



Scottish Affairs Committee

Rt Hon Alister Jack MP
Secretary of State for Scotland

Andrew Griffith MP
Minister of State
Department for Science, Innovation and Technology

Via email

24 May 2024

Dear Alister and Andrew,

As you know, the Scottish Affairs Committee opened an inquiry into Science and Scotland on 15 June 2023. Since then, the Committee has received and published 37 pieces of written evidence from stakeholders, held six oral evidence sessions as part of the inquiry, and also conducted visits to Edinburgh to explore the challenges and opportunities for the sector. We are very grateful to all who contributed to our inquiry.

Given the imminent dissolution of Parliament ahead of the General Election, the Committee will not have time to agree a report for this inquiry. However, the Committee did have the opportunity, having concluded its evidence-taking, to discuss its conclusions. I am therefore taking this opportunity to write to you to set out the most important messages which, had the inquiry not been interrupted by dissolution, the Committee would likely have reflected in its final report. The Committee very much hopes that, regardless of the outcome of the General Election, the UK Government will bear our observations in mind when taking future decisions about how to support Scotland's science sector.

UKRI research funding in Scotland

Core funding

There has been a decrease in Scotland's overall share of UK-wide funding from the UK Government, with Scotland's receipt of project-specific grants from UKRI falling from 15.7% in 2013-14 to 13.4% in 2020-21.¹ Our evidence suggests that Scotland's share of innovation funding from UKRI is particularly concerning for researchers. We have heard that a key factor causing this decrease in Scotland's attainment of UK-wide project-specific and innovation funding is a difference in core funding. Core funding in England (QR funding, distributed by Research England) has increased at a significantly greater rate than comparable core funding in Scotland (the REG, funded by the Scottish Funding Council (SFC)). Between 2014-15 and 2023-24 the REG increased by 0.9% in cash terms in Scotland, compared to the equivalent QR research funding in England, which grew by 24.7%.²

UKRI project-specific grants only fund 80% of a project's full economic cost, so institutions must fund the remaining 20% themselves. This remaining 20% is usually made up through alternative income sources, including student fees, the core funding grant, or private sources. We heard that not meeting the full economic cost of a project limits institutes' opportunities to access funding as they are "losing money when [they] gain it".³ As a result, Scottish institutions – who have lower core funding, and lower student

¹ SFC, Review of Coherent Provision and Sustainability - phase 3, 29 June 2021

² University of Dundee (SS0015)

³ Q94



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fee income, compared to England – are in a weaker position to make up the remaining 20%, and are therefore less likely to compete in funding bids for UKRI project-specific grants.

As well as the overall amount of SFC core funding, *how* that funding is organised also has a "knock-on effect" of reducing an institution's ability to compete for UK-wide funding.⁴ The SFC supports researchers through three funding streams.⁵ Research England has some equivalents to those streams, but also distributes additional unhypothecated pots of money.⁶ The relatively fewer funding pots available in Scotland means, in effect, that Scottish researchers have fewer opportunities (compared with their English equivalents) to compete for funding, irrespective of the overall amount of money available. For example, we heard that the University of Edinburgh would receive £5 million per year in innovation funding if it was based in England, almost three times as much as it currently does in Scotland.⁷ This, in effect, makes Scottish institutions less competitive for UKRI grants and risks a "downward spiral" and an erosion of the "powerhouse of higher education research in Scotland".⁷

Our evidence suggests that disparities in both the overall level of core funding, and the relatively fewer different funding pots in Scotland compared with England, is hampering Scottish researchers' ability to compete for UK-wide UKRI project-specific funding schemes. When additional funding is announced for English universities through Research England, in general the Scottish Government receives a proportionate increase in funding through the Barnett formula, which it is not obliged to pass on to the Scottish Funding Council.

UKRI should acknowledge that due to the structure and size of Scottish funding programmes, researchers in Scotland face more challenges accessing UK-wide funding schemes, when compared with competitor institutions in England. UKRI should be clear how they will take greater account of this, and should also work with the Scottish Funding Council to better ensure the accessibility of its funding programmes for Scottish researchers.

Funding for IROs

Our evidence suggests that Independent Research Organisations (IROs) are especially disadvantaged by the 80:20 model as they have "no or only partial support equivalent to QR or REG" to supplement research grants.⁸ Most notably, IROs lack income from student fees to help meet match funding requirements. UKRI told us that it is currently looking into "tweaks" that could be made to address the disadvantages IROs face under this model.⁹ The Minister defended the 80:20 model on the basis that it enables more projects to be funded.

It is clear to us that meeting match funding requirements through the 80:20 model is a particularly acute barrier for IROs. While we accept the UK Government's arguments regarding the role of the 80:20 model in allowing more projects to be funded overall, more support is needed to improve IROs' access to funding. We welcome the fact that UKRI is proactively considering how to redress the barriers which Scottish IROs face through the 80:20 model, specifically the difficulties they face meeting match funding requirements.

⁴ Q48

⁵ SFC, [Funding for Research and Innovation](#), accessed 20 April 2024

⁶ Q292; Cross also noted that the SFC does consult research institutions as well as the Scottish Government on how core funding should be divided up into streams.

⁷ Q8

⁸ James Hutton Institute (SS0019)

⁹ Q321



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UKRI should provide updates on this work, and set out what changes it plans to make to the current funding model.

Government understanding of Scotland's science sector

Sector understanding

Throughout our inquiry an oft-cited concern expressed by researchers in Scotland relates to the UK Government's understanding of the research landscape in Scotland, and whether understanding gaps cause barriers for the sector. To improve the UK Government's understanding of Scotland's research landscape, some witnesses called for the UK Government to undertake a mapping exercise.¹⁰ We also heard warnings that such an exercise could not be a "one-and-done" process, due to the nature of the changing landscape. Since we started this inquiry, and since we heard these calls for a mapping exercise, DSIT launched an Innovation Cluster Map. The Map, which shows innovation activity across the UK, could help address the need for a tool to better understand the research landscape in Scotland.

We have also heard concerns that a similar lack of understanding of how SMEs dominate the business base of the research ecosystem in Scotland has caused the funding mechanisms of UKRI councils – such as Innovate UK – to be "problematic" for Scottish researchers to engage with.¹¹ In order to better support commercialisation and industry engagement in Scotland, some witnesses called for Innovate UK to adopt programmes that are better equipped to support the Scottish industry base.¹²

It is difficult to understand the impact the Cluster Map is having on the UK Government's understanding of Scottish researchers, and any benefit the Map may have for scientific researchers in Scotland, as the project was only recently launched. Regardless of existing tools used to understand the research landscape, there are significant concerns that UKRI's policy design does not have sufficient regard to the particular nature of Scotland's scientific research ecosystem – including its SME-dominated business base. While the success rate of Scottish researchers' funding applications is generally high, the UK Government needs to do more to understand and address the barriers that may be preventing more from succeeding or applying in the first place. The UK Government should publish periodic updates of the Cluster Map, and be clear about how it will be used in practice to benefit Scottish researchers.

UKRI physical presence in Scotland

We heard throughout our inquiry that a consequence of the primarily SME-based sector in Scotland is that businesses based there are less likely to "have a seat at the table" when UKRI priorities and funding mechanisms are shaped, notably for Innovate UK.¹² This need for researchers in Scotland to have 'a seat at the table' has been echoed in calls for a more extensive and regular physical UKRI presence in Scotland, to better support Scottish researchers in their engagement

with the organisation and its funding programmes.¹³ UKRI does not have an office in Scotland, although certain councils, including the Engineering and Physical Sciences Research Council (EPSRC), do maintain a physical presence in Scotland through regional engagement managers.¹⁴

¹⁰ University of Edinburgh (SS0011), Universities Scotland (SS0022)

¹¹ Q154

¹² University of Edinburgh (SS0011)

¹³ Royal Society of Edinburgh (SS0025)

¹⁴ Q265



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The EPSRC has been praised for its model of regional contacts, used to promote regional voices within the wider council. The nature of EPSRC's engagement has been highlighted to us as being a model UKRI itself should follow to ensure engagement with the scientific research community in Scotland is enhanced, and that the interests of that community are heard by research councils.¹⁵ We also heard a number of calls for EPSRC's approach to be replicated by other research councils.¹⁶

It is clear from our evidence that Scotland's scientific researchers would benefit from a greater physical UKRI presence in Scotland, as demonstrated by the success of the EPSRC's regional contact system. Such a presence and the engagement it would bring with the research sector could help address concerns from the sector that their voices are not being heard. UKRI should expand the EPSRC model of regional contacts to the other research councils, increasing their physical presence in Scotland to better support Scotland's scientific community.

Geographical spread of funding and cluster coordination

Place priority

Throughout our inquiry, we have heard praise for UKRI's strategic focus on the place-based benefits of its actions and investment, and ensuring this impact is felt in all parts of the UK. One such UKRI initiative that supported this strategic priority is the Strength in Places Fund, which is now closed to applications. The Strength in Places Fund had resulted in £82 million of investment, a quarter of the funding available, being directed to Scotland (compared with the 7.4% of total UKRI spend going to Scotland).¹⁷ UKRI explained that it will need to decide which funds to advocate at the next spending review, but that the Strength in Places Fund is a "strong example" of one they may choose to put forward.¹⁸ However, when asked for its understanding of why the Fund has been such a particular success for researchers in Scotland, UKRI said that although the Fund was designed "to encourage applications from all regions and nations of the UK", it was not able to say what specific factors contributed to the number of successful applications from Scotland; UKRI said it "can only say that a number [of Scottish projects] strongly met the assessment criteria".¹⁹

The UK Government's Science and Technology Framework includes plans to ensure funding and development is felt across the UK. Of particular note to this inquiry was the pledge to raise domestic public investment in R&D outside the greater southeast of England by at least 40% by 2030. Whilst this commitment has been welcomed, we have heard calls for more detail on how this will be done and what attention will be given to devolved nations' policy frameworks.²⁰ We heard that there must be more of a "focus on what really works for different regions in the UK" and, in particular, the SME-dominated business base in Scotland, if the 40% target is going to be met.²¹

We welcome the strategic priority of place launched under UKRI's 2022-27 Strategy, and the commitment to raise R&D investment outside the southeast of England. However, to date, the trajectory of UKRI policy has not been in favour of Scottish researchers. UKRI must

¹⁵ University of St Andrews (SS0006), University of Glasgow (SS0010)

¹⁶ Universities Scotland (SS0022)

¹⁷ Q148, UKRI total spend in Scotland 7.4% in FY 2020-21 UKRI (SS0017)

¹⁸ Q320

¹⁹ Correspondence with Dame Jessica Corner on the Strength in Places Fund, dated 8 and 16 May 2024

²⁰ University of Glasgow (SS0010), Alliances for Research Challenges (SS0007), University of Glasgow (SS0010)

²¹ Q12



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consider ways of ensuring science researchers in Scotland are able to benefit from its commitment to raise investment and compete for a proportionate amount of the funding available.

We also welcome that the Strength in Places Fund has proved beneficial for researchers in Scotland. However, it constitutes only a fraction of the funding offered by UKRI and is in any case now closed to new applications. We are also concerned that, despite the Fund being championed by UKRI as part of its efforts to support all nations of the UK, UKRI was not able to tell us what factors meant Scotland specifically was so successful in it. This does little to allay concerns about UKRI's understanding of Scotland's research ecosystem, or its ability to consciously design policies such that Scotland's researchers can be most effectively supported. UKRI should undertake a review of the Strength in Places Fund to identify the characteristics which meant Scottish researchers were so successful in it. UKRI should consider replicating those elements in future funding schemes in which Scottish researchers are underrepresented, to ensure Scotland receives its fair share of UK-wide funding, and UKRI's world-class places priority is properly satisfied.

Innovation clusters

Both the UK Government's Science and Technology Framework and the Scottish Government's National Innovation Strategy share plans for proposed innovation clusters. Whilst most organisations we have heard from broadly supported plans for such clusters, the possible benefits of better coordination between the UK Government's Framework and Scottish Government's Strategy have also been highlighted.

We support plans for R&D clusters in Scotland and recognise the advances in research and innovation they can enable. We can see both Governments are seeking to promote such structures and to provide clear opportunities for funding organisations such as UKRI to support them through schemes like the Strength in Places Fund. For such plans to succeed and achieve maximum impact, co-ordination between the UK and Scottish Governments is needed.

The UK and Scottish Government's cluster plans must be co-ordinated in order to maximise impact and ensure appropriate focus. The UK and Scottish Governments must work together on plans for R&D clusters, to ensure that the Science and Technology Framework aligns with the National Innovation Strategy to best support innovation in Scotland.

Supporting spin-outs

Retaining spin-outs in Scotland

Concerns regarding the retention of spin-outs has been an ongoing theme in this inquiry and was summarised as: "we build them, then they leave".²² We heard that to prevent scientists in Scotland being attracted to other parts of the world, more must be done to support the scaling up of spin-outs, particularly technical companies, including more private and public investment to support scaling up.²³ During a visit to the Higgs Centre for Innovation in Edinburgh, we heard from sector representatives about the need for more innovation hubs and flexible lab spaces, particularly to support researchers as

²² University of Dundee (SS0015)

²³ Q14



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their ventures grow in size.²⁴ Such infrastructure is currently more accessible in England, forcing many companies to leave Scotland and move to the southeast, taking the economic benefits of their work with them.²⁴ This lack of development space and infrastructure is causing Scottish cities to lose the firms their researchers create.²⁵

As science spin-outs seek to grow, difficulties in scaling-up often force them to move out of Scotland and to the southeast of England or abroad. Increasing the availability of facilities to help them grow, notably innovation hubs and flexible lab spaces, is key to keeping these companies, and the economic benefits they bring, in Scotland.

Investing in research spaces to help boost innovation and skills should be a joint aim of the Scottish and UK Governments. The UK Government should work with the Scottish Government to ensure a joint approach to developing relevant infrastructure in Scotland, notably increasing the availability in innovation hubs and flexible lab space, in order to retain spin-outs and ensure the economic benefits of such home-grown research remain in Scotland.

Support for spinning-out

Throughout our inquiry we have heard that more needs to be done to improve the support available to researchers in the initial spin-out process. During a roundtable discussion with science spin-outs and start-ups at the Higgs Centre for Innovation, we heard calls for the provision of independent advice from sources outside of the universities from which the projects are spinning-out. Participants explained that when commercialising their research, those spinning-out must enter negotiations with the universities, to agree shares and terms of IP ownership.²⁴ We have heard how challenging this process can be, particularly as these researchers often have little commercial experience. Currently, the main source of support for researchers in this process comes from inside the university itself, which roundtable participants highlighted to us as presenting a clear conflict of interests.²⁴

It is clear to us that advice given to innovators who are seeking to spin-out from universities needs to be independent of the main technology transfer office within their university. Researchers often have little commercial experience and their primary source of advice for these negotiations is often the technology transfer office of the university itself, which poses obvious challenges and constitutes a barrier to effective and fair negotiations.

To best support spin-outs, the UK Government should promote policies which ensure that independent sources of support and advice are available outside the university from which researchers are spinning out, or from an appropriately independent source within the university. The UK Government should include actions to deliver access to independent advice and support in its planned response to the independent review of university spin-outs, ensuring that they are integrated into the general network of support for innovation in the science sector.

²⁴ Note of visit to Higgs Centre for Innovation and National Robotarium, Edinburgh, Scotland, 29 January 2024

²⁵ Further written evidence, University of Dundee (SS0031)



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Regardless of the outcome of the General Election, I hope that this summary of our findings will be helpful to the UK Government in considering how it can further support the sector. This letter will be published on our website. Our successor Committee may wish to publish any response.

Yours sincerely

Pete Wishart MP
Chair, Scottish Affairs Committee