

Written Evidence Submitted by The University of Edinburgh

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1. Context

Findings from [NAO's Summary UKRI management of the Industrial Strategy Challenge Fund Report](#) published 5th Feb. 2021 highlight many of the issues the University and our stakeholders faced. This response represents these perspectives. Alignment with the findings in the NAO Report is referenced.

2. ISCF Investments

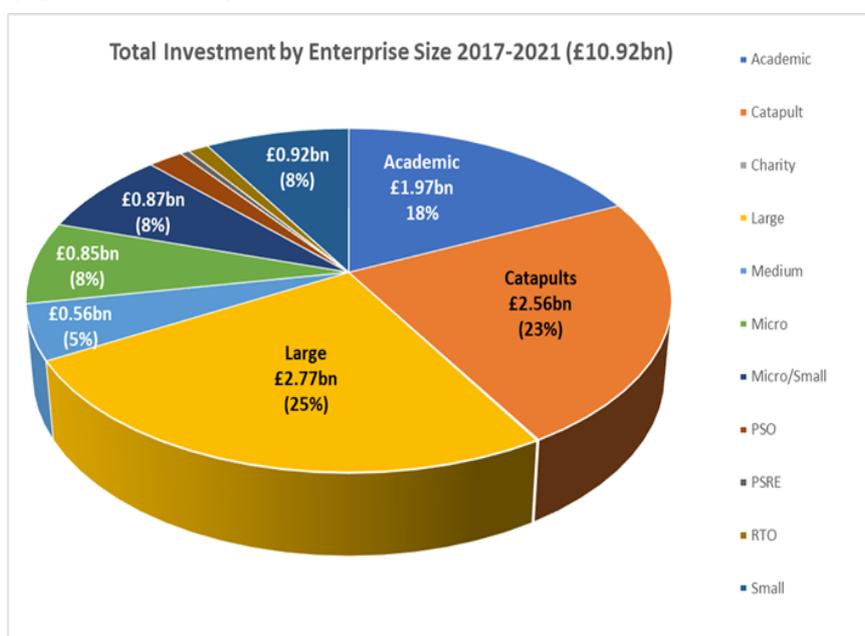
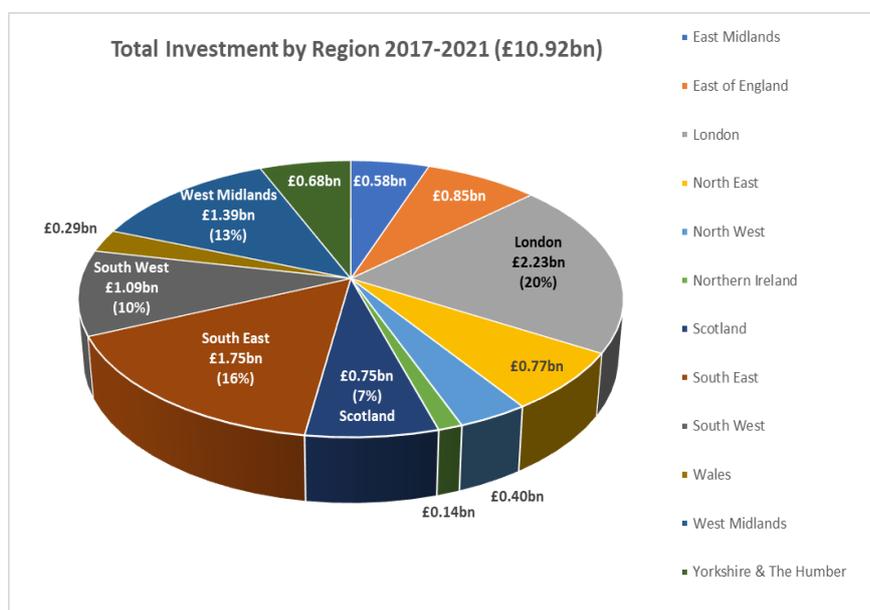
Data and comments below are derived from Innovate UK transparency data to 1 Jan 2021 (alignment with sections 13 and 14 on p9 of the NAO Summary Report). Whilst their analyses differ slightly, the key messages are similar. The regional disparity of investments is highlighted as a recommendation (26c, p13) in line with the Government's 'levelling up' agenda.

By Region (points 14; p9 & 26c; p13)

Chart 1 shows ISCF investment by region over the period 2017-2021. **Scotland has only received 7% (£0.75bn) of the total ISCF investments made.** Notably London (£2.23bn; 20%); the South East (£1.75bn; 16%); and South West (£1.09bn; 10%) have received proportionally greater funding which collectively accounts for 46% (£5.07bn) of total ISCF investments made. The West Midlands has also received substantial investment; when this funding is added to that of London, the South East and South West collectively it amounts to 59% (£6.46bn) of the total ISCF investment.

By Enterprise Type (point 13; p9)

Chart 2 shows the breakdown of investments by enterprise type. **Of note is the high levels of ISCF investment, £2.56bn (23%), given to the Catapults.** This figure does not include the award of



£4.5m (2018) given to the University of Warwick to support operating costs of the High Value Manufacturing Catapult (this is included in the academic awards). Relative to investments given to industry the Catapult investment of £2.56bn is not far from that given to large enterprises £2.77bn (25%). Although collectively medium, small and micro enterprises have secured £3.2bn (29%) of the investment, individually, each of these enterprise types has only secured investment <£1bn.

These investments highlight enhanced opportunities for regions with more mature ecosystems, hosting a strong mix of large and SMEs communities, as compared to Scotland where SMEs predominate. A key question is whether this is in the longer term interest of the whole of the UK? We think not.

3. ISCF Investment Pathway

Below is a diagram from the Summary Report of the key stages of ISCF investments from identifying challenge priorities to funding of projects (p6). The following insights relate to this pathway; unfortunately, they are hard to evidence formally, but perhaps are important points for consideration.

Key stages in approving challenges and then projects

Two key stages need to be completed before funding can be distributed to support projects



Step One: Identifying and approving challenges Challenge Expressions of Interest (Eoi)

There have been limited open calls for Expressions of Interest to propose challenge areas for investment across the Waves.

More inclusive consultation would be welcomed.

Step Two: Identifying and approving projects Funding Call Design Consultation

Generally, there has been limited transparency regarding the consultation process relating to calls design/structure within each challenge priority area. The University was advised (primarily via Innovate UK and KTN Managers) that there had been various closed consultation meetings comprising stakeholders from industry and academia who had helped to inform call design (eg Manufacturing Made Smarter Fast Start call). The selection process for invitees participating in these consultations was deemed "privileged" and not for disclosure. Invited academics and industry to these closed meetings undeniably had an advantage supporting: readiness for calls; advanced insights on the scope of calls; and an opportunity to build consortia with relevant industry/academic partners, particularly important where calls had a short deadline.

However, during Wave 2 Innovate UK did invite Expressions of Interest to attend small stakeholder meetings to inform aspects of a forthcoming call or to support the development of consortia in real

time. However, these opportunities have been infrequent and only in one/two challenge areas. The selection criteria for choosing invitees to these stakeholder meetings was not transparent nor was a list of attendees available.

Also, more clarity around significant investments such as the Accelerated Detection of Disease Challenge and why there is not more open opportunity to access this funding like other challenges.

In our view, more consultation and transparency regarding call design would benefit the whole UK rather than those inside an 'apparent privileged circle'.

4. ISCF Funding Process & UKRI's Ability to Attract competitive bids

Shortness of Call Deadlines

Deadlines between call launch and submission are typically: 8 weeks for R&D calls but can be 6 weeks or less; around 12 weeks for larger Centres/Hubs or Demonstrator calls. In some instances calls have been open for only just over 4 weeks (eg Manufacturing Made Smarter, Round 1 Fast Start) with the briefing events taking place during this period.

Very short deadlines compromise the ability of industry and academia to prepare competitive bids, thereby reducing the number of submissions. This leads to missed opportunities for UKRI to consider potentially transformative research that could drive industry productivity and growth across the UK. The optics are not good, giving rise again, rightly or wrongly, to a perception of 'favoured bidders'. Twelve weeks seems a reasonable period to pull together a team and a compelling bid from scratch.

Information Events and Briefing Events

When available, Information Events can provide an additional 2-3 weeks prior to a call launch and formal Briefing Event. These offer industry and academia additional time to begin to scope potential projects and form consortia. However, Information Events are not consistently applied across challenge calls.

If Innovate UK more consistently used Information Events across all challenge calls it would increase the number and especially the quality of submissions.

In relation to past physical Briefing Events these were often superficial, offering little insight beyond the basic call outline. Their ability to attract a representative industry audience to support networking was often far from optimal. However, due to Covid-19, KTN's more accessible webinar events have supported increased representation from Challenge Directors and offered more insights on challenge calls; they also appear to have attracted increased industry engagement. Particularly useful online events have promoted 1-1 engagement using the Meeting Mojo platform to help companies and academia build collaborations.

It would be good if KTN/Innovate UK evaluated their approach to events and considered utilising a combination of on-line and physical events which ensured more dedicated 1-1 meeting opportunities to support cross-industry and academia collaboration.

Application Development

The awareness of ISCF opportunities within industry appears to be limited. Very often it is the university that encourages industry to engage in ISCF funding calls despite this being an industry-focused funding stream.

ISCF applications are by nature complex and often built around a consortium. The process is overly complicated, with the level of detail required extensive and repetitive. Industry partners are often inexperienced in writing grants and require considerable support in drafting and development, project management and connecting a range of consortium partners to meet call briefs. In our experience

Industry is highly dependent on support from the academic institutions – this support is not well-recognised within Innovate UK. Actually, this remains a fundamental weakness of the

system. UKRI, with its constituent research councils and Innovate UK, has the opportunity to break further the barriers between universities, spin-outs/start-ups and major industry. Equally valuing all parts of the ecosystem is a strong step to making such progress.

Industry Appetite for Funding Model

The Innovate UK funding model and match funding requirements is often seen as unattractive, both by large and small companies. The requirement for match-funding is expected to become even more challenging in the wake of Covid-19. Despite successfully applying for ISCF funding, one project between the University and an industrial partner has already been withdrawn as they were unable to provide match funding due to investment partners pulling out as a result of Covid-19.

Match funding, the complexity of the process and resource requirements to support bid development to a funding stream with perceived low success rates are potential disincentives, especially to SMEs with limited resources.

Application Submission Process

The application submission process is disjointed where an academic partner is involved. For industry applications, the current submission process requires academia to utilise both the Innovation Funding Service (IFS) and Je-S. In some instances, this results in duplication of effort and can be time consuming. The IFS platform is not user-friendly and does not readily support the joint development and drafting of applications.

A more collaborative and streamlined platform would support competitive bids.

Quality of Assessor Feedback

The quality and depth of Assessor feedback is variable. In some cases feedback is constructive, providing applicants with a clear pathway to address project shortcomings, but in others feedback is very limited. Whilst we understand that assessors will have differing views as to an application's quality and viability, the aims here, surely, is to assist the development of the sector as a whole. The near misses are the next successes.

More consistent levels of feedback would be welcomed.

Review Panel Membership

Unlike the Research Councils there is no transparency regarding Innovate UK review panel membership.

Availability of Innovate UK's review panel membership would benefit applicants and represent appropriate transparency.

Areas of Future Focus

The requirement for match funding was a challenge for some companies pre-Covid and is expected to be even more so now.

ISCF would likely be more attractive if match funding could include in-kind as well as cash.

Furthermore, some companies are awarded ISCF funding only to fail the subsequent financial checks –

A tool for companies to quickly determine their financial viability for funding pre-application would help to avoid this, which wastes effort and brings the scheme into poor repute

The National Audit Office notes an average of 24 weeks¹ to appoint permanent Challenge Directors in 2019-2020, whilst this is an improvement on the previous 37-week average it is still

likely to have a negative impact on the ability to design and announce calls in a timely manner, potentially leading to Challenge underspend. It is vital that permanent Directors are appointed to a Challenge as soon as possible, ideally to be in place from day one of a Challenge launch.

Where significant delays have occurred in the appointment of Challenge Directors, often resulting in the re-design/re-focusing of challenge priorities, this has a negative impact on industry and academia's expectations and their preparations for calls.

The full impacts of COVID 19 and Brexit on the economy and individual sectors are yet to be realised however, it is clear that public R&D funding will play a major role in the nation's recovery.

More open challenges with the ability to flex in response to industry needs as they arise would be welcomed.