

The role of technology, research and innovation in the COVID-19 recovery

1. Summary

- 1.1 Russell Group universities have played a leading role in the fight against Covid-19, from facilitating ground-breaking research on the virus, to producing new ventilator and testing technology, to providing community support and offering housing and facilities to healthcare workers. Researchers at the Universities of Oxford, Imperial, Bristol and Southampton are carrying out vaccine trials and many of our universities have devoted laboratories to Covid-19 research.
- 1.2 The Comprehensive Spending Review (CSR) will set the fiscal environment in which policy decisions on how we invest in technology, research and innovation are taken. Our CSR submission to Government addresses questions around economic opportunities and challenges resulting from the pandemic, sets out priority areas for intervention and highlights measures that will maximise the economic impact of the UK's world leading research base. As our CSR submission is directly pertinent to the questions posed by the Committee we submit it into written evidence. In addition, we would bring the following points to the attention of the Committee.

2. Investing for rapid growth: supporting technology, research and innovation

- 2.1 Government will need to focus its support on sectors that can drive economic recovery through skills and productivity growth in every region. The UK's research and higher education sectors are areas that deliver significant returns in terms of economic growth, jobs and sustainable development across the country. Every £1 of public funding spent on R&D for example raises private sector output by 20p each year in perpetuity by raising the level of the UK knowledge base.¹ For every £1 of public research funding they secure, Russell Group universities deliver an average return of £9 to the UK economy.²
- 2.2 There is strong evidence demonstrating the transformative role universities play in boosting productivity through enhancing the skills base and delivering world leading R&D. The Office for National Statistics estimates that around a fifth of the rise in productivity between 1994 and 2019 can be attributed to improvements in the quality of the workforce, especially those with higher education qualifications.³
- 2.3 Current regional inequalities in productivity are apparent: gross value added per hour worked (GVA/hr) is a third higher in London than the national average, while the Northeast, Midlands, Yorkshire & Humber, Wales and Northern Ireland all have GVA/hr levels ranging between 11% and 17.5% below the national average. Closing these gaps is fundamental if we are to support levelling-up across the country. Investing in high-level technological skills, supporting and enhancing our research skills pipeline and doubling down on innovation programmes which support

¹ Haskel J, Hughes A, Bascavusoglu-Moreau E (2014) The Economic Significance of the UK Science Base. A report for the Campaign for Science and Engineering

² Halterbeck M, Conlon G, Julius J (2017) The economic impact of Russell Group universities. A report for the Russell Group <https://russellgroup.ac.uk/news/economic-impact-of-russell-group-universities/> :

³ Written answer to a Parliamentary Question by Lord Duncan of Springbank, 7 January 2020 <https://questions-statements.parliament.uk/written-questions/detail/2019-12-19/h166>

businesses as they work to turn R&D advances into commercial products should be critical elements of our economic response to the pandemic.

- 2.4 Government will need to ensure any conditions attached to sectoral support do not serve as additional barriers to regional and local investment decision-making. For R&D, one approach to ensure this would be to channel funding through trusted regional hubs, such as research-intensive universities, which can work with local partners to identify the needs of their communities and make decisions on the most impactful interventions.

3. Covid-19 response: support for research

- 3.1 Within R&D, the Government's approach has been to address the short-term pressures facing the sector, before taking on longer-term challenges around research sustainability; this is sensible. However, clarity around the timing and content of the Government's short-term interventions is key if they are to be effective in protecting the UK's research talent and overall capacity for research.
- 3.2 Government announced universities would be able to access a welcome package of grants and loans to protect research activity in the autumn, but there remain uncertainties around how much support will be available to individual universities, when universities will actually be able to draw on this support and the terms and conditions which will be attached to any grants or loans.⁴
- 3.3 For financial planning purposes, this means universities have had to continue to plan much as before: pausing some activities and making provision (or at least plans) for other measures in order to maintain short- to medium-term financial stability. Clarifying the details of the support package and committing to a clear timetable for its delivery should be a priority ahead of the Spending Review.
- 3.4 Short-term measures should also be accompanied with steps to put publicly-funded R&D on a more sustainable footing for the future. At present, Research Council funding only supports 74% of the full economic cost (FEC) of delivering research programmes⁵. With charity funders of research already confirming significant cuts in investment⁶, looking again at the overall funding model for R&D will be crucial if UK research is to provide us with a lead in the technologies of the future and deliver the innovation and productivity gains needed to drive post-Covid-19 recovery. The R&D Roadmap published by Government is a positive step in this regard and we look forward to working with Government on implementing its strategy for R&D led growth and social prosperity.

September 2020

⁴ <https://www.gov.uk/government/news/government-to-protect-uk-research-jobs-with-major-support-package>

⁵ See Table 5 in Annual TRAC 2018-19 [Sector summary and analysis by TRAC peer group](#).

⁶ For instance, Cancer Research UK (CRUK) has announced a 5-10% reduction on existing CRUK awards, along with a statement that they will not fund new research for at least the next 6 months and expect their income to drop by 20-25%. See CRUK's [Covid-19: Open letter to cancer researchers](#).