more exciting research outputs and activities outlined below cross programme boundaries.

2. Collaboration and Engagement Activities

- 2.1 SIRE's organisational and governance structure remains unchanged from the 2011-12 Report. The only change to the membership of the SIRE Executive over the reporting period has been the return of Ed Hopkins to the Directorship of the BIC programme, replacing Jozsef Sakovics who took over this role temporarily during 2012-13, while Hopkins was on sabbatical. The Executive comprises:
- David Ulph (SIRE Director)
 - Stuart Sayer (SIRE Executive Director)
 - Ed Hopkins from September 2013, replacing Jozsef Sakovics (Director of BIC)
 - Charles Nolan (Director of MFLR)
 - David Bell (Director of W&W)
 - Liam Delaney (SGPE PhD Director)
 - Catia Montagna (Policy Forum Co-ordinator).
- 2.2 One of the key roles of the Executive is to facilitate and foster a wide-range of research-focused events and activities, which provide a major mechanism for within-SIRE and external networking. The SFC-funded activities budgets of the SIRE Centre and Programmes have been invaluable in developing and sustaining the events programme. In many cases the offer of SIRE funding has allowed initial event planning to go ahead and enabled event organisers to leverage various sources of external funding or co-funding by the host institution, to supplement or in some cases partially replace the use of SIRE funds. This success in leveraging co-funding has enabled us to develop and run a substantial and high quality event portfolio, while extending the life of the SFC-funded activities budgets, from the 5 year footprint envisaged in the SIRE proposal, until July 2015 with the agreement of the SFC.
- 2.3 The SIRE Centre, administered by Gina Reddie, oversees and co-ordinates SIRE events, liaising with local organisers at the host institutions. She maintains a calendar of SIRE events, along with other economic-research-related events (including departmental seminar series and David Hume Institute seminars) on the SIRE website, and publicises events through the website, twitter and extensive email distribution lists, which include economists and others working in the public and private sectors as well as academics at SIRE institutions. While we have to date been able to extend the appointment of the SIRE administrator beyond the 5 year term covered by SFC funding, maintaining this valuable collective oversight, co-ordination and publicity function requires an ongoing source of collective funding to be identified.
- 2.4 The main SIRE events taking place over the reporting period are summarised in section 8 below. As the summaries indicate, the events foster networking across different dimensions, with the precise mix depending on the nature and topic of the event:

Networking among Scottish-based researchers working on the topic of the workshop or other event. As is evident from section 8, events typically attract presenters or participants from most SIRE institutions. It is also noteworthy that all the SIRE institutions in receipt of SFC funding have hosted major events over the reporting period.

Networking between senior established researchers and early career researchers (ECRs) and PhD students. In addition to explicitly targeted activities, such as the SIRE Young Researchers' Forum and advanced training events, many SIRE events earmark one or more slots for presentations by ECRs or PhD students. Whether or not they are directly presenting, the events provide a valuable opportunity for ECRs and PhDs to interact with their more established peers, and frequently provide opportunities for one-to-one meetings between ECRs/PhDs and leading international researchers.

Networking with leading international researchers and the international research community from outwith Scotland. As is evident from section 8 many SIRE events include presentations from and participation of leading international researchers from outwith Scotland. Departmental seminar series, within SIRE institutions, add to these international networking activities. As SIRE matures, and the international reputation of the economics research base within Scotland grows, our ability to attract international research leaders to events and seminars has grown apace. This international dimension plays a very important role in the context of SIRE's mission. It enables us to benchmark Scottish-based research against the best in the world and raise the aspirations of Scottish-based researchers. It also provides a valuable vehicle for disseminating our research to the international research community and further enhancing the reputation of Scottish-based economics research. In some cases, this international networking leads to or helps build and maintain further research collaborations and co-authorships.

Networking with Scottish Government economists. In addition to the established SIRE-Scottish Government Policy Forum, a growing number of SIRE workshops include policy roundtables, with panellists drawn from the academic and government sectors. Scottish Government economists are also frequent general participants at SIRE events including workshops, seminars, public lectures and advanced training events.

Networking with other public sector economists. The relevant network depends on the topic. SIRE events over the reporting period have included participation of economists from the Bank of England, European Central Bank, the Federal Reserve, Office for Budget Responsibility, the Central Bank of Ireland, Scottish Development International, Scottish Enterprise and the Glasgow, Edinburgh and Aberdeen City Councils. Again it is notable, as the reputation of Scottish-based research and researchers has grown, that our work is attracting markedly more interest from further afield.

Networking with the business and finance sectors. The nature of much cutting edge economics research limits the mutual benefits from extensive direct engagement with the business sector. Despite this, a notable development over the reporting period has been the direct engagement of the business sector in three relevant SIRE events, explicitly: the involvement of an entrepreneur and consultant, along with Scottish Enterprise, in the "Frontiers in Empirical Entrepreneurship Research" workshop and policy forum; participants (including a presenter) from Morgan Stanley, Lacima Group, DEVnet, and Bankia in the conference on "Finance and Economics of Commodity Markets and Natural Resources"; the keynote talk by the Founder and President of ASA and ASA International at the "Microcredit Symposium".

- 2.5 The range of high quality events such as focussed conferences, workshops, policy forums, and or advanced training were rare or non-existent in Scotland prior to SIRE. Departmental

seminar programmes pre-dated SIRE, but attendance at seminars outwith one's home institution was rare so networking was limited. The influx of new high quality researchers into Scotland, originated by but now extending well beyond the SIRE appointees, combined with the development of SIRE events and the opportunities they provide, has caused a significant and ongoing shift in the economics research culture in Scotland. As the research culture and reputation of Scottish-based economics grows, this feeds back into further improvements in the quality and range of research-related events, creating the potential for a virtuous circle.

- 2.6 This virtuous circle is well-illustrated by the prestige of collaborators and co-funders involved in recent SIRE events held during the reporting period. For example, the prestigious "Review of Economic Studies May Meetings" involved collaboration with a "top 5" journal and was primarily funded by the journal's publishers. While the conference on "International Capital Flows and Spillovers in a Post Crisis World" was hosted by the Bank of England, and co-funded by: the IMF Economic Review, the Bank of England, the Bank of Canada, UBC, St Andrews, ECARES and CEPR along with SIRE.
- 2.7 A further indication of this growth in reputation is that a number of recent SIRE events have provided a direct link to journal publication. Explicitly: the *IMF Economic Review* will publish a special issue based on papers presented at the just mentioned "International Capital Flows ..." Conference; four of the papers presented at the workshop on "Demographic Application of OLG-CGE Modelling" will be published in a themed section of *Economic Modelling*; and the conference and policy forum on "New Research in Performance-related Pay" led to a special issue of the *National Institute Economic Review* published in November 2013.
- 2.8 The international success of Scottish-based SIRE workshops is also leading to follow-up events planned with international collaborators. For example: the workshop and policy forum on "Frontiers in Empirical Entrepreneurship Research" has led to participants agreeing to organize similar future events in Sweden and Germany and the workshop's organizers have successfully applied for a CESifo Summer Institute; the success of the workshop on "Bounded Rationality in Choice (BRIC)" has given rise to concrete plans for an ongoing series of BRIC workshops rotating among a small number of institutions – Barcelona in 2014, New York in 2015, with St Andrews hosting the event again in 2016 or 2017.
- 2.9 While SIRE events play a key role in networking, collaboration and engagement, SIRE researchers also play a leading or major role in a wide variety of other substantial collaborative projects. An exhaustive list of these collaborative activities would be lengthy and beyond the scope of this report, some leading examples must suffice.
- 2.10 *Longitudinal Survey of Ageing in Scotland*: There is a worldwide family of studies of older people which now covers 80% of the world's population aged over 50. It began with the Health and Retirement Study (HRS) in the USA. Its main rationale stems from co-existence of high costs of medical care alongside relatively poor public health outcomes in the USA. In the UK it is currently represented by the English Longitudinal Survey of Ageing (ELSA) led by Sir Michael Marmot, which is based in the Institute for Fiscal Studies. These studies have individually and collectively generated a substantial literature which is of great significance at a time when the health costs associated with population ageing are increasing substantially. With the help of SIRE, Scotland has now been invited to join this group. Led by economists from Stirling and Strathclyde, but also including sociologists, psychologists, social statisticians and medics from a range of Scottish universities, a successful proposal has been put to the National Institute of Ageing in the USA to set up a pilot study in Scotland in 2014. This is a particularly exciting development since Scotland has similar health characteristics to the US, which is very useful for comparative purposes, but it also has better possibilities for

combining survey and administrative data than any other country currently involved in the group.

- 2.11 *Constitutional Change*: SIRE economists were involved in the establishment of the *Scottish Centre for Constitutional Change*, which is based in the University of Edinburgh and has attracted £1.2 million of ESRC funding. Again, this is a multidisciplinary venture, drawing also on political science, social policy, defence and legal studies. While contributing extensively to the ongoing debate on constitutional change, the economists amongst this group have been active in enhancing the capabilities for modelling the Scottish economy along the lines that would enable it to carry out the kinds of analyses commonly associated with the Institute for Fiscal Studies for the UK as a whole. This additional capacity will be of value irrespective of the outcome of the constitutional debate due to the additional tax powers already in train for the Scottish Parliament and those that might potentially follow the referendum. The Scottish Parliament is currently examining whether there needs to be an independent forecasting body in Scotland. This association with the Scottish Centre for Constitutional Change means that SIRE is well placed to make a significant contribution both to the debate and to the outcome. For further information on the Centre see: <http://www.futureukandscotland.ac.uk/projects/research-centre> .

In addition to the Centre, SIRE economists have been engaged in a range of related work, linked to constitutional change. Research at the University of Aberdeen, led by Alex Kemp, on market and economic issues relating to the North Sea oil and gas industry, and the implications of constitutional change have significantly impacted on the policy stance and proposals made by the Scottish Government in the run-up to the public referendum in 2014. The Scottish Government (Office of the Chief Economic Advisor, OCEA) have adopted a Strathclyde/Fraser of Allander-based CGE model of the Scottish economy to explore the impact of further devolution of taxing powers from Westminster. This engagement is led by Kim Swales, who regularly visits OCEA. SIRE economists also played an active part in the series of ESRC-supported “Conversations on Constitutional Change in Scotland” organised by the David Hume Institute and have participated in a wide variety of other related roundtable discussions with policy makers and officials in Scotland and London as well as contributing through the media and public events to the wider debate.

- 2.12 *ClimateXchange and the Edinburgh Centre for Carbon Innovation (ECCI)*: *ClimateXChange* is a collaborative initiative between sixteen of Scotland’s leading research and higher education institutions undertaking work on climate change and the transition to a low carbon economy. It delivers objective, independent, integrated and authoritative evidence to support the Scottish Government in relation to its activities on climate change mitigation, adaptation and the transition to a low carbon economy. *ECCI*, hosted by the University of Edinburgh in partnership with Heriot Watt and Edinburgh Napier, is a hub for the knowledge, innovation and skills required to create a low carbon economy. *ECCI* creates a unique platform for supporting Government policy implementation; enhancing business enterprise and innovation; and delivering professional skills training. A number of SIRE researchers collaborate with *ClimateXchange* and/or *ECCI* in a variety of capacities. For example: the energy-economy-environment variants of the Strathclyde/Fraser of Allander-based CGE model of the Scottish economy are increasingly being used in the work of *ClimateXchange*; Stuart Sayer contributes to *ECCI* CPD activities and is an adviser to *Carbon Masters*, a spin-off consultancy, and the *Association of Carbon Professionals* both of which have a base in *ECCI* and were started by former graduate students.

In closely related work: Peter McGregor has been actively involved as an investigator and in the KE activities of a number of other multi-disciplinary, multi-institutional research networks to which KE activity is central e.g. 3 Supergen Consortia, EPSRC Desimax, EU Biomara, EU TROPOS, NINES (Northern Isles New Energy Solutions). And Karen Turner was an invited adviser to the European Commission Joint Research Centre Institute for

Energy and Transport. She is also a member of a new network of experts convened by the International Energy Agency to advise on its proposed work programme on ‘the Multiple Benefits of Energy Efficiency’. Frans de Vries was the project leader for an interdisciplinary project on Designing Markets for Ecosystem Services Delivery (Eco-Delivery), funded by the European Investment Bank, which ended during the reporting period. While Nick Hanley, a co-PI on this project, has continued to work on a variety of collaborative projects concerned with sustainability and ecosystem services, with funding from, inter alia, the ESRC, NERC, the EU, DEFRA and Leverhulme.

- 2.13 *Health and Well-being:* SIRE researchers are playing a leading role in a new €3 million multi-country interdisciplinary project (Munros), funded by the European Commission for four years, to undertake a systematic evaluation of the impact of ‘new professional roles’ on practice, outcomes and costs in a range of different health care settings within European Union and Associate Countries. Bob Elliot (HERU, Aberdeen) is PI for the project, with Ioannis Theodossiou (Aberdeen) a further lead investigator. The project also involves NHS Grampian and partners in Manchester, Netherlands, Germany, Norway, Italy, Czech Republic, Turkey and Poland.

SIRE researchers based in Aberdeen and Dundee (Catia Montagna, Hassan Molana and Yu-Fu Chen) are part of another pan-European interdisciplinary research consortium covering 33 partners from 12 EU countries awarded a grant of €8.5 million from the EU running from 2012 through 2016. The project (Welfare, Wealth and Work for Europe) brings together researchers with interdisciplinary expertise from economics, ecology, history, demography, political science and gender research to work on how Europe can cope with the challenges of the financial crisis, globalisation, demographic shifts, climate change and new technologies, whilst delivering social inclusion, wellbeing and environmental quality.

Ioannis Theodossiou (Aberdeen) is a lead investigator on a €4 million EU funded project (PARASITE), running from 2012 to 2016, providing a multidisciplinary approach to detect, monitor and mitigate risk of seafood-borne parasites. The Consortium is composed of 12 European and 3 Asian research institutions and 6 European SMEs from a total of 13 countries.

Michèle Belot (Edinburgh) is a co-investigator on a further large interdisciplinary collaborative project, recently awarded £7.4 million by the EU. The project’s goal is to understand the physical and psychological factors that control eating behaviour, so that we can develop more effective strategies for encouraging healthier food choices. The five-year initiative – called Nudge-it – will be conducted by experts from 16 institutions across six European countries, the US and New Zealand. A mixture of brain imaging, behavioural studies and laboratory experiments will be used. Researchers will also collect information from families about the social and economic factors that affect people’s eating decisions.

3. SIRE Appointments

- 3.1 The current post-holders of SFC co-funded SIRE senior and junior posts are set out, respectively, in tables 1 and 2.
- 3.2 At senior level, the vacancy at Strathclyde arising from the departure of Bernard Fingleton in 2011 remains unfulfilled. Three further senior vacancies have arisen during the reporting period arising from the departures of Tooraj Jamasb (from Heriot Watt), Miguel Costa-Gomes (from Aberdeen) and Arnab Bhattacharjee (from Dundee). Fortunately, in the latter two cases, they have remained within Scotland moving to other SIRE institutions, respectively, St Andrews and Herriot Watt. In the case of Arnab Bhattacharjee, the move was accompanied by promotion from Reader to Professor. The functioning of the labour market in economics means that some staff turnover is to be expected, and the departments concerned are actively engaged in a replacement strategy.
- 3.3 At junior level there have been two departures over the reporting period, both from Dundee, with one of the resulting vacancies already being filled with the appointment of Grigorios Emvalomatis from November 2013.
- 3.4 A noteworthy indicator of the high quality of recent SIRE hires is that, following the award of a Philip Leverhulme Prize (a highly competitive multi-disciplinary prize for the leading researchers in the UK under age 36) to Mike Elsby in 2012, soon after his arrival in Scotland Philip Kircher was awarded the British Academy's first Wiley Prize in Economics in 2013 for achievement in research by an outstanding early career economist.
- 3.5 On top of the SFC co-funded SIRE posts, there have been a substantial number of additional high quality senior and junior appointments made by participating universities in the lifetime of SIRE. Notable new arrivals in the reporting period include Hervé Moulin and Anna Bogomolnaia, both from Rice University in the USA; and Sayantan Ghosal from the University of Warwick, with all three moving to Glasgow. And Jakub Steiner, originally appointed as a SIRE lecturer before his departure to Northwestern, has returned to Edinburgh as a half-time Professorial Fellow.
- 3.6 The extent and quality of these net additions to the Scottish research base, over and above the SFC co-funded posts, provides a strong signal of the sustainability of the SFC investment in SIRE and the step change in research culture it has induced. What is more, these net additions are ongoing, with a number of departments actively engaged in the job market at the time of writing.

Table 1 SIRE Senior Post-holders as of 21.01.2014

Programme	University	Appointee
BIC	Edinburgh (5)	José V (Sevi) Rodriguez Mora Maia Güell Ed Hopkins Mike Elsby (started Dec 2010) Philipp Kircher (started Sept 2012)
	Heriot Watt (1)	<i>Tooraj Jamasb</i> (departed mid 2013)
WW	Aberdeen (2 + 1 initially converted from L to P, replaced by R with agreement of SFC)	Keith Bender (appointed from July 2012 to replace Hans Hvide, who moved to a fractional post); <i>Miguel Costa-Gomes</i> (moved to St A, summer 2013) Ramses Abul Naga (Reader)
	Stirling (1)	Liam Delaney (from Sept 2011, replacing Sascha Becker).
	Dundee (1) (P converted to R + RF)	<i>Arnab Bhattacharjee</i> (moved from readership at Dundee to P at H-W, May 2013)
MFLR	Glasgow (3)	Gabriel Talmain Charles Nolan Tatiana Kirsanova (started Sept 2011)
	St Andrews (3)	Rod McCrorie Paola Manzini Marco Mariotti George Evans ¹
	Strathclyde (2)	Gary Koop (<i>Bernard Fingleton</i> left Sept 2011, yet to be replaced).

¹ Part-time 0.2 FTE

Table 2 SIRE Junior Post-holders as of 21.01.2014

Programme	University	Appointee
BIC	Edinburgh (4)	Tatiana Kornienko Kohei Kawamura Robert Zymek (from Aug 2011 – replacing Gorbachev) Anikó Bíró (from Aug 2011 – replacing Steiner)
	Heriot-Watt (1)	Philippe LeMay-Boucher
WW	Stirling (1)	Ian Lange
	Dundee (2)	<i>Grigorios Emvalomatis</i> (started Nov 2013, replacing Dennis Petrie, who left Dec 2012) Andrzej Kwiatkowski (from January 2010) <i>Shaolin Wang</i> (Research Fellow; left Feb 2013)
	Aberdeen (2 – minus 1 converted to P)	Yu Aoki (from Aug 2012, replacing Silvia Mendolia)
MFLR	Glasgow (3)	Luis Angeles Céline Azémar Iona Moldovan
	Strathclyde (2)	Lise Tole (rehired from Sept 2011 as SL) Rodolphe Desbordes (Promoted to Reader)
	St Andrews (3)	Gonzalo Forgues-Puccio Alexandru Nichifor (from Sept 2011 replacing Faravelli) Georgios Gerasimou (replacing Arico departed Feb 2012)

4. Other ‘Outputs’ and Performance Indicators

- 4.1 As noted above, in addition to the SFC co-funded SIRE junior appointments, there have been a substantial number of further junior appointments across the SIRE universities to Lecturer, Post-Doctoral or Research Fellow posts. Thus there is a substantial and growing base of *Early Career Researchers* (ECRs). At present, while contact details for all new hires are reported to the SIRE Centre annually, we do not systematically collect and collate pooled information specifically on ECRs. A more systematic and detailed data-gathering exercise on ECRs is planned for the final SIRE end of grant Report.
- 4.2 SIRE organizes and supports a number of events and activities specifically directed at ECRs. Of particular note are:
- The *SIRE Young Researchers’ Forum (SYRF)*: an ongoing series of workshops organised by ECRs, with senior support. The Forums involve a leading senior researcher, from within or outwith Scotland, who provides a keynote talk and feedback/discussion of research presentations by two or three young researchers. The location of the workshop migrates around the SIRE universities. See section 8 for further details of SYRF events held in the reporting period.
 - The SIRE programme activities budgets have been used to provide capped financial support to ECRs, who need funding to enable them to *present research at major conferences*. Requests for funding are relatively simple to make and subject to tight quality controls by the SIRE Executive, so that support is primarily focused on major conferences such as the annual Royal Economic Society, European Economic Association, or Econometric Society meetings. There were 15 successful applicants for these grants in the reporting period. As well as providing very valuable experience and encouragement for the ECRs, this support also helps to disseminate SIRE research and SIRE itself.
 - The SFC funds restored to SIRE are also targeted at ECRs, to support high quality research that involves a significant element of *engagement with a non-academic organisation* in the public or private sector in UK or abroad. Further details are provided in section 7 below.
- 4.3 The *Scottish Graduate Programme in Economics (SGPE)*, a long standing collaboration between the 8 pre-1992 Scottish universities, was established well before SIRE. The SGPE provides the ESRC recognized pathway for Economics within the Scottish Graduate School of Social Science (SGSS). There are currently 80 PhD students on the SGPE PhD programme, and a substantial number of additional economics PhD students not directly registered on the SGPE taking the total number of PhDs well above 100. A more systematic and detailed data-gathering exercise on PhDs is planned for the final SIRE end of grant Report.
- 4.4 Overall PhD numbers show a significant growth, since the creation of SIRE, although the growth has been unevenly distributed across the SIRE universities. The aim is for further substantial growth, as long as this can be achieved while at least maintaining, and striving to enhance intake quality. The competition for high quality economics PhD students, within the UK and internationally, is particularly fierce. The reputation and quality of the research environment and potential advisors is one important dimension of competition and, as indicated throughout this report, SIRE has done much to enhance our competitiveness in this dimension. The availability of funded PhD studentships is another important dimension of competition. Since the creation of SIRE, there has been a substantial growth in the number of

funded studentships, with the funding coming partly from increased grant income and partly from participating universities/departments. The differing availability of funded studentship across universities provides a possible partial explanation of the unevenly distributed growth in PhD numbers.

- 4.5 A further important dimension of competition for PhD students is the quality of the advanced, post MSc, training offered. Here again, there have been some significant enhancements since the creation of SIRE. Key advanced courses from the SGPE MSc programme are now available as webcasts, and form part of the SGSS approved pathway. SIRE departments with a greater concentration of PhDs, primarily Glasgow, Edinburgh and St Andrews, have been developing their own in-house advanced core modules, which are generally made available to PhDs based elsewhere who wish to attend. As well as encouraging these developments, SIRE has more directly provided a range of more specialised advanced training workshops, boot-camps and mini-courses, which have been well-attended and well regarded by PhD students (along with ECRs and even some ‘more mature’ researchers). In addition the extensive list of SIRE events provides a variety of valuable learning opportunities for PhDs and ECRs, both in general, and more specifically by, where appropriate, providing earmarked opportunities for PhD students or ECRs to present their work.
- 4.6 Despite these developments, our provision of systematic and structured post-MSc training lags behind the very top graduate programmes in the UK and internationally. We also lag behind in establishing connections, exchange opportunities and jamborees for PhD students with leading graduate schools in Europe and further afield. While pooling and collaboration can in a number of respects be very helpful, and even essential, in delivering these objectives, not least in the provision of scale, reputation and high quality researchers, at times the multiple institutions involved, including the SGPE, SGSS and ESRC, alongside SIRE, and their respective participating universities, can make progress difficult and slow. With strong leadership, this impediment is not insuperable. A potentially more serious impediment, is the lack of collective (SIRE-wide or SGPE-wide) funding to facilitate further developments beyond the current July 2015 deadline.
- 4.7 A new *experimental laboratory* (The Behavioural Laboratory at the University of Edinburgh – BLUE) was launched in March 2013 by the School of Economics at Edinburgh in which the lab is based. The lab’s primary objective is to promote and facilitate experimental research by economists and other social scientists. It has 18 fully partitioned work-stations, with a separate experimenter’s office, and is designed to support a wide range of experiments. The lab is directed by Michele Belot, a recent professorial hire from Oxford, and provides a valuable new facility for SIRE researchers and PhD students, who wish to undertake experimental work. For further information see: <http://www.ed.ac.uk/schools-departments/economics/blue>
- 4.8 In line with SIRE milestones, there has been a substantial increase in high quality *publications* in highly ranked journals since the creation of SIRE. This increase partly results directly from the SFC co-funded SIRE appointments, providing a strong indicator of the high quality of the appointments made. But the increase also stems from longer-standing Scottish-based researchers upping the quality and quantity of their research outputs, in response to the enhanced research environment as well as the high quality of the new appointments made over and above the SFC co-funded posts. A more formal and detailed bibliometric analysis of the evidence base underlying this claim is planned for the final SIRE end of grant report.
- 4.9 One simple indicator is publications in the “top 5” journals. Prior to SIRE, such publications by Scottish-based economists were a rarity. One hit would have been a ‘good year’, two would have been truly exceptional. In the current reporting period, there were five “top 5” publications by SIRE researchers.

- Alexandru Nichifor *Journal of Political Economy*

- Tatiana Kirsanova *Review of Economic Studies*
- Jozsef Sakovics and Jakub Steiner *American Economic Review*
- Mike Elsby *American Economic Review*
- Herve Moulin *Econometrica*.

The authors include two senior and one junior SFC co-funded SIRE hires, a further recent ‘additional’ senior hire, a longer-standing Scottish-based researcher, and a previous junior SIRE hire, who has recently returned as a half-time Professorial Fellow.

- 4.10 Section 9 below provides a longer, but still highly selective list of publications in highly ranked journals during the reporting period. The selection is partly based on journal rankings, but also aims to provide some indication of the range and depth of SIRE research outputs by including some publications in leading field journals as well as general journals. The list was truncated to avoid excessive length - there were a substantial number of other publications in identical or similarly ranked journals, which might have been included.
- 4.11 Along with journal articles, SIRE research outputs are disseminated by the *SIRE Discussion Paper* series available on the SIRE website (<http://www.sire.ac.uk/>) maintained by the SIRE administrator, Gina Rennie. At the time of writing there are 498 Discussion Papers in the series, which dates back to 2008.
- 4.12 Alongside a number of ongoing *major grants*, announced in previous SIRE Reports, and the substantial multi-disciplinary, multi-institution collaborative grants summarised in paragraphs 2.10-2.13 above, there have been a healthy number of new major grants awarded to SIRE researchers over the reporting period. These include:
- Michael Hatcher: Postdoctoral Fellowship for research comparing long-term welfare effects under inflation and price-level targeting. 2012-14, £150,289 from ESRC.
 - Arjunan Subramanian: ‘Information, market creation and agricultural growth’, funded by ESRC-DFID under the DFID/ESRC Growth Programme. Glasgow share: £185,000; Nov 2012-Oct 2015
 - Yiannis Vailakis: ANR French National Centre for Scientific Research (co-investigator) Project: Towards New Tools for Time Dimensions in Models of Economics, €300,000, 2012-2015.
 - Paola Manzini and Marco Mariotti: Choice with Errors. 2012-2015, £404,605 from ESRC
 - Philipp Kircher: Labour heterogeneity. 2012-2017, £866,667 from EU.
- 4.13 Tables 3 and 4, below, provide an aggregate summary of grant income across SIRE institutions. The tables reveal a strong and healthy grant income. Although a rigorous comparison is not yet feasible, since the data for comparable tables for the pre-SIRE years have yet to be collected and collated, the tables indicate the substantial increase in grant income that has taken place since the creation of SIRE. The strong set of pending grant applications, which include major grants at the final stages of tournament-like review, suggest that this trend is continuing, providing a good indication of the sustainability of the SIRE investment by the SFC. A more rigorous analysis and comparison with the pre-SIRE years is planned for the final SIRE end of grant report.
- 4.14 The substantial enhancements to research personnel, publications, grant income and PhD numbers, together with the dramatic step change, across several dimensions, in the broader research environment, dissemination, collaboration and engagement under the SIRE aegis have had a strongly positive impact on the *REF submissions* of SIRE’s participating departments. SIRE’s participating universities have submitted separately to either UoA 18 ‘Economics and Econometrics’ or UoA 19 ‘Business and Management Studies’, with the selection of UoA reflecting the strategic decision of senior management in the respective

university. There was no appetite among senior management or SIRE researchers for a collective SIRE submission comprising either all, or a subset, of participating universities. This is consistent with the views outlined in the original SIRE proposal. There are several reasons underlying this lack of appetite, notably:

- Unlike some of the pooling initiatives, SIRE is an extensive pool with no core research project or physical facility. In the absence of such a core project or facility, cherry-picking top researchers from across SIRE institutions could all too easily lead to negative rather than positive perceptions of the state of economics research in Scotland.
- REF is about much more than the completion of a submission. It plays an integral part in the management of the ongoing performance of individual researchers. Decisions about inclusion/exclusion from REF submission are an important element of this management process as is the ongoing management of researchers whether or not they are included in the current submission. Such management is an important part of HR processes, and the managerial challenges (including pay and promotion considerations) can vary across individuals and institutions. Since SIRE researchers are directly employed by an individual university, SIRE does not have the HR mandate or the managerial authority and information base needed to play this managerial role directly.

Table 3
Grant income

Grant income:	2012-13	Cumulative total	Pending applications
Awarded to a single institution within the pool	3,338,245	9,205,158	13,148,185
Awarded jointly to two or more institutions within the pool	468,352	1,028,341	2,581,585
Awarded jointly to two or more institutions across two or more pools	0	0	0
Other, please specify	9,000	12,490	337,935
Total	3,815,597	10,245,989	16,067,705

Grant Source	Scottish		UK		European		Other international		Total	
	AY2012-13	Cumulative	AY12-13	Cumulative	AY12-13	Cumulative	AY12-13	Cumulative	AY12-13	Cumulative
Research Councils			1,388,991	3,874,500					1,388,991	3,874,500
European Framework Programmes					684,530	2,873,075			684,530	2,873,075
Other public bodies*	399,410	1,177,953	674,764	1,362,856	72,323	117,334	0	0	1,146,497	2,658,143
Charities	0	0	115,417	211,965	0	0	125,405	125,405	240,822	337,370
Industry	150,000	150,000	125,674	131,526	68,553	196,665	0	0	344,227	478,191
Other	0	9,632	0	0	0	0	6,612	6,612	10,530	24,710
Total	549,410	1,337,585	2,304,846	5,580,847	825,406	3,187,074	132,017	132,017	3,815,597	10,245,989

Table 4

Grant Income

5. Sustainability

- 5.1 The major part of the SFC's and participating universities' financial investment in SIRE was directed towards new senior and junior academic posts. These posts have all been filled with high quality researchers, surpassing the quality threshold set out in the original SIRE proposal, as was clearly indicated by the interim review conducted for the SFC by two members of the IAB in 2009. Some turnover in personnel holding these posts is to be expected as part of the normal functioning of the labour market for academic economists. As noted in section 3, the senior vacancies that currently exist are part of this normal turnover process and the relevant departments have set in train a replacement strategy. As the SFC co-funding of these posts tails off, their financial sustainability has been assured by the substantial growth in income from research grants, RAE-related income and PGT and UGT fee income achieved since the creation of SIRE. This growth in income has not only provided for the sustainability of the original SIRE posts, but has also allowed for a substantial number of additional new net-hires at senior and junior levels. This growth is ongoing, with a number of SIRE departments actively engaged in recruitment at the time of writing.
- 5.2 More broadly, the substantial step change in research culture and outputs which has taken place is firmly established and provides a virtuous circle encouraging sustainability and, indeed, an ongoing upward trend. One strong signal of this is the volume and value of grant income currently in place and pending. Among the pending grants, there are a number of impressive large grant bids, for example an ESRC grant for approximately £6 million for fundamental research on the intersection of macroeconomics, finance and labour economics led by a strong group of SIRE researchers, which at the time of writing has reached the final interview stage of the rigorous review process.
- 5.3 At a more detailed level, there are some key challenges, as noted elsewhere in this report, in particular:
- The wide range of collective SIRE events play a very important role in SIRE's networking and collaborative activities. Increasingly many of these events are co-funded, but some SIRE-funding typically plays a key part in initial event planning and leveraging external funding. There is a need to source ongoing collective SIRE funding for such events along with the co-ordinating, publicity and dissemination functions performed by the SIRE Centre, post July 2015. In the absence of such funding the rationale for and influence of the SIRE Executive will diminish.
 - To sustain and enhance the developments that have taken place in the PhD programme, there is a need to develop and implement a more structured advanced (post-MSc) training programme for PhD students, which can flexibly meet the differing needs of SIRE institutions, and to build closer links with leading graduate schools in Europe and further afield. Further collective (SIRE-wide) funding beyond the current July 2015 deadline would greatly assist these developments.
 - There is a perceived need in Scotland for an independent source of high level policy analysis, akin to the IFS, building on the work currently being undertaken in the context of constitutional change. While it can take time to build an effective organisation of this kind and build a reputation for quality and independence, a key building block is a collective need in Scotland for a group of high quality micro-econometricians, with an interest in Scottish data and policy.

6. Pools' Engagement in European Research (PEER)

- 6.1 SIRE was awarded £10,000 from a strategic fund provided by the Scottish Government towards the cost of its Engagement in European Research to enable SIRE to participate in and compete for European Funding. The funds are held by the University of St Andrews on behalf of SIRE. It is available to be used over the period AY 2011-12 and AY 2012-13.
- 6.2 While SIRE has a good and ongoing track record of obtaining European Research funding, either for individual researchers or as part of large consortia (see paragraph 2.13), there have been no concrete and successful applications for the SIRE PEER funding. As is indicated by last year's report, this can partly be explained by the lumpiness of large collaborative grant bids. Informal discussions with key SIRE researchers involved in large EU collaborative grants suggest that, while money is always useful, the additional administrative requirements associated with PEER funding, on top of the already very substantial administrative burden involved in putting together a major bid for EU funding, appeared unattractive relative to the PEER funds available.

7. Restored funds

- 7.1 SIRE's restored funds, amounting to £238,978, were originally placed in St Andrews, the home university of the SIRE Director. With the agreement of the SFC, the funds were subsequently transferred to the University of Edinburgh, the administrative centre of SIRE, to facilitate the administration and monitoring of the use of the funds.
- 7.2 As agreed with the SFC the funds are targeted to ECRs, including PhD students, in support of high quality research that involves a significant element of engagement with a non-academic organisation in the public or private sector in UK or abroad – an ECR Engagement Grant. .
- 7.3 To date there have been four successful applications for this ECR Engagement Grant:
- Almira Elasila: An internship in the United Nations Development Program (UNDP) country office in Indonesia.
 - Marie Briguglio: Research in the field of environmental behavioural economics, specifically in relation to collaboration with the Malta Environment and Planning Authority (MEPA).
 - Loe Franssen: An internship at the European Bank for Reconstruction and Development (EBRD).
 - Serafeim Tsoukas: Collaboration with the Hong Kong Monetary Authority and the Bank for International Settlements (Hong Kong Office).
- 7.4 To date one of these projects has been completed, that of Serafeim Tsoukas. In his end of award report he states: "The SIRE Engagement award has provided me with extensive opportunities that will offer me lasting benefits in my future academic career. Crucially, I believe that many of these benefits would have been difficult for me to receive without a SIRE award".
- 7.5 Committed expenditure, to date, has been relatively modest – amounting to a total of £21,187. There have, however, been a substantial number of further enquiries, from which some further strong applications are anticipated soon. Planning and developing the engagement activities, embedded in the grants, can take time, so we are not, as yet, concerned by the modest take up and expenditure to date. We also plan a further major promotional exercise for the ECR Engagement Grants in the near future.

8. Events – public lectures, workshops and conferences



SIRE Econometric Lecture and workshop April 3rd 2013 – St Andrews

The second such lecture, which follows on from Nobel Laureate Robert Engle's lecture at the Conference in Honour of Sir David Hendry in St Andrews in July 2010, was given by Peter Robinson (LSE). Among many elected honours, Peter is a Fellow of the Econometric Society, a Fellow of the Institute of Mathematical Statistics and a Fellow of the British Academy. Peter presented a paper "Efficient Inference on Fractionally Integrated Panel Data Models with Fixed Effects". The Statistics and Econometrics Workshop around which the SIRE

Econometrics Lecture was based drew statisticians as well as econometricians, with presentations from: Domenico Marinucci (Rome), Alessandra Luati (Bologna), Bent Nielsen (Oxford), Rod McCrorie, Janine Ilian and Peter Jupp (all St Andrews).



Public Lecture – Jonathan Feinstein (Yale) February 8th 2013 – Edinburgh

Jonathan Feinstein (Yale) gave an interdisciplinary Public Lecture on "Creating Fields: Learning, Creativity Generation, Paths of Development". His talk reviewed his current work using knowledge representation to build formal models of how fields develop through series of individual creative contributions. The Lecture drew a good sized audience (over 80) from a wide range of academic disciplines, private and public sectors.

Public Lecture (David Hume Institute) – Patrick Honohan (Governor, Central Bank of Ireland) November 13th 2012 – Edinburgh

Continuing our history of working with the David Hume Institute (DHI) SIRE co-sponsored (in collaboration with SDI) a DHI talk by Professor Patrick Honohan (Governor, Central Bank of Ireland) on "Restoring the Smooth Operation of the Euro System". This timely talk, from a key insider, drew a large audience, approx. 100, from academic, public and private sectors.

SIRE Workshop and Policy Forum on Regional Economic Policy September 28th 2012 - Dundee

The workshop included presentations from John Dewhurst, Arnab Bhattacharjee (both Dundee), Bjarne Madsen (CRT, Denmark), Eduardo Castro (Aveiro, Portugal), Geoffrey Hewings (Illinois), and concluded with a Policy Forum with discussion led by Graeme Roy (Scottish Government) and Bjarne Madsen (CRT). The event attracted 40 delegates from the Scottish Government, the Danish Centre for Regional and Tourism Research, and a wide range of universities: Goethe University (Frankfurt), Aveiro (Portugal), Illinois at Urbana-Champaign, Aberystwyth, Aberdeen, Dundee, Glasgow, Heriott-Watt, St Andrews, Stirling, Strathclyde. There were plenty of questions and comments from the audience, with wide ranging discussions covering, inter alia, how regional economics can contribute to meeting the challenges faced by the Scottish Government and the agenda of the EU research doctorate. These fruitful discussions led to a follow-up KE meeting in St Andrews, with participation from Edinburgh and Glasgow City Council. Building on this successful initiative, a further workshop on regional economics is planned for 2014 in Heriot-Watt.

SIRE Workshop on "Demographic Application of OLG-CGE Modelling" – October 5th 2012, Munich

This workshop, organized by Robert Wright (Strathclyde) in collaboration with the Max Planck Institute, brought together a focused international group of 12 active researchers, including various groups of co-authors, in this important and topical field. Participants were drawn from CERGE-EI (Prague), MEA Munich, Cologne, Luxembourg, NIESR, Ottawa, Stirling, and Strathclyde. Four papers presented at the conference will be published in a themed section of the journal *Economic Modelling*.

BIC “Economic Theory” Conference – October 6th 2012, Edinburgh

There were presentations from: Klaus Schmidt (Munich), Santiago Sanchez-Pages (Barcelona & Edinburgh), Miguel Costa Gomes (Aberdeen), Manuel Mueller-Frank (Oxford), Nick Vikander (Edinburgh), Georgios Gerasimou (St Andrews), Philipp Kircher (Edinburgh), and Olivier Compte (Paris) covering a wide range of economic theory topics. The mix of leading international researchers, from Scotland and elsewhere, with more junior Scottish-based researchers, worked well – engendering lively discussions and very valuable experience and feedback for the ECRs. The conference attracted 43 participants drawn from the universities of: Aberdeen, Dundee, Edinburgh, Glasgow, Stirling, Heriot Watt, Strathclyde, St Andrews, Munich, Oxford, Barcelona, Carlos III (Madrid) and the Paris School of Economics.

SIRE Workshop on “Competition, Innovation and Competition Policy” – October 25th-26th 2012, St Andrews

The event began with a masterclass, given by Jeroen Hinloopen (Amsterdam) on Experiments in Industrial Organisation. The workshop followed on with presentations by: Yannis Katsoulacos (Athens), David Ulph (St Andrews), Evgenia Motchenikova (Amsterdam), Joseph Swierzbinski (Aberdeen), Alex Dickson (Strathclyde), Luca Savorelli (St Andrews), Jacob Seifert (St Andrews) and Jeroen Hinloopen (Amsterdam). There were 21 participants at the masterclass, expanding to 26 for the workshop. Participants were drawn from: Aberdeen, Edinburgh, Glasgow, Heriot Watt, St Andrews, Strathclyde, Amsterdam, UEA, Athens and the Office of Fair Trading.

SIRE Young Researchers’ Forum – October 31st 2012, Strathclyde

The Autumn contribution to this ongoing series had Farid Toubal (ENS Cachan and Paris School of Economics) as the keynote speaker, with further presentations by Arjunan Subramanian (Glasgow) and Stephan Heblich (Stirling). It attracted 20 participants, drawn from the universities of Dundee, Edinburgh, Glasgow, Heriot Watt, Stirling and Strathclyde.

SIRE Workshop on “Fiscal Policy after the Crisis” – December 7th 2012, Glasgow

The workshop focused on the key theoretical and computational issues involved in modelling time-consistent fiscal policy, debt default and stabilisation policy. Presentations were given by: Juan Carlos Conesa (Barcelona), Salvador Ortiguera (Catloss III, Madrid), Fabrice Collard (Bern), Apostolis Philippopoulos (Athens) and John Tsoukalas (Glasgow). Participants were drawn from the universities of: Glasgow, Edinburgh, Stirling, Dundee, St Andrews, Heriot Watt, Edinburgh Napier, Bern, Barcelona, Carlos III (Madrid), Athens, Luxembourg; and the Scottish Government, Bank of England, and Office for Budget Responsibility.

Conference on “International Capital Flows and Spillovers in a Post Crisis World” – December 13th-14th, Bank of England

This major international two-day conference, hosted by the Bank of England, was co-organised by Alan Sutherland (St Andrews) and co-funded by the IMF Economic Review, the Bank of England, the Bank of Canada, UBC, St. Andrews University, SIRE, ECARES and CEPR. There were presentations from: Martín Uribe (Columbia), Bianca De Paoli (New York Fed), Marcel Fratzscher (ECB and CEPR), Jack Favilukis (LSE), Luca Fornaro (LSE), Philippe Bacchetta (Lausanne and CEPR), Luca Dedola (ECB and CEPR), Emmanuel Farhi (Harvard and CEPR), Gianluca Benigno (LSE and CEPR), Aaron Tornell (UCLA), and Vincenzo Quadrini (USC and CEPR). The *IMF Economic Review* will publish a special issue based on papers presented at the conference. The conference had around 50 selected participants, including 7 from SIRE institutions. See <http://www.cepr.org/meets/wkcn/1/1794/> for further information on this event.



Micro-credit Symposium – January 24th 2013, Strathclyde

The event was co-organised by the Department of Economics, University of Strathclyde together with the Yunus Centre for Social

Business and Health in Glasgow Caledonian University and was co-funded by the two university departments, the Development Studies Association (DSA Scotland) and SIRE. The first keynote talk was given by Shafique Choudhury, the Founder and President of ASA (Association for Social Advancement) and ASA International, a global micro-finance institution with facilities in such countries as Bangladesh, Philippines, Nigeria, Indonesia, India, Pakistan, Tajikistan, Afghanistan, Yemen, Jordan, Ethiopia, Myanmar and Peru. Followed by presentations from Praful Patel, a Development Consultant and former Regional Vice President, World Bank; and Cam Donaldson (Glasgow Caledonian), on microfinance in Scotland. The symposium concluded with a panel discussion on the workability of microfinance in rich countries. The event attracted about 60 participants from a range of universities and civil-society organisations.



Workshop and Policy Forum on “Frontiers in Empirical Entrepreneurship Research” – January 30th 2013, Stirling.

The workshop included presentations from: Hans Hvide (Bergen), Robert Gold (Kiel), Georgios Panos (Stirling), Olmo Silva (LSE), Lars Persson (Stockholm), Oliver Falck (LMU, Munich), and Claire LeLarge (INSEE). The workshop was followed by a roundtable discussion assessing entrepreneurship policies, led by Stephan Heblich (Stirling), Kenny Richmond (Scottish Enterprise) and Iain Scott (an entrepreneur). There were 20 participants drawn from academia and Scottish Government. The success of this

workshop led to participants agreeing to organize similar future events in Sweden and Germany and the organizers have successfully applied for a CESifo summer institute.

SIRE Young Researchers’ Forum on “Labour Economics” – March 8th 2013, Edinburgh

The keynote talk was given by Mike Elsby (Edinburgh), with ‘young’ researcher presentations from Yu Aoki (Aberdeen), David Comerford and Georgios Panos (both Stirling). The Forum attracted 20 participants from the universities of Aberdeen, Edinburgh, Heriot Watt, Glasgow and Stirling, as well as the Scottish Government.

European Monetary Forum – March 8th-9th 2013, Glasgow.

This meeting of the *European Monetary Forum* in Glasgow was co-funded by the Adam Smith Business School University of Glasgow, Cardiff Business School, the Julian Hodge Institute of Applied Macroeconomics and SIRE. There were presentations from Michael Argyrou, Mike Wickens (both Cardiff), Arnab Bhattacharjee (Dundee), Stephen Wright (Birkbeck), Gulkin Ozkan (York), Harris Dellas (Bern), Dale Henderson (Georgetown), Tony Yates (Bank of England), and Peter Smith (York). The Forum incorporated a lively policy panel, with panellists Jagjit Chada (Kent – an adviser on banking to the House of Lords Treasury Committee) and Dale Henderson (Georgetown, formerly at the Fed). There were 40 participants drawn from the universities of Glasgow, Dundee, Edinburgh, Glasgow Caledonian, West of Scotland, Edinburgh Napier, Heriot Watt, Strathclyde, Istanbul, Cardiff, Durham, Kent, Bern, Georgetown, York, and Birkbeck, as well as participants from the Bank of England and the Scottish Government.

SIRE Econometrics Workshop: ‘Advanced Econometric Modelling for Finance’- May 8th 2013- Glasgow

There were keynote presentations by: Hashem Pesaran (USC and Cambridge) and Valentina Corradi (Warwick), with further presentations from: Nikolaos Antonakakis (Portsmouth), Marco Avarucci (Glasgow), Paolo Zaffaroni (Imperial), and Rod McCrorie (St Andrews). The models presented in the workshop (whether theoretical or empirical) were all specifically developed for understanding important financial issues, such as investing under uncertainty, volatility (risk) measurement of portfolio decisions, and characterizing and understanding bubbles in commodities markets. The workshop attracted participants from the universities of: Glasgow, Strathclyde, Edinburgh Napier, Heriot-Watt, Stirling Dundee, St Andrews, Edinburgh, Aberdeen, Glasgow Caledonian, West of Scotland, Robert Gordon and Lancaster.



The Review of Economic Studies May Meetings – May 9th-10th 2013, Edinburgh

The Review of Economic Studies May Meetings have been held annually in May since 1989. Every year, in line with the Review's tradition of encouraging the work of young economists, seven of the most promising graduating doctoral students in economics and finance in the world are selected to present their research to audiences in Europe. The meetings take place at the economics departments or institutes of three or four major universities across Europe. Standard seminar presentations are given over two days to audiences invited by

the local hosts and which include members of the journal's editorial board. This May the first leg of this prestigious event was held in Edinburgh, the first time the meetings have been held in Scotland. The presenters were Nikhil Agarwal (Harvard), Rebecca Diamond (Harvard), Joachim Freyberger (Northwestern), Bradley Larsen (MIT), Tim McQuade (Harvard), Melanie Morten (Yale), and Petra Persson (Columbia). The invited audience was approximately 100, with the majority being from SIRE departments, who were asked to nominate staff and PhD students, mixing with current and past members of the journal's editorial board. The event certainly lived up to its billing – the presentations were highly promising – and provided a valuable, if challenging, benchmark for Scottish PhD students to aspire to. For further information see: <http://www.restud.com/meetings/>



Conference and Policy Forum on “New Research on Performance-related Pay” – June 3rd-4th 2013, Aberdeen.

The conference included key note talks by Jed DeVaro (Cal State-East Bay) on “Pay and the Delegation of Worker Authority”; and David Marsden (LSE) on “The Paradox of Performance Related Pay Systems: Why Do We Keep Adopting Them in the Face of Evidence That They Fail to Motivate?”. With further presentations by: Alex Bryson (NIESR and CEP), Tim Barmby (Aberdeen), Bob Hart (Stirling), Jaime Ortega (Carlos III de Madrid), John Heywood

(Wisconsin-Milwaukee), Colin Green (Lancaster), John Sessions (Bath), Ian Gregory-Smith (Sheffield). The conference concluded with a lively policy roundtable, with panellists Graeme Roy (Scottish Government) and Ewan Sutherland (Head of HR and Organisational Development, Aberdeen City Council). There were 32 participants drawn from the universities of: Aberdeen, Stirling, Edinburgh Napier, Heriot Watt, Queen Margaret, London School of Economics, California State- East Bay, Lancaster, Carlos III Madrid, Bath, Sheffield, Wisconsin-Milwaukee; and the Scottish Government and Aberdeen City Council. The conference led to a special issue of the *National Institute Economic Review* published in November 2013.

Inaugural Conference of the Behavioural Laboratory at the University of Edinburgh (BLUE) – June 6th-7th 2013, Edinburgh

The conference included presentations by: Abigail Barr (Nottingham), Simon Weidenholzer (Essex), Enrique Fatas (East Anglia), David Cooper (Florida State), Santiago Sanchez Pages (Edinburgh), Lorenz Goette (HEC, Lausanne), Marie-Claire Villéval (GATE, Lyon), and Catherine Eckel (Texas A&M). The conference attracted 43 participants from the universities of: Edinburgh, Stirling, Strathclyde, Aberdeen, Dundee, Glasgow, Lyon, Lausanne, Texas A&M, Barcelona, East Anglia, Oxford and Nottingham. As well as bringing together economists with an interest in experimental research, the participants included academic staff from a range of other disciplines. As a follow up, discussions are underway to establish an interdisciplinary seminar series on experimental work in the social sciences.



Conference on “Finance and Economics of Commodity Markets and Natural Resources” – July 13th-14th 2013, St Andrews.

Keynote talks were given by: Helyette Geman (Birkbeck & John Hopkins), Eduardo Schwartz (UCLA), Andrew Lyasoff (Boston University), Ronnie Sircar (Princeton), Alexander Eydeland (Morgan Stanley), Marc Yor (Paris); with 24 further presentations by a mix of

Scottish and international researchers. The latter included two SIRE Young Economists' Lectures given by Theodoros Diasakos (St Andrews) and Xiaohong Wang (Singapore). The conference attracted 41 participants from the universities of: St. Andrews, Strathclyde, Glasgow, Kent, Carlos III (Madrid), Guelph (Canada), SOAS, Chinese University of Hong Kong, Heidelberg, Essex, York, Rotterdam, Limerick, Pierre et Marie Curie (Paris), Princeton, St. Gallen, Pompeu Fabra (Barcelona), Molde (Norway), Tampere (Finland), Xian Jiatong Liverpool (China), California Los Angeles, Birkbeck (London), Boston, and John Hopkins (Baltimore); and the corporate sector: Morgan Stanley, Lacima Group, DEVnet and Bankia. It was particularly interesting to have representatives from key financial companies among the participants - this opened gateways for knowledge exchange in both directions.



Workshop on “Theory and Estimation of Gravity Equations” – July 17th 2013, Strathclyde.

The gravity equation, in its simple form, relates the volume of a given economic phenomenon to the size and proximity of two economic entities, such as countries. Among other applications, gravity models have been successfully used to study the determinants of international bilateral flows of goods, capital or people. However, recent theoretical and empirical research demonstrates that estimation of gravity equations is not as straightforward as it seems. World experts from France, Germany, the United Kingdom and the United States presented

cutting-edge work on this important topic in International Economics. Keynote talks were given by: Thierry Mayer (Sciences-Po, Paris), Markus Eberhardt (Nottingham), Mario Larch (Bayreuth), and Jonathan Eaton (Pennsylvania State). There were 25 participants from the universities of: Glasgow, Dundee, Edinburgh, Stirling, Heriot-Watt, Edinburgh Napier, St Andrews, West of Scotland, Reading, Penn State, Leeds, Bayreuth, Birmingham.

Workshop on Bounded Rationality in Choice (BRIC): Theory, Application, Welfare and Experiments – July 29th-30th 2013, St Andrews

The workshop comprised 7 sequential sessions. Session 1 – Rationality: theory and measurement: 1. Hiroki Nishimura (NYU), Efe Ok (NYU); 2. Jose Apesteguia (Pompeu Fabra) and Miguel Angel Ballester (Barcelona); Session 2 – Identification: 3. Rohan Dutta (McGill) and Sean Horan (UQAM); 4. Yoram Halevy (UBC); Session 3 – Choice and Risk: 5. Erkut Y. Ozbay (Maryland); 6. David Dillenberger (Penn.); Session 4 – Rational Inattention: 7. Andrew Caplin (NYU); 8. Andrew Ellis (Boston U.); Session 5 – Choice procedures: 9. Koichi Tadenuma (Hitotsubashi); 10. Michael Richter (Yeshiva); Session 6 – Predictions/ Mechanism Design: 11. Franz Dietrich (CNRS Paris and UEA) and Christian List (LSE); 12. Yuval Salant (Northwestern); Session 7 – Behavioural Choice: 13. Sayantan Ghosal (Glasgow); 14. Dave Freeman (UBC). The conference attracted 59 participants drawn from a wide range of universities in Scotland (Aberdeen, Edinburgh, Glasgow, St Andrews, Stirling, Edinburgh Napier) and around the world (including, in addition to those noted earlier: Brown, Bielefeld, Karlsruhe, Ozyegin Turkey, Queen Mary London, Pisa, UCL, Luxembourg, Manchester, Michigan, Wisconsin, and Yale). The papers, which were submitted in response to a targeted call, were of a very high quality, including several that are now either under second revision or forthcoming in top journals (e.g. Review of Economic Studies). The success of the workshop has given rise to concrete plans for an ongoing series of BRIC workshops rotating among a small number of institutions (organized by Jose Apesteguia and Miguel Ballester in Barcelona in 2014, and Andrew Caplin, Efe Ok and Ariel Rubinstein in New York in 2015, with St. Andrews hosting the event again in 2016 or 2017).



Workshop on “Globalization of Chinese industrial sector: productivity, trade and finance” – September 2nd-3rd 2013, Glasgow.

This workshop was co-organized and co-funded by the Confucius Institute, Glasgow, and the Adam Smith Business School, Glasgow) along with SIRE. There were two keynote talks: Jun Qian (Boston College) on ‘The Political Economy of Corporate Finance: Evidence from ‘Re-nationalization’ in China’; and Johannes Van Biesebroeck (Leuven) on ‘WTO Accession and Performance of Chinese

Manufacturing Firms'. With further presentations from: Daniel Yi Xu (Duke), Zhihong Yu (Nottingham), Richard Harris (Durham), Miaojie Yu (Peking), Mirko Draca (Warwick), Puyang Sun (Nankai), The workshop attracted 35 participants from (in addition to universities mentioned above): Heriot Watt, Glasgow, Edinburgh, Stirling, Dundee, Edinburgh Napier, Strathclyde, Birmingham and the Edinburgh Centre for Carbon Innovation.

SIRE Public Lecture – Jean Tirole (Toulouse) – October 7th 2013, Edinburgh

On the occasion of his admission as an Honorary Fellow of the Royal Society of Edinburgh, Jean Tirole gave a well-attended SIRE-sponsored public lecture on “Monitoring Banks and States: Governance and Reforms in Europe” as well as a research seminar on “Addressing the Patent Thicket”. The lecture attracted an audience of approximately 75, from a range of academic disciplines and a good number of economists from the Scottish Government.

SIRE and SGSS training workshop on “Modern Methods of Programme and Policy Evaluation – October 3rd-4th 2013, Strathclyde

This training workshop was organised by Robert Wright (Strathclyde) and co-funded by SIRE and the Scottish Graduate School of Social Science (SGSS). The workshop was given by Jochen Kluge (Humboldt University, Berlin; and head of the Berlin Office of RWI, an economics think tank). The workshop covered: Foundations of Causal Analysis and Program Evaluation Methods; Randomized Controlled Trial (RCT); Natural Experiment / Regression Discontinuity; Instrumental Variables; Statistical Matching; Difference-in-Differences. The workshop had 40 participants (with a waiting list – it was oversubscribed by 50%) drawn from the universities of: Aberdeen, St. Andrews, Dundee, Edinburgh, Queen Margaret, Edinburgh Napier, Robert Gordon, Stirling, and Strathclyde.

SIRE PhD Masterclass on “Bayesian Inference in the Social Sciences” – November 8th 2013, Heriot Watt.

The masterclass was given by Taps Maiti (Michigan State and Heriot Watt), a Fellow of the American Statistical Association and the Institute of Mathematical Statistics, and on the Editorial Board of Journal of the American Statistical Association. The class brought Bayesian modelling to an applied economics setting, including related frameworks like Empirical Bayes and Hierarchical Bayes, with a special focus on issues relating to modelling and computation. This is first of a series of three masterclasses, the following ones will be in Spring and Summer 2014.

SIRE – Scottish Government Policy Forum: “Successful Exporting: Where does the UK do well and where does it not? Lessons for Scotland” – October 25th 2013, Edinburgh.

The Forum was introduced by Graeme Roy (Scottish Government), who provided a Scottish Government perspective, with presentations by Jonathan Slow (Scottish Development International) on “The changing face of Scottish Trade” and Richard Kneller (Nottingham) on “Successful exporting: where does the UK do well and where does it not?”. The presentations were followed by a lively policy discussion. There were approximately 30 participants, split between government and academic economists.

SIRE – Scottish Government Policy Forum: “Why Do Reforms Fail? The Roots of Reform Resistance” – November 22nd 2013, St Andrews House.

The Forum was introduced by Graeme Roy (Scottish Government), with the keynote presentation given by Friedrich Heinemann (Head of the "Corporate Taxation and Public Finance" department at the Centre for European Economic Research (ZEW) in Mannheim) on “Why Do Reforms Fail? The Roots of Reform Resistance”. The presentation was followed by an open policy debate.

SIRE – SGPE Advanced Training “Numerical Methods for Economists Python Boot Camp (short course on Python programming)”- starting September 2013, Edinburgh

Numerical Methods for Economists is a suite of Python-based lab sessions covering the basic numerical techniques used to solve and simulate non-linear economic models. The emphasis of the labs is on practical application and not on the mathematical theory underlying the techniques. The training is designed for MSc/PhD students who wish to apply the methods

from the lab sessions as part of their MSc/PhD thesis/dissertations. This is a follow up to an intensive one week boot camp, held earlier in the summer, aimed primarily at MSc students. At very short notice (a day or so) this summer course was opened up to PhDs and there were 5 who came (from Dundee, Strathclyde, Heriot Watt, Edinburgh and Durham).

SIRE Young Researchers' Forum - October 25th 2013, Edinburgh

The key note talk was given by Thijs van Rens (Warwick) on “Accounting for Mismatch Unemployment”. With young researcher presentations by: Robert Zymek (Edinburgh), David Comerford (Stirling), and Xiaoshan Chen (Stirling). There were 30 participants from the universities of: Glasgow, Edinburgh, Aberdeen, St Andrews, Edinburgh Napier, Stirling, Strathclyde and Amsterdam.

SIRE Workshop on Microeconomic Theory – November 29th 2013, Glasgow.

This BIC conference followed a similar format to the successful event held in Edinburgh in 2012. There were keynote talks by: Thomas Mariotti (Toulouse) and Joel Sobel (UC San Diego). With further presentations organised by topic: Decision Theory - Tatiana Kornienko (Edinburgh), Tugce Cuhadaroglu (St Andrews), Takashi Hayashi (Glasgow). General Equilibrium - James Best (Edinburgh), Andrew Clausen (Edinburgh), Yiannis Vailakis (Glasgow). Mechanism Design and Social Choice I - Aristotelis Boukouras (Edinburgh), Anna Bogolmonaia (Glasgow), Bram Driesen (Glasgow). Mechanism Design and Social Choice II - Theodore Diasakos (St Andrews), Michele Lombardi (Glasgow), Herve Moulin (Glasgow). Information and Contracts - Daniel Z. Li (Durham), Andriy Zapechelnyuk (Glasgow). Game Theory and its applications - Sayantan Ghosal (Glasgow), Vasco F. Alves (Edinburgh).

SIRE PhD training course on “Search and Matching” – December 6th 2013, Edinburgh

This one day course was given by Philipp Kircher (Edinburgh), a recent SIRE professorial appointee, member of the Executive and Scientific Committee of the Search and Matching Research Group (a European network of academic economists working on search and matching models) and co-editor of the Review of Economic Studies. The morning session covered micro aspects of matching theory in frictionless markets (no search frictions), touching on stable matching theory, which has recently been applied to the allocation of students to schools and for medical interns to hospitals. The afternoon session turned to frictional markets, in which unemployment across different worker types can be discussed. This part will focus mainly on new techniques in this area, where firms can advertise the attractiveness of their jobs to attract workers. The session attracted approximately 30 participants from the universities of: Edinburgh, St Andrews, Glasgow, Dundee, Robert Gordon, and Amsterdam.

Major National and International seminar speakers include:

Davide Debortoli (UC San Diego)	Theodore Papageorgiou (Penn State)
Jaume Ventura, (Universitat Pompeu Fabra)	Dirk Krueger (University of Pennsylvania)
Olivier Compte (Paris School of Economics)	Flavio Cunha (University of Pennsylvania)
Juan-Carlos Conesa (Autònoma de Barcelona)	John Kennan (University of Wisconsin)
Josep Pijoan-Mas (CEMFI, Madrid & CEPR)	Jean Tirole (Toulouse School of Economics)
Manuel Bagues (Carlos III, Madrid)	Jean-Charles Rochet (University of Zurich)
Piero Gottardi (European Univ Institute)	Greg Kaplan (Princeton University)
Etienne Wasmer (SciPo, Paris)	Nicola Pavoni (Bocconi University)
Nicola Fuchs-Schündeln (Goethe Universität)	Victor Rios-Rull (University of Minnesota)
Elena Pastorino (University of Minnesota)	George Mailath (University of Pennsylvania)
Scott E. Carrell (UC Davis)	Robert Shimer (University of Chicago)
Yona Rubinstein (LSE)	Leena Rudanko (Univ of Boston, NBER)
Andrei Levchenko (Michigan)	Benjamin Moll (Princeton University)
Bart Hobijn (Fed - San Francisco)	Andrea Caggese (Universitat Pompeu Fabra)

Olivier l'Haridon (Université of Rennes)	Analissa Ferrando (European Central Bank)
Mónica Martínez Bravo (CEMFI, Madrid)	Fiorella De Fiore (European Central Bank)
Albrecht Glitz (UPF, Barcelona)	Tetsugen Haruyama (Kobe University)
Basit Zafar (Fed - Bank of New York)	Luca Gambetti (Autònoma de Barcelona)
David Jaeger (CUNY, New York)	Karim Abadir (Imperial College London)
Stefan Lauer mann (Michigan)	Fabio Canova (Universitat Pompeu Fabra)
Christopher House (Michigan)	Francois Vaillancourt (CIRANO)
Charles Kahn (University of Illinois)	John Y. Campbell (Harvard),
Garry Young (Bank of England)	Fabio Canova (CREI, UPF)
Peter Egger (ETH Zurich)	Mehdi Farsi (University of Neuchatel)
Stephen Millard, Bank of England	Dan Quan (Cornell University)
Enrique Sentana (CEMFI, Madrid)	Charles F. Mason (University of Wyoming)
Paul de Grauwe (LSE)	Abhirup Sarkar (Indian Statistical Institute)
Simon Price (Bank of England)	Konrad Burchardi (Stockholm SE)
Zacharias Maniadis (UCLA)	Martin Richardson (Australian National Uni)
Friederike Niepmann (Fed- New York)	Lutz Killian (University of Michigan)
Rodney Strachan (Australian National Univ)	Loriane Py (Banque de France)

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