

## Science and Technology Committee (Lords) Science Research Funding in Universities

19 June 2019

### *Session I*

#### **Witnesses**

- Mr David Sweeney, executive chair of Research England, UK Research and Innovation
- Dr Alex Marsh, deputy director of strategy, UK Research and Innovation

### *Session II*

#### **Witnesses**

- Lord Macpherson of Earl's Court

#### **Overview**

The Science and Technology Committee heard evidence on the condition of funding university research and development in the UK.

### *Session I*

#### **Augar Review**

The session was opened by the Chair, Lord Patel (CB) who asked what impact the cuts to university fees would be upon research, as proposed in the Augar Review.

Dr Alex Marsh, deputy director of strategy, UK Research and Innovation (UKRI), responded that if the recommendations of the review were implemented in a way that did not protect university sustainability, there would be a detrimental impact. It would be pivotal, he continued, that any reduction in fees was compensated for elsewhere, with additional funding found for teaching and funding.

Lord Kakkar (CB) asked how UKRI would analyse the impact of and respond to a reduction in fees that was not compensated for to which Mr David Sweeney, executive chair of Research England, UKRI, responded they would consider alternative allocation of resources. However, the reduction in funding would undermine the Government's two-point-four percent target and impact upon university research capabilities.

Baroness Morgan of Huyton (Lab) asked whether there was a concern that any substitute funding would be aimed at particular courses, giving precedent to some subjects over others.

Sweeney replied that it was not for UKRI to comment on how the education system was funded beyond ensuring the flow of the supply chain of researchers.

Lord Griffiths of Fforestfach (Con) asked what incentives could be offered to the private sector to make up for the potential reduction in funds to which Sweeney said that the reduction in money was

more likely to limit and restrict private funding and the capability universities had to engage with business.

## QR

Baroness Young of Old Scone (Lab) raised concerns that quality-related research (QR) had seen a decline in its real terms value and asked what UKRI's position was on QR.

Sweeney recognised that there had been a thirteen percent decline in real terms in QR funding, however argued that had been resolved through increased funding through the Research Councils since 2015. Sweeney recognised the importance of QR, noting that it was a stable form of funding for research.

He further said that though QR did not provide for the full economic cost of research, nor did any fund public or private. Universities were not simply research contractors but active partners and strategic decision makers, he said.

Was there was a need to reassess entirely the QR system, Lord Kakkar asked.

Sweeney replied that levels of QR were in the right place at the moment and were it to be reduced, the outcomes would be damaging to university research. However, there was also no evidence that QR needed to be increased, he said, as universities were effective at meeting their funding needs utilising both QR and other funding streams.

Marsh added that UKRI were cognisant of the risks to research funding of the Augar Review and of Brexit, as well as other issues, and recognised the importance of QR funding being maintained in light of those risks.

## Two-Point-Four Percent Spending Target

Baroness Young asked whether UKRI had assessed what additional money would be required for the UK to reach the two-point-four percent target to which Marsh replied that the target included both the public, private and charity sectors across the UK. He said that it was critical to meet the target that there was an increase in public funding to incentivise private funding.

Marsh said that whilst UKRI were conducting studies on those figures, he was unable to share them with the committee. However, he added that there would need to be roughly a doubling of research and development funding with a substantial and sustained increase in public funding.

Lord Mair (CB) asked what the role of Innovate UK would be in achieving the two-point-four percent target.

Marsh replied that Innovate UK was pivotal in UKRI as whilst the research councils were concerns with private investment it was Innovate UK's primary focus. The organisation further provided a wealth of expertise to UKRI and they had played a key role in designing and delivering the Industrial Strategy Challenge Fund.

Lord Vallance of Tummel (Lib Dem) questioned whether there was a potential role for further fiscal incentives to the private sector to encourage research work with universities to which Marsh responded yes. He said that UKRI had already increased their funding incentives and as a result powerful collaboration between the research base and industry.

Baroness Morgan of Huyton (Lab) noted that more researchers would be needed in order to meet the two-point-four percent target, which necessitated funding more PhDs. Baroness Morgan asked what additional funding and support UKRI was providing for that increase.

Marsh responded that UKRI recognised the importance of both grant funding and investing in people to meet the target. They had supported the training in PhDs in several ways, through Research Council funding and partnership training, complimented by funds from Research England, he said. **There was more than needed to be achieved**, Marsh continued, therefore UKRI were currently building the evidence base to understand the necessary trajectory of public funding into PhDs.

**He further said that attracting and retaining the best talent was pivotal, therefore workplace culture and immigration were integral to the matter.**

### **Discovery Research**

Baroness Neville-Jones (Con) raised concerns that **funding was increasingly being focused away from discovery research to applied research, in line with the industrial strategy.**

Marsh replied that UKRI believed in the importance of discovery research and advocated a sensible strategy for funding that type of research. He recognised that a large portion of the additional seven billion pounds invested in R&I was being oriented towards practical and applied research in line with industrial strategies. However, he said that UKRI was advocating on behalf of discovery research and was currently developing and implementing funds for that type of research.

### **Brexit**

Lord Renfrew of Kaimsthorn (Con) asked whether there was capacity in the system to support basic or discovery research where at the present time it was predominantly funded by the EU.

Marsh responded that the funding that UK universities and the research sector more broadly received from the EU was extremely important. He said that the Government had been clear that it would underwrite the funding from Horizon and wanted close collaboration with Horizon in the future. However, Marsh added that it was important to recognise the important of that funding and the necessity of securing funding to make up for the gap in any money lost after Brexit.

Baroness young questioned whether collaborations with EU funding were declining as a result of Brexit to which Marsh said that UKRI were looking closely into the issue and though they had heard there was a problem in that regard, there was currently no evidence of that.

Sweeney added that it was an issue UKRI took seriously and that there were specific examples where collaboration appeared to have stopped in preparation for Brexit.

### *Session II*

### **Augar Review**

Asked how the Treasury was likely to respond to the Augar Report and whether they were likely to make up for the gap in funding created by its proposals, Lord Macpherson of Earl's Court told the committee that whilst he could no longer speak for the Treasury, they would approach it both from an economics and financial ministry perspective.

He said that the Treasury was in favour of a more skilled workforce as that led to greater prosperity and increased revenue and that the Treasury would be nervous regarding the reduction of student fees. Lord Macpherson noted that the Government might make up for the reduction in the short term but that might not be sustainable.

Baroness Young asked what types of decisions the Government was likely to make in light of the Augar Review.

Lord Macpherson replied that the university sector was a massive positive for the UK and that funding high quality research was unambiguously good for the economy. Which, he added, was recognised by successive governments.

However, he noted the difficult context in which funding research was to be discussed, including Brexit, the housing crisis and the crisis of social care and local authority services. Therefore, Lord Macpherson said, whilst the Government said it considered research funding a priority, there were difficult trade-offs to be made.

One concern regarding Auger, Lord Macpherson said, was its demand for greater centralisation. He said that market mechanisms and educated choices on the ground were the best ways for universities to decide what and how they funded subjects and research.

### **Applied Research**

Lord Kakker raised concerns that funding in future would be directed more towards applied research than basic and fundamental research.

Lord Macpherson replied that it was fundamental research that provided the greatest public good and without it applied research would not be possible. A sensible strategy for funding both was necessary, he said. The Government should be incentivising and enabling fundamental research and skills which was fundamental to growth, he added.

### **Student Fees**

Lord Vallance questioned whether there should be a universal cap on fees to which Lord Macpherson replied that when the gap was first implemented he believed it would just keep steadily increase. There was scope for increasing the limit, he said, as long as society was prepared to provide support to students that could not afford the fees. Furthermore, a situation with fees as high as for many Ivy League schools in the USA would not be desirable, he said.

### **Industrial Strategy**

Lord Mair asked how the Government would attain its target of two-point-four percent of GDP spend on research and innovation.

Lord Macpherson replied that targets were important in focusing aspiration but that it was important for the Government to ensure implementation of actions to meet the target. He said that R&D was positive for the economy and was likely to improve society in the long-term and therefore had to be prioritised over current consumption. The Treasury had to work with BEIS and industry to analyse how to optimise state spending on R&D and incentivise the private sector to further invest.

Asked by Lord Mair what steps the Government could do to incentivise industry, Lord Macpherson noted the success of UKRI's challenge funds and match fund programmes. There were also the tax credits, he said