

Comhairle Maoineachaidh na h-Alba

A' brosnachadh foghlam adhartach agus àrd ìre

Annual return [Section 1]

Return approval

Guidance

Please complete all relevant sections for your award over this reporting period. We may ask for supporting evidence. Leave other sections blank.

For further assistance, contact the SFC project officer named in your <u>award letter</u>.

The completed return should be emailed to rosi@sfc.ac.uk including an electronic signature or a scanned, signed cover page by **12:00 on 30 September.**

| Reporting period: | Only adjust dates if, by agreement with SFC, you are reporting for different period than the previous academic year. | 01/10/2014 | 30/04/2016 | |
|---|--|------------|------------|--|
| Award activity: Please give the start and end dates for all the activity funded by this award. | | 01/08/2007 | 30/04/2016 | |
| SFC project code: | HR06012 | | | |
| Award title: | Scottish Institute for Research in Economics (SIRE) | | | |
| Reporting institution: | University of Edinburgh | | | |
| Award contact: | Professor Stuart Sayer (s.sayer@ed.ac.uk; 01316508356) | | | |

| Signature (Reporting Lead) | Prof Stuart Sayer | Date | |
|---|---|------|--|
| | | | |
| Signature (authorised financial officer of reporting institution) | [Please enter signature to endorse the financial statement of this return to SFC in relation to this award] | Date | |
| officer of reporting institution, | Si e in relation to tins awaraj | | |

Award summary

Please insert the summary used in your <u>proposal</u> or latest agreed version (provide date of this revision). We may use this summary in reports to the SFC Board and elsewhere.

SIRE's mission is to develop and sustain a reputation for internationally excellent research in economics; attract high quality staff and graduate students; and foster and disseminate high quality research, including policy-related research. Through pooling, we will enhance critical mass in key research areas, attract top researchers to permanent and visiting positions, develop young researchers to provide the next generation of research leaders, enhance income and attract growing numbers of graduate students to Scotland.

Financial statement

Using the same expenditure categories as in the original <u>proposal</u>, please provide a financial statement accounting for the use of our grant. Partner institutions should be satisfied with the financial information before the authorised financial officer of the reporting institution endorses that SFC funding has been spent in accordance with the purposes for which it was awarded.

Notes:

- (a) Includes 'Restored Funds' earmarked for SIRE Early Career Engagement Grants;
- (b) All Institutions have confirmed that they have at least met their agreed contribution. In many cases the agreed contribution has been substantially exceeded, through additional appointments, premium salaries and co-funding of events.
- (c) Funded from unspent activities budget, of £160,182, carried forward from previous year. All funds spent or committed by April 30 2016 deadline agreed with SFC.
- (d) Funded from carried forward balance of 'Restored Funds' of £158,069.
- (e) Balance of 'Restored Funds' at 31/07/2017, earmarked for ECR Engagement Grants, with no defined spending deadline. We would anticipate spending this comparatively small remaining sum in 2017-18.

| | Reporting Period/ £ | Cumulative award to date/ £ | Total award budget/ £ |
|---|-----------------------|-----------------------------|-----------------------|
| Income Received | | | |
| SFC grant awarded | | £9,360,463ª | £9,360,463 |
| Institutional contribution | | £11,852,538b | £11,852,538 |
| Other co-funding | | | |
| Total Income | | £21,213,001 | £21,213,001 |
| Expenditure (Add or amend categories as needed) | | | |
| Salaries (SIRE Professor & Lecturer Posts) | | £15,130,560 | £15,130,560 |
| SIRE Director, Assistant Director, and Programme Director buyouts | | £757,012 | £757,012 |
| SIRE Centre and Programme Base Support Costs | | £381,202 | £381,202 |
| Activities | £160,182° | £656,970 | £656,970 |
| Additional Post Costs | | £2,399,782 | £2,399,782 |
| Studentships (less reduction in SFC funding in 2011-12) | | £1,648,497 | £1,648,497 |
| Early Career Engagement Grants (from 'Restored Funds') | £128,770 ^d | £209,678 | £238,978 |
| Total Expenditure | | £21,183,701 | £21,213,001 |
| Balance | | £29,300 ^e | |

| Progress on agreed outcomes | | | |
|-----------------------------|---|--|--|
| rogress on agreed outcomes | - | | |

1. How many outcomes does your award have?

0

| | Agreed outcome Use most up-to-date version. If Outcome has been revised since your award letter, insert date of revision. | Is your award on track to achieve this outcome? | Commentary on and evidence of your progress achieved in current reporting year If you have reported <i>yes</i> , provide supporting evidence referring to any key <u>progress indicators</u> set out in your <u>award letter</u> . If you have reported <i>pending</i> , please explain circumstances e.g. work not scheduled to start until later. If you have reported <i>no</i> , please provide an explanation of the specific circumstances. Also briefly outline the effect this is having / will have on the delivery of award. | Geographical Reach of outcome to date |
|---|---|---|---|---------------------------------------|
| 1 | Appoint to SIRE (SFC co-funded posts) | YES ⊠ NO □ Pending □ | All 36 co-funded posts have been filled with high quality appointees. While there has been some turnover, this is to be expected in a lively and competitive global market. In addition to the SFC co-funded posts, there have been a substantial number of further high quality appointments at senior and junior levels. See the appended document for further more detailed evidence. | International |
| 2 | Increase PhD Numbers | YES ⊠ NO □ Pending □ | PhD enrolments over the reporting period averaged 150, almost doubling the pre-SIRE (2000-07) average enrolment of 77. Completions averaged 31 per year, compared to a pre-SIRE annual average of 12. There are good reasons to think that quality has improved, though it is hard to support this claim with systematic quantitative evidence. | International |
| 3 | Increase in research grants awarded, including ESRC Centre or similar | YES ⊠ NO □ Pending □ | Annual grant income averaged £2,413,767 over the reporting period. This more than doubled the pre-SIRE (2002-07) annual average of £1,110,844. Substantial increases in both EU and UKRC grant income were the main components of | International |

| _ | | | | |
|---|--------------------------------------|-----------|---|---------------|
| | | | this achievement, including a substantial ESRC grant for circa | |
| | | | £6 million which meets the ambitious milestone goal of the | |
| | | | award of an ESRC Centre or similar. See the appended | |
| | | | document for further more detailed evidence. | |
| 4 | Increase in publications in highly | YES ⊠ | Using the Journal Ranking of Kalaitzidakis et al (2011), we | International |
| | ranked journals | NO □ | recorded an annual average of 4 publications in the elite top | |
| | | Pending | 5 Journals in 2014 and 2015, compared to a pre-SIRE annual | |
| | | | average from 2000-07 of 1.88. In the top 30 journals, the | |
| | | | annual average was 33.5, compared to 16.13 pre-SIRE. See | |
| | | | the appended document for further more detailed evidence. | |
| 5 | Develop and sustain a reputation for | YES ⊠ | RAE 2008 saw a substantial improvement in performance by | International |
| | internationally excellent research | NO □ | SIRE departments. REF 2014 showed a further improvement, | |
| | | Pending □ | most dramatically at Edinburgh and St Andrews, with | |
| | | | Edinburgh rising from 14 th to 8 th in the UK, and St Andrews | |
| | | | from 28 th to 15 th , in terms of overall average ranking. On the | |
| | | | basis of research outputs, Edinburgh ranks 7 th , St Andrews | |
| | | | 10 th and Glasgow 15 th , with 80% or more of outputs classified | |
| | | | as internationally excellent or world leading. In terms of | |
| | | | research environment, Edinburgh ranks ahead of Warwick | |
| | | | and Cambridge in 6 th place. | |
| | | | During the reporting period SIRE Researchers included: the | |
| | | | President of the Royal Economic Society (RES) 2015-16; the | |
| | | | Secretary General of the RES 2008-15 (created a Vice- | |
| | | | President for Life on demitting this office); and 3 members of | |
| | | | the Council of the RES elected during the reporting period; a | |
| | | | member of Council and member of the Executive Committee | |
| | | | of the European Economic Association; a Managing Editor of | |
| | | | the Review of Economic Studies (a top 5 Journal). | |

| Contribute to the quality of policy- related research activities | YES ⊠ NO □ Pending □ | Taking a set of key general policy journals, plus key journals in two illustrative, topical and important policy fields (the environment and climate change; and population demographics and ageing), the annual average number of articles published by SIRE affiliated authors over 2014 and | International |
|---|-------------------------------------|--|--|
| | | 2000-07 of under 2. As in previous years, the wide range of SIRE events, many of which had an explicit policy focus and/or policy sessions, continued to attract strong participation of government | |
| | | workshop on Well-being, held in September 2015, is particularly noteworthy for being held in the Scottish Parliament. Advanced training workshops on the Scottish Census and Administrative Data illustrate CPD activities. | |
| | | SIRE ECR engagement grants included collaboration with: Office for National Statistics, International Monetary Fund, Behavioural Insights Team, Hungarian CSO, OECD, ASA Bangladesh (a leading microcredit institution), Inter-American Development Bank, a large Italian Co-operative, Food | |
| Foster and disseminate high quality economics research | YES ⊠ NO □ Pending □ | SIRE events continue to attract many of the World's leading economists. A wide range of well-attended focused miniconferences and workshops were held over the reporting period, as well as a substantial number of research seminars attracting an impressive array of speakers. We have also | International |
| | Foster and disseminate high quality | related research activities NO □ Pending □ Foster and disseminate high quality economics research NO □ Pending □ | related research activities NO Pending In two illustrative, topical and important policy fields (the environment and climate change; and population demographics and ageing), the annual average number of articles published by SIRE affiliated authors over 2014 and 2015 was 10 compared to a pre-SIRE annual average from 2000-07 of under 2. As in previous years, the wide range of SIRE events, many of which had an explicit policy focus and/or policy sessions, continued to attract strong participation of government economists and others from outside academia. The workshop on Well-being, held in September 2015, is particularly noteworthy for being held in the Scottish Parliament. Advanced training workshops on the Scottish Census and Administrative Data illustrate CPD activities. SIRE ECR engagement grants included collaboration with: Office for National Statistics, International Monetary Fund, Behavioural Insights Team, Hungarian CSO, OECD, ASA Bangladesh (a leading microcredit institution), Inter-American Development Bank, a large Italian Co-operative, Food Standards Scotland, and Skills Development Scotland. Foster and disseminate high quality economics research YES SIRE events continue to attract many of the World's leading economists. A wide range of well-attended focused miniconferences and workshops were held over the reporting period, as well as a substantial number of research seminars |

| SEC Strategic | Investment Return | [Section 1] | 1 |
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conferences. For example, in the reporting period we have agreed to host: the European Workshop on General Equilibrium Theory 2016; the European Winter Meeting of the Econometric Society 2016; and the Society for Economic Dynamics Annual Meeting, 2017. Such events provide valuable opportunities to promote the high quality research taking place in Scotland and to network with the world's leading researchers.

Young researchers travel grants facilitated presentations by ECRs at a number of major international conferences, including: European Economic Association annual congresses in Toulouse and Mannheim (x7); International Association of Energy Economics, New York; Allied Social Science Association, Boston; Econometric Society, Toulouse; American Economic Association Congress, Boston; European Association for Research in Industrial Economics, Milan; Bank of Finland; NBER Summer School, Boston; Society of Labor Economists, Montreal; Econometric Society World Congress, Beijing; World Economic History Congress, Japan; International Society for New Institutional Economics, Boston.

Add more rows to the table if you have more outcomes.

Unanticipated outcomes

2. Have there been any unanticipated outcomes arising from your award in this reporting period? YES □ NO ☒

| | Details of the unanticipated outcome | How did this outcome come about? | Geographical reach of this outcome? |
|---|--------------------------------------|----------------------------------|-------------------------------------|
| а | | [max 200 words] | [Choose an item] |
| b | | [max 200 words] | [Choose an item] |
| С | | [max 200 words] | [Choose an item] |

Add more rows to the table if you have more unanticipated <u>outcomes</u>.

Award achievements

3. Please provide details of the achievements of your award during this reporting period.

If your response is **yes** to the questions below, please complete the relevant table as requested restricting your answers to this reporting period.

| Has your award enhanced people capacity? | YES □ NO ⊠ | Table 1 |
|--|------------|---------|
| Were there any difficulties in filling any of the posts? | YES □ NO ⊠ | Table 1 |
| Has your award improved facilities or infrastructure at your or other institutions? | YES □ NO ⊠ | Table 2 |
| Was further funding secured by your award over this reporting period? | YES ⊠ NO □ | Table 3 |
| Has your award created new products or inventions? | YES □ NO ⊠ | Table 4 |
| Has your award contributed to colleges' and universities' engagement with external bodies? | YES ⊠ NO □ | Table 5 |
| Is your award connected to any wider recognition for the work of your project or team members? | YES ⊠ NO □ | Table 6 |

| Has your award delivered any other significant achievements that we should be aware of? | YES □ NO ⊠ | Table 7 |
|--|------------|---------|
| Have you put in place arrangements to sustain the <u>outcomes</u> of your award after our funding has ended? | YES □ NO ⊠ | Table 8 |
| Has your award contributed to advances relevant to SFC's statutory responsibilities? | YES □ NO ⊠ | Table 9 |

NB You are only required to complete the sections in Tables 1-5 which are relevant to your award. All other sections should be left blank.

| Table 1 | Type of enhanced people capacity (You should report here on all additional posts created for this project in this reporting period at both HEIs and colleges, not just those funded directly from this SFC funding, but not replacements for existing posts.) (Please do not include any personal details) | Total full-time Equivalents (FTEs) recruited | Nos of FTEs recruited on a permanent appointment | Nos of FTEs recruited on a fixed term basis for the duration of the project |
|---------|--|--|--|---|
| а | Academic research posts | | | |
| b | Academic teaching posts | | | |
| С | Non-academic professional / managerial posts | | | |
| d | Non-academic technical posts | | | |
| е | Non-academic communications posts | | | |
| f | Administrative posts, including clerical posts, secretary and receptionists | | | |
| g | Studentships or other student opportunities e.g. apprenticeship place | | | |
| h | Consultant | | | |
| i | Business secondment | | | |
| j | Other (please describe) | | | |

| To | tal | | |
|----|--|--|--|
| h | Please describe any recruitment difficulties | | |

Commentary: No new posts were directly created by the award, in the sense of being co-funded by the SFC, during the reporting period. The new academic posts and studentships created by SIRE have all been sustained (subject to temporary vacancies arising from turnover) and thus continue to enhance people capacity. As noted above, a substantial number of academic research and teaching appointments, along with studentships, have been made additional to the original SIRE SFC-co-funded posts, further enhancing people capacity.

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| Table 2 | New or <u>improved facilities or infrastructure</u> created in this reporting period? | Please provide details here about improvements created by your award | What was the reach of this improvement? |
|---------|---|--|---|
| а | Equipment | [max 100 words] | [Choose an item] |
| b | Teaching / training facilities | | [Choose an item] |
| С | Research facilities | | [Choose an item] |
| d | Buildings e.g. laboratories / accommodation | | [Choose an item] |
| f | Institutional or sectoral collaborations, including college and university collaborations | | [Choose an item] |
| g | Teaching / training networks / training delivery partnerships | | [Choose an item] |
| h | Research networks / knowledge exchange partnerships | | [Choose an item] |
| i | Other (please describe the improvement) | | [Choose an item] |

Commentary: The limited SIRE funding available during the reporting period helped to maintain research and training networks and training delivery, rather than directly funding substantively new initiatives. More indirectly, the new large research grants, which SIRE has helped to attract, are helping to build and develop research, training and KE networks.

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| Table 3 | Source of further funding secured in this reporting period and its purposes (please tick all that apply) | How much further funding was secured? | Academic staff (Teaching & Research) | Non- academic staff | Studentships / other student opportunities | Facilities & Infra- structure | Teaching & Learning activities | Research activities | Knowledge Exchange & commercialisation activities | Other purposes (please describe in box below) |
|---------|--|---------------------------------------|--|---------------------------|--|-------------------------------------|---|------------------------|---|---|
| 1 | Own Institution(s) | | | | | | | | | |
| 2 | UK Research Councils | 2,228 | \boxtimes | × | × | × | | × | × | |
| 3 | Scottish Government | | | | | | | | | |
| 4 | UK Government ^a | 237 | \boxtimes | | | | | \boxtimes | × | |
| 5 | Enterprise agencies | | | | | | | | | |
| 6 | Industry / Business | 406 | | | | | | × | | |
| 7 | Charities | 214 | | | | | | \boxtimes | | |
| 8 | EU | 1,592 | | | × | \boxtimes | | \boxtimes | ⊠ | |
| 9 | International sources | | | | | | | | | |
| 10 | Others | 151 | \boxtimes | | | | | | | |

Total 4,828

Commentary: The sums reported cover research grant income received by SIRE participating departments (excluding HERU) over the reporting period, extended to include all the 2014-15 and 2015-16 financial years. The 'purposes' are a guesstimate based on limited available data.

Notes: (a) The data bases from which numbers are drawn do not consistently disaggregate funding from UK and Scottish Governments.

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| Table 4 | New products and inventions created in this reporting period? | Total number created? | Estimated total financial value? |
|---------|---|-----------------------|----------------------------------|
| а | Software products | | £ |
| b | Technical products | | £ |
| С | Artwork and other creative products | | £ |
| d | Diagnostic tools or other interventions | | £ |
| е | Training packages | | £ |
| f | Curriculum enhancements | | £ |
| g | Good practice guidelines | | £ |
| h | Toolkits | | £ |
| i | Research tools / methods / databases / models | | £ |
| j | New communities of practice | | £ |
| k | Other (please describe) | | £ |
| | Total | | £ |

Commentary: Use this box to provide more information on your answers in this Table [max 200 words]

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| Table 5 | Type of engagement with external stakeholders in this reporting period (Tick all that apply) | General public | Local authorities including schools | Other public sector | Business (including SMEs) | Charities/ Third sector | Other (please briefly describe) |
|---------|---|-------------------|--|---------------------------|---------------------------------|-------------------------------|---------------------------------|
| а | Communicating knowledge | | \boxtimes | \boxtimes | | | |
| С | Sharing / exchanging knowledge | | | \boxtimes | | | |
| d | Building relationships | | \boxtimes | \boxtimes | | | |
| f | Informing decision making | | \boxtimes | \boxtimes | \boxtimes | \boxtimes | |
| h | Contractual relationship | | | \boxtimes | | | |
| i | Other (please describe) | | | | | | |
| Co | ommentary: | | | | | | |

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Wider recognition for the work of your project or team members?

able 6

(Please do not include here any personal details)

Please tell us about any prizes, honours or other recognition achieved *in this reporting period* by any member of your project team connected with the award, including business and public sector awards as well as academic recognition:

two SIRE researchers received OBEs in 2015 and a further researcher a CBE in 2016 for services to Economics; a SIRE researcher was the President of the Royal Economic Society (RES) 2015-16, and a further SIRE researcher received the distinction of becoming a Life Vice-President of the RES in 2015 on his demitting office as Secretary General of the RES.

| Table 7 | Any other significant achievements of your award in this reporting period? | Please provide details [max 200 words] |
|---------|---|---|
| Table 8 | Have any <u>sustainability</u> arrangements been developed or implemented in this reporting period? | While no new specific sustainability arrangements have been put in place, the ongoing healthy income arising from increased research grants and student numbers provides for the sustainability of the SFC co-funded SIRE posts, together with the substantial number of additional posts and studentships created, as well as providing funding for continuing high quality research and KE events and activities (which are specifically targeted by some grant funding). |
| Table 9 | Have any contributions relevant to SFC's statutory responsibilities been made during this reporting period? | Please provide details [max 200 words] |

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Overall award progress

4. What is your overall assessment of award progress within the reporting period?

| а | Please summarise your award's progress during the reporting period. (This summary may be used to illustrate your award to various audiences.) | Since the great bulk of SFC funding had been spent prior to the reporting period, the achievements of SIRE over this period provide a strong signal of the sustainability of the core outcomes of SIRE. There has been a substantial and very positive step change in economics research activity, culture and reputation in Scotland, which has become firmly embedded. The key disappointment is that we were unable to obtain ongoing SFC funding for core collective SIRE activities and administration and further enhancement to advanced PhD training. |
|---|---|---|
| b | Please describe any <u>impacts</u> of your award realised over the reporting period. | The major impacts of economics research tend to be longer term and more diffuse in nature, as reflected, for example, in the impact cases submitted to REF 2014. Such impact is difficult to pin down within a reporting period. |

| С | Any other comments on your award for this | [max 200 words] |
|---|---|-----------------|
| | reporting period? | |
| | | |

5. Has your award funding finished in this reporting period?

YES □ NO □

If **yes**, please continue and complete <u>Section 2</u>. If **no**, please ensure <u>Section 1</u> is complete and return to SFC as detailed on <u>page 1</u>.

End of award return [Section 2]

Award outcomes

Guidance

Complete this end of award report to help us:

- Gather experiences and views from our investments.
- Understand better what works well in projects and any challenges faced.
- Demonstrate to key stakeholders the impact of our investments.
- 1. Thinking about your award overall how successful do you think you have been in delivering the award overall? Highlight any factors critical to this success and any challenges faced?

| Agreed Outcome (Copy from No 1 in Section 1) | Achieved | Summary of outcome delivery | Factors critical for successfully delivering this outcome | Any challenges faced in delivering this outcome? |
|--|----------------------------|--|---|---|
| Appoint to SIRE (SFC cofunded posts) | YES ⊠ NO □ Partial □ | All 36 co-funded posts have been filled with high quality appointees. While there has been some turnover, this is to be expected in a lively competitive global market. In addition to the SFC co-funded posts, there have been a substantial number of further high quality appointments at senior and junior levels. See the appended document for further more detailed evidence. | The excitement created by the scale of the SIRE development and the high quality of the initial appointments made built momentum, strengthening the signal of a vibrant and dynamic research environment. Limited time pressure giving freedom to hold out to make really strong appointments in a | The global market for top flight economics researchers is highly competitive. Recruitment at this level tends to be time-consuming and can require flexibility in appointment procedures and/or offer packages. Standard salaries, particularly for Lectureships, are low compared to many other highly |

| | | | | highly competitive | ranked institutions, |
|---|--------------------------|-----------|---|------------------------|------------------------|
| | | | | market, particularly | especially in the US. |
| | | | | at Professorial level. | |
| 2 | Increase PhD numbers | YES ⊠ | PhD enrolments have increased from a pre- | | |
| | | NO □ | SIRE (2000-07) average of 77 to an average of | | |
| | | Partial 🗆 | 141 in 2008-15. PhD Completions have | | |
| | | | increased from a pre-SIRE average of 12 pa to | | |
| | | | an average of 28 pa in 2008-15. There are | | |
| | | | good reasons to think that quality has | | |
| | | | improved, though it is hard to support this | | |
| | | | claim with systematic quantitative evidence. | | |
| 3 | Increase in research | YES ⊠ | Average annual grant income, of £2,102,364 | The step change in | Developing large and |
| | grants awarded, | NO □ | in 2008-15, has almost doubled in comparison | the research | complex grant bids is |
| | including ESRC Centre or | Partial 🗆 | to the pre-SIRE period (£1,110,844 between | environment and | onerous and time- |
| | similar. | | 2002-07). Substantial increases in both EU | culture, critical mass | consuming. |
| | | | and UKRC grant income were the main | of high quality | Collaborative, inter- |
| | | | components of this achievement, including a | researchers, and | institutional bids can |
| | | | substantial ESRC grant for circa £6 million, | strong and growing | be particularly |
| | | | which meets the ambitious milestone goal of | research reputation, | onerous, involving |
| | | | the award of an ESRC Centre or similar. See | brought about by | coordination of |
| | | | the appended document for further more | SIRE undoubtedly | multiple parties in |
| | | | detailed evidence. | helped the | contexts where self, |
| | | | | development of | institutional and |
| | | | | successful grant bids. | collective interests |
| | | | | More directly, many | are imperfectly |
| | | | | SIRE appointees have | aligned. |
| | | | | themselves become | |
| | | | | major grant holders. | |

| 4 | Increase in publication in | YES ⊠ | Using the Journal Ranking of Kalaitzidakis et al | Raising realistic | The global |
|---|----------------------------|-----------|--|-------------------------|------------------------|
| | highly ranked journals. | NO □ | (2011), the percentage increase in the annual | aspirations to publish | competition for |
| | | Partial 🗆 | average of articles from pre-SIRE (2000-07) to | in higher-ranked | space in top journals |
| | | | SIRE (2008-15) appearing in top ten Journals | journals through: | is very tough and |
| | | | was 45%, top twenty 35%, top thirty 68% and | building a critical | getting tougher. To |
| | | | top forty 63%. At first glance the increase in | mass of high quality | some extent one |
| | | | top 5 journals, at 7%, looks disappointing. This | researchers; | needs to run just to |
| | | | is, however, misleading since the number of | providing leadership | stand still. Achieving |
| | | | pre-SIRE publications were boosted by some | and mentoring; a | a substantial |
| | | | short articles. The increase in number of pages | judicious mix of | increase in this |
| | | | in top 5 journals, at 59%, gives a better | collegiality and | context is much |
| | | | reflection of the outcome. This signal | competition; | harder than it might |
| | | | strengthens even more if the data period is | networking and | look. |
| | | | extended to encompass 2008-16, bringing the | presentation | |
| | | | increase in annual average pages in top 5 | opportunities in | |
| | | | journals up to 88%. | conferences, | |
| | | | | workshops and | |
| | | | | seminars; etc. In | |
| | | | | essence the kind of | |
| | | | | research | |
| | | | | environment fostered | |
| | | | | by SIRE. | |
| 5 | Develop and sustain a | YES ⊠ | Weak performance in RAE 2001, where no | This output interacts | Key challenges are: |
| | reputation for | NO □ | Scottish Economics department achieved | closely with others. It | the highly |
| | internationally excellent | Partial 🗆 | above a 4, was a catalyst for the original | requires a critical | competitive global |
| | research. | | investment in SIRE. RAE 2008 saw a | mass of high quality | market dominated |
| | | | substantial improvement in performance. REF | researchers at senior | by long-established |
| | | | 2014, showed a further improvement. On the | and junior levels, | market leaders; and |

basis of research outputs, Edinburgh ranked 7th, St Andrews 10th and Glasgow 15th, with 80% or more of outputs classified as internationally excellent or world-leading. In terms of research environment, Edinburgh ranked ahead of Warwick and Cambridge in 6th.

SIRE Researchers include: the President of the Econometric Society, 2010; two Fellows of the British Academy; three Fellows of the Econometric Society; two Fellows of the European Economic Association; a Foreign Honorary Member of the American Academy of Arts and Sciences; a Foreign Honorary Member of the American Economic Association; a member of the Executive Committee of the European Economic Association; the President of the Royal Economic Society, 2015-2016; a Vice President (Life) of the Royal Economic Society; the Secretary General of the Royal Economic Society (2008-2015); the Chairman, co-Director, Editorial Board member and former Managing Editor of the Review of Economic Studies (a top 5 Journal). 5 SIRE academics have been recognized in recent UK Honours lists for services to

delivering and disseminating high quality outputs and engaging pro-actively with the premier league of the international research community. SIRE played an important role in delivering these elements.

the tensions that sometimes arise between the collective pooled interests of SIRE and the interests of individual researchers, departments or universities.

Economics.

| 6 | Contribute to the quality | YES 🗵 | Taking a set of key general policy journals, | A sufficiently broad | There can be |
|---|---------------------------|-----------|---|------------------------|---------------------|
| | of policy-related | NO 🗆 | plus key journals in two illustrative, topical | research | tensions between |
| | research activities | Partial 🗆 | and important policy fields (the environment | environment, which | policy-related work |
| | | | and climate change; and population | encourages, | and engagement |
| | | | demographics and ageing), the annual average | recognises and | and the pressure to |
| | | | number of articles published by SIRE affiliated | rewards high quality | publish in highly |
| | | | authors rose from 2 pre-SIRE (2000-07) to 10 | policy-related work | ranked journals. |
| | | | in 2008-16. | and engagement, and | |
| | | | | fosters interaction | |
| | | | SIRE/Scottish Government "policy forums | between high quality | |
| | | | which began in 2009 have covered a range of | more abstract | |
| | | | areas and have been successful in generating | theoretical and | |
| | | | on-going dialogue. One specific example from | methodological | |
| | | | the support for our Energy Modelling team | research and more | |
| | | | where a successful SIRE event led us to | applied policy-related | |
| | | | establish a cross disciplinary Economics and | research. | |
| | | | Engineering Technical Advisory group on | | |
| | | | Energy and Climate Change involving a | | |
| | | | number of SIRE academics. This group has | | |
| | | | provided valuable assistance in enhancing our | | |
| | | | energy modelling capacity within | | |
| | | | Government." (Gary Gillespie, Scottish | | |
| | | | Government Director and Chief Economist). | | |
| | | | | | |
| | | | SIRE ECR engagement grants have included | | |
| | | | collaboration with: Office for National | | |
| | | | Statistics, International Monetary Fund, | | |
| | | | Behavioural Insights Team, Hungarian CSO, | | |

| Toster and disseminate high quality economics research. Partial □ Partia | | | OECD, ASA Bangladesh (a leading microcredit institution), Inter-American Development Bank, a large Italian Co-operative, Food Standards Scotland, Skills Development Scotland, UNDP Indonesia, Malta Environment and Planning Authority, European Bank for Reconstruction and Development, Hong Kong Monetary Authority, Bank for International Settlements. | | |
|---|------------------------|------|---|--|--|
| Equilibrium Theory, 2016; the European attract further | high quality economics | NO □ | World's leading economists, including a number of Nobel Laureates, to Scotland. The growing ease with which we can attract such leading economists bears testimony to the growing international reputation of economics research within Scotland, as well as helping to further enhance that reputation. Such high quality visits are continuing post-award. In addition to the many more focused events, which are reviewed in the series of SIRE Annual Reports, we have also been able to attract a number of major international conferences, notably: the European Economic Association Annual Congress, 2010; the Review of Economic Studies May Meetings, 2013; the European Workshop on General | experimentation to find event formats which would attract busy researchers to travel to hosting locations. Focused workshops or miniconferences worked particularly well. A promise of funding from SIRE activities budgets (while these lasted) facilitated initial planning of events, to the point where they could | |

| 2016; and the Society For Economic Dynamics Annual Meeting, 2017. It is noteworthy that the latter events took place after the end of the SIRE award, providing a further signal of the sustainability of the step change induced by SIRE. This outcome was also fostered by young researcher's travel grants from SIRE's activitie budgets, which facilitated presentations by ECRs at major international conferences whic met with a stringent quality threshold. | sources. |
|--|----------|
|--|----------|

2. Have there been any unanticipated <u>outcomes</u> arising from your award?

| YES INO | YES | | NO | |
|---------|-----|--|----|--|
|---------|-----|--|----|--|

| | Details of the unanticipated | How was this outcome achieved? | Geographical reach of |
|---|------------------------------|--------------------------------|-----------------------|
| | outcomes | | impact |
| а | | [max 200 words] | [Choose an item] |
| b | | [max 200 words] | [Choose an item] |

| С | [max 200 words] | [Choose an item] |
|---|-----------------|------------------|
| d | [max 200 words] | [Choose an item] |
| е | [max 200 words] | [Choose an item] |

Award Impacts

3. What impacts have arisen from your award?

| Impact focus | Yes / No? | Details of impact Briefly describe the Impacts, how these were supported by specific outcomes from your award and when they occurred. | Geographical reach of impact |
|-----------------------------|---------------|--|------------------------------|
| Added value for the economy | YES ⊠ NO □ | Ongoing work on liquidity, business cycles and monetary policy and a separate strand of ongoing work on liquidity traps, learning and stagnation influenced the thinking of central banks in operating monetary and macro-prudential policy during the 2008 financial crisis and beyond. | International |

| | | Five SIRE-based researchers were members of the independent expert group on | |
|-------------------|-------|--|---------------|
| | | Financial Accountability reporting to the Calman Commission. Several key | |
| | | recommendations of the expert group were incorporated into the Scotland Act 2012. | |
| | | | |
| | | Influence on revised penalty policies of Competition Authorities in UK and France in | |
| | | 2011-12. | |
| | | | |
| | | Work on youth unemployment in the Great Recession had a direct impact on policy | |
| | | introduced by the UK Labour Government in 2009. | |
| | | | |
| | | Work on enhancing the Scottish Government's policy evaluation capacity through | |
| | | development and implementation of regional CGE modelling has an ongoing impact. | |
| | | | |
| | | Work on climate change adaptation, particularly in infrastructure, formed the primary | |
| | | background document underlying the Cancun COP 16 agreement in 2010. | |
| Social and | YES ⊠ | Research on costs of long-term health care continues to influence and inform debate | International |
| cultural change / | NO □ | about social care policy in Scotland and Wales. | |
| benefits | | | |
| | | Research on factors influencing job satisfaction, health and well-being has influenced | |
| | | and informed public debate and UK and EU policy reviews and reports (e.g. the Hutton | |
| | | Report on Fair Pay in the Public Sector 2011). | |
| | | | |
| | | Research to determine whether health inequalities primarily arise from chronic or | |
| | | transient patterns of social disadvantage, to monitor and explain changes in health | |
| | | inequalities over time, and to evaluate interventions designed to tackle health | |
| | | inequalities continues to inform policy debate in Scotland and the UK. | |

| Improvements for Higher or Further Education sector | YES □ NO ⊠ | For example: embedded collaborative culture, or new academic practices [max 200 words] | [Choose an item] |
|--|---------------|--|---------------------|
| SFC's statutory responsibilities | YES ⊠ NO □ | The research strands on job satisfaction, health and well-being; health inequalities; and youth unemployment, cited above, have some bearing on equality and diversity. The work on climate change adaptation has a bearing on Climate Change. In addition, several SIRE researchers have extensive research, including publications and grants, relating to climate change, biodiversity and ecosystem services, and links to groups such as The Edinburgh Centre for Carbon Innovation and ClimateXChange. SIRE activities funding has also been used to facilitate an extensive series of workshops and bootcamps on environmental and energy economics. | International |
| Other valuable impacts from your award | YES ⊠ NO □ | The enhanced international reputation and increase in scale, to which SIRE has contributed, is not only good PR, but has also had a direct economic impact by attracting a substantial number of conference participants and international students to Scotland. The impact of their expenditures on local economies is substantial. Increased grant income from UKRC and EU is also a significant income inflow. | National (Scotland) |

Future Impacts

4. Are there likely to be other impacts arising directly or indirectly from the outcomes of your award in the future?

YES ⊠ NO □

We appreciate that in some areas of investment, <u>impacts</u> are achieved on a longer timescale than during our award funding. If this is the case for your award, please record the circumstances here.

| | Details of anticipated impact | Likely timescale | Likely geographical |
|---|--|--|----------------------------|
| | Please describe the anticipated <u>impact</u> , how specific <u>outcomes</u> / changes arising from your award will underpin the impact (even when link is not simple or direct) | Indicate the likely timing of realising this impact | <u>reach</u> of the impact |
| а | Healthy Ageing in Scotland (HAGIS), which received seed corn funding from SIRE, is expected to have substantial impact on our understanding the circumstances of older people in Scotland, helping to improve health and well-being. This is a large scale long-term project, so the main impacts may take some time to emerge. | This is a large scale long-term project, so the main impacts may take some time to emerge. | National (Scotland) |
| b | The ESRC-funded major MacCaLM project, aims to rethink the foundations of macroeconomics, highlighting the roles of credit and labour markets. Some work strands in the project, relating to credit, have already had impact as noted earlier. This strand includes extensive engagement with the Bank of England and other central banks, and further impacts on understanding and policy are anticipated. The labour market strands also look set to have impact, for example the large-scale experimental work on understanding job search being carried out in collaboration with the DWP. | Ongoing | International |
| С | There are many other research projects, of varying scales, which the SIRE award has encouraged and fostered through improvements in the scale and vibrancy of the research environment, mentoring and leadership, together with some direct financial support. Many of these projects are expected to have impacts, either directly or indirectly through enhanced understanding of an issue. It is difficult and potentially invidious to single out specific projects for explicit attention. | Ongoing | International |
| d | [max 200 words] | | [Choose an item] |

Sustainability

5. Have any specific arrangements been put in place to sustain the <u>outcomes</u> / <u>impacts</u> of this award after SFC funding has ended?

YES ⋈ NO □

Details of sustainability arrangements Please describe each arrangement, how successful it has been to date and how it will be supported in the future a Finance to maintain and significantly add to SIRE's co-funded posts has been obtained from enhanced research grant income, REF-related income, and student numbers bringing increased fee income. This has and will continue

obtained from enhanced research grant income, REF-related income, and student numbers bringing increased fee income. This has and will continue to sustain, and indeed further extend and develop, the critical mass of high quality researchers and the major elements of the enhanced research environment and reputation brought about by SIRE. The success of income generation provides for ongoing sustainability and further development of all the key outcomes of the SIRE award.

Due to the careful management of SIRE activities budgets, including success at obtaining co-funding to support many events, we were able to sustain the activities budgets from the initial 5 year window until the end of April 2016. While regrettably collective SIRE funding has now come to an end, so that the undoubted value-added from the collective activities budgets has disappeared, SIRE departments are continuing to support and host a range of events, linked in a number of cases to grant funding. Examples include the large international conferences, taking place in 2016 and 2017, mentioned above, as well as more specific events such as MacCaLM-related Policy

What do you see as the critical factors for successful <u>sustainability</u> of your award's <u>outcomes</u> / <u>impacts</u>?

The collective excitement generated by the scale of the SIRE award and determination, by participating departments and senior management, to make strong high quality appointments to the SIRE posts, followed on by the desire and pressure to generate the income needed to make these posts sustainable. The very positive step change arising from the strong appointments made and broader enhancements to the research environment added to this desire and provided the foundation needed to enhance income generation.

Successful and productive events create their own momentum, and requirements attached to grant funding can provide additional, more specific, pressures to host dissemination events. The sustained improvement in the research environment and international reputation brought about by SIRE will continue to have a strong positive impact on the quality of events. With seed corn funding from the collective SIRE activities budgets ending, setting up events has become harder and dependent on

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| | Forums with the Bank of England, Sveriges Riksbank, and Department of Work and Pensions. | department funding and grants. We hope that the demonstration effect provided by SIRE events will continue to encourage ad-hoc co-financing arrangements where there is substantial cross institution participation. |
|---|--|---|
| С | The Scottish Graduate Programme in Economics (SGPE), and its governance structure, will continue to provide a collective vehicle for PhD training, thus maintaining this important element of pooling collaboration. | The benefits of collaboration need to clearly outweigh the outside options for all participating departments for the SGPE coalition to remain stable. There have been tensions within the SGPE for some time over the best way to further develop advanced PhD training. This may necessitate more flexible collaborative arrangements, allowing for differing PhD pathways to suit the requirements and aspirations of different institutions. |
| d | [max 200 words] | |

6. If no <u>sustainability</u> arrangements have been put in place, please describe the expected legacy of your award.

[max 200 words]

Lessons learnt

7. Are there insights and / or lessons learnt from undertaking your award?

YES □ NO □

| Lessons Learnt | As well as commenting here on the substantive issues your award was advancing, we are |
|----------------|---|
| | also interested in the way in which your project was undertaken, such as working with |
| | partners and with SFC in addition to your immediate team and institution. Suggestions for |
| | future practice based on your experience with undertaking the award are welcome. |

| а | What worked well in undertaking your award? | The process of recruiting to the SIRE posts and the quality of appointees, the general step change in the quality of the research environment, the range and quality of SIRE events and activities (with some learning to identify event formats which worked well), and income generation to sustain and extend the key SIRE outcomes at individual HEI/department level. A common feature of these aspects is that the collective SIRE-wide interests and the interests of individual participating HEIs, departments, and researchers are all fairly closely aligned. |
|---|---|--|
| b | What didn't work as well as expected and how could things have worked better? | Inter-institutional pooling worked comparatively well in fairly small tightly focused groups of dispersed researchers, such as environment, energy, econometrics, health, and ageing. In such contexts researchers had a strong sense of identity with the subfield, which could in some sense dominate their identity with their home department or institution. Pooling proved somewhat harder in broader more diffuse areas, such as macroeconomics, where the larger departments are closer to having an in-house critical mass of researchers with established research networks outwith Scotland. Large collaborative inter-institutional grant bids also proved difficult. This appears to reflect the extent to which the relevant interests, outlined above, are imperfectly aligned. Effective two-way information flows across the full range of SIRE proved to be a difficulty. This is not surprising given the scale of SIRE, since information flows can easily be problematic within a single larger department. As in other parallel areas (illustrated by Brexit and 'America First') breaking down narrower traditional identities (with individual departments or HEIs) to foster a more collective identity can be a challenge, even where there are substantial potential benefits from cooperation. |
| С | Are there issues which arose over the course of the award which SFC should be aware of for future funding of other investments? | · |

d As a result of undertaking this award will you be changing the way you undertake / manage projects in the future?

A more focused project, where it is easier to build a stronger sense of collective identity would be considerably easier to manage. It would, however, lack the scale, impact and excitement of SIRE and be less effective at delivering such a broad improvement in scale and quality of the research reputation and environment.

| 8. | Any | y other comments o | n your award | and | your experience of | fundertaking it? |
|----|-----|--------------------|--------------|-----|--------------------|------------------|
|----|-----|--------------------|--------------|-----|--------------------|------------------|

| YES | NO | X |
|-----|----|---|
|-----|----|---|

If yes, please provide details [max 200 words]

Award dissemination

9. Please describe activities related to sharing the outcomes of the award, e.g. with others within the public / private sectors.

| а | Have you undertaken activities to disseminate the <u>outcomes</u> / <u>impacts</u> of your award? | YES 🗵 NO 🗵 | No event has been held specifically focussing on disseminating the collective outcomes/impacts of the SIRE award. But, in a more indirect way, the numerous SIRE and post-SIRE events and activities have disseminated SIRE's success, and will continue to do so. |
|---|---|------------|---|
| b | Are there particular outcomes arising from your award that you would be happy for SFC to use to demonstrate the value of investments in Scotland's universities and colleges? | YES ⊠ NO □ | MacCaLM - a circa £6 million ESRC-funded research project bringing together a group of leading economists to re-examine macroeconomic theory, focussing on how malfunctions in labour and financial markets seem to be at the root of macroeconomic failure. See: http://www.maccalm.org/ Contact Tim Worrall (Edinburgh). HAGIS — a longitudinal study of people aged 50+ in Scotland. It collects data on their health, economic and social circumstances; uses this information to help scientists understand the circumstances of Scotland's older people; and will help improve the health and wellbeing of Scotland's older people. See: http://hagis.scot/ Contact: David Bell (Stirling). |

Thank you for completing your end of award report (Section 2). Please email your completed report to rosi@sfc.ac.uk as detailed on page 1.

Definitions

| Proposal | The original statement which you provided to SFC of what outcomes you want to achieve, how you will |
|-----------------------|---|
| | deliver and the costs of undertaking the work. |
| Award letter | Our letter offering funding which set out agreed outcomes, the scale of funding offered and the |
| | conditions of grant. |
| Outcome | The changes or differences you plan to achieve through the activity funded by our award. Outcomes are |
| | the result of the activity, not the activity itself. Outcomes can be changes in behaviour, attitudes, |
| | knowledge, infrastructure, capacities or skills. |
| Progress indicators | Measures which help determine your progress towards achieving the agreed outcomes during the |
| | period of your award. |
| Impact | Any longer term effect of an activity or outcome which adds value or benefit to others, which may |
| | concern, for example: |
| | Improved educational and skill levels of the workforce. |
| | Solutions to societal problems. |
| | Economic impacts. |
| | Improvements in survival, morbidity or quality of life. |
| | Changes in public attitudes on social issues. |
| | Improvements in the regulatory environment. |
| | Improvements in public service delivery. |
| | The 2014 UK Research Excellence Framework exercise used the following definition of impact 'an |
| | effect on, change or benefit to the economy, society, culture, public policy or services, health, the |
| | environment or quality of life, beyond academia'. |
| Geographical reach of | The extent of the geographical reach for each outcome / impact reported on should be recorded using |
| outcomes and impacts | the following categories: |
| | Regional - within the Scottish region where your project is located (e.g. Strathclyde or the Lothians). |
| | National (Scotland). |
| | UK-wide. |
| | International. |

| Enhanced people capacity | New posts created, at both HEIs and colleges, by the project <i>in the reporting period</i> , not just those funded directly from the SFC funding contribution, such academic teaching and research posts, non-academic posts, <u>consultants</u> , <u>secondments</u> or studentships. Current staff contributing to projects as part of their existing role or staff replacements for existing posts should not be included . |
|--|--|
| Improved facilities / infrastructure | New or enhanced training facilities, laboratories, IT infrastructure or newly created people networks including scientific or teaching collaborations (national and international) and knowledge exchange partnerships with business. |
| SFC's statutory responsibilities | These include, in summary: Equality and diversity: the elimination of discrimination, harassment & victimisation and the advancement of equality of opportunity for protected groups (Equality Act 2010) British sign language and Gaelic: facilitation and promotion of the use of these British languages (British Sign Language (Scotland) Act 2015 and Gaelic Language (Scotland) Act 2005) Climate change: deliver reductions in carbon emissions (Climate Change (Scotland) Act 2009) Nature conservation: reduce negative effects on biodiversity (Nature Conservation (Scotland) Act 2004) |
| Consultant | Any person or business contracted but not directly employed by an institution, i.e. HEI or college, to provide advice and services to your project, such as legal advice on commercialisation. |
| Secondment | Any person who continues in employment with an external body, including the private sector, public sector and voluntary or charitable bodies, while providing input to the award. |
| Non-academic professional / managerial | Professional / managerial posts such as knowledge exchange, business engagement or relationship management, student support and quality assurance professionals. |
| Non-academic technical posts | Technical posts such as laboratory, engineering, building, IT and medical technicians (including nurses). |
| Non-academic communication posts | Communications posts such as media, public relations and marketing posts. |
| Non-academic staff posts (All) | All non-teaching or research posts. |
| Communicating knowledge | One way transfer of knowledge from academia to wider audiences. |

| Sharing / exchanging | Two or multi-way communication and dialogue between academia and external communities. |
|--------------------------|--|
| knowledge | |
| Sustainability | Continuing the benefits created by the strategic investment, after SFC funding has ended. This may be in |
| | a different format from the original project. |
| Contractual relationship | Formal agreement to provide / exchange services, which may or may not involve financial payment |