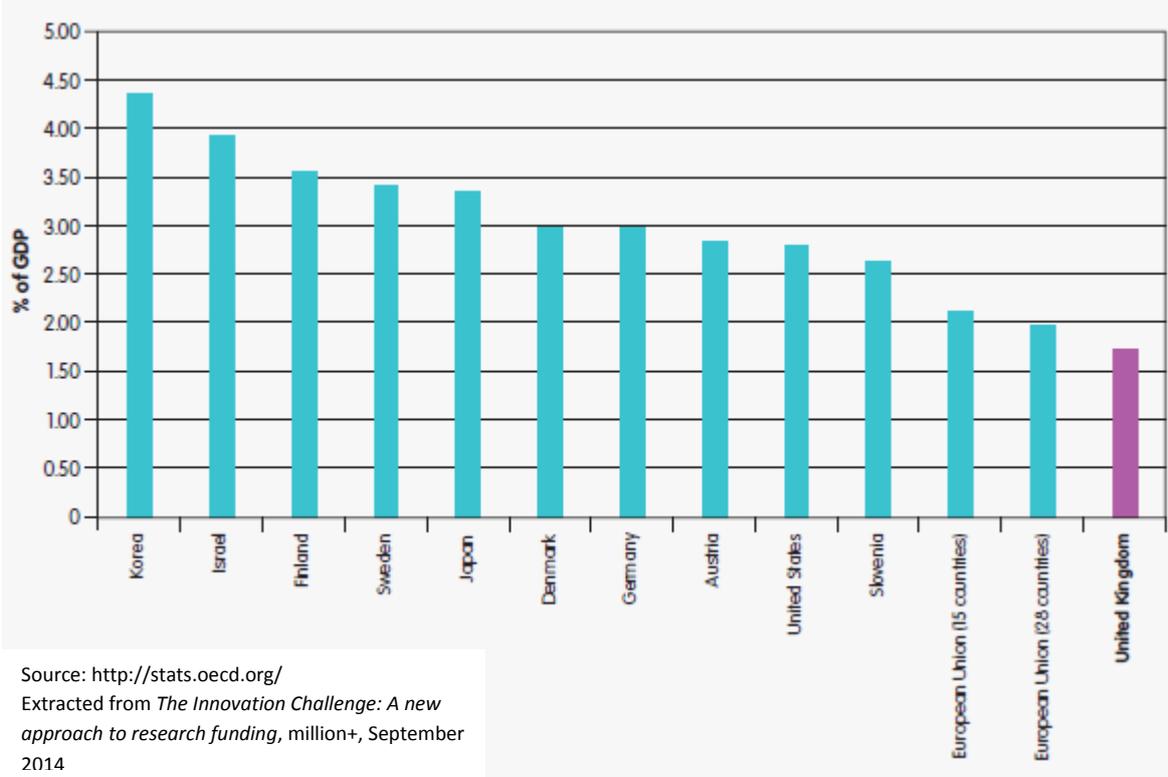


Summary Report

The Innovation Challenge: A new approach to research funding (September 2014)

The Innovation Challenge: A new approach to research funding, published by the university think-tank million+ investigates the scale of investment of the UK in science and innovation compared to other countries, and reviews the history and impact of university research funding distribution models. Successive governments in the UK have lauded the role of research in creating economic growth. Investment in innovation is valued to the extent that the science and research budget has been ring-fenced in cash terms since 2010 when most other areas of government spending have been significantly reduced or removed altogether. However, investment in research and development (R&D) by the UK is low compared to its OECD competitors



The report calls for a new approach to guarantee the UK steps up to the innovation challenge. million+ recommends that the next government fund research capacity in all universities and create a new stream of funding for translational research in order to support innovation, address imbalances in regional growth. The think-tank also argues that students are entitled to have access to research-informed teaching and facilities wherever they study.

Key findings

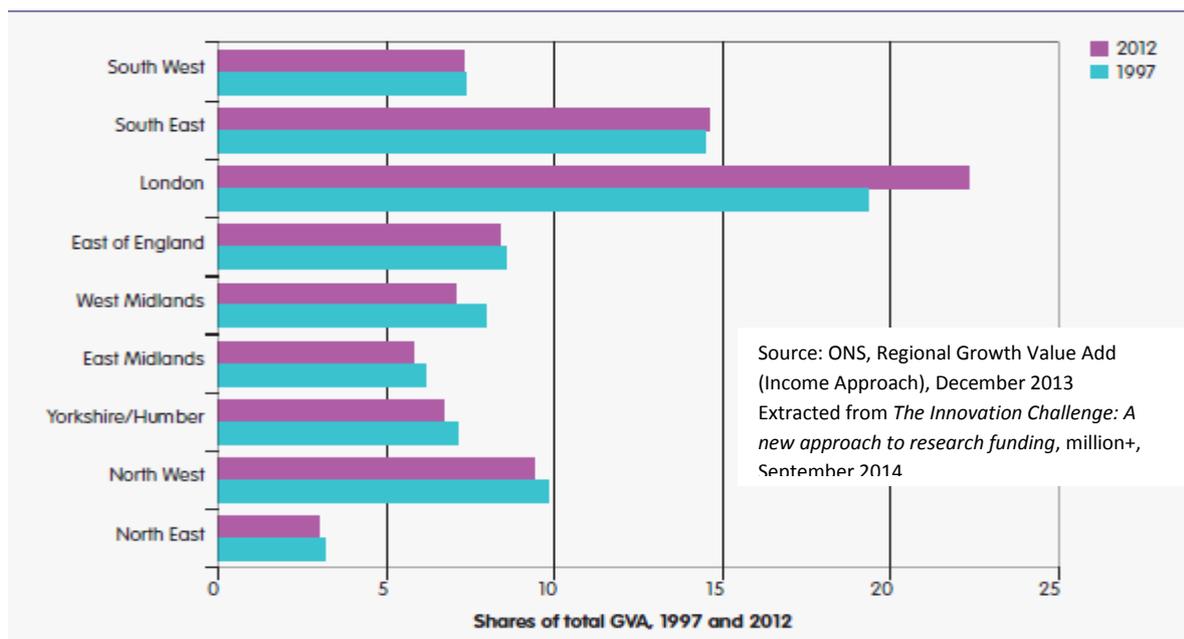
- The UK invests less in publicly funded research and development (R&D) as a percentage of GDP than the leading 22 OECD countries and is 19th of OECD countries in terms of private sector investment in R&D as a percentage of GDP; the UK also invests less in R & D than the average of other EU Member States. Between 2011 and 2012 the UK’s expenditure on research and development decreased by 3% in real terms. This reduction was the result of a decline in the

value of government expenditure but also a decline in business and industry investment.

- Because of a focus on narrow definitions of excellence, by 2012-13, 25% of the £1.9bn of research funding provided by taxpayers was allocated to five universities with 12 institutions receiving 50% of the funding in spite of there being no reassessment of research quality
- Research funding policies concentrating investment in a small number of universities create inequity for students, waste the talents of university staff across the sector and limit interaction between universities, local businesses and the not-for-profit sector which are seeking to develop new products and services
- A focus on STEM risks under-estimating the value of research in the social sciences and creative industries in which the UK is currently world-leading
- The UK's current approach to research funding stands in stark contrast to the Nordic model and other countries which fund research capacity and translational research and have better records in innovation along with attracting private R&D investment
- In addition to adopting a new target to increase investment in research, the next government should ensure that all universities are funded to develop research capacity and also establish a new stream of funding for translational research to improve Britain's record in innovation

Missed opportunities for growth

Investing in higher education makes economic sense and will generate significant impact across the regions. Supporting universities and businesses to collaborate, translate research for commercial purposes and invest in innovation will have significant positive impacts on the economy. The way in which government provides investment for the research base determines the extent to which universities can respond to the needs of national and regional stakeholders as well as to new and emerging markets and supply chains. The impact of research funding policies upon regional capacity and growth appears to have been given little thought by government. There are stark difference in the growth achieved by London and the South East compared to other regions in England.



Recommendations

The report calls for new approach in particular to funding the translational research which business and SMEs need to help them bring products to market, innovate and respond to changing technologies and demands.

In Scotland there is a growing recognition that a new strategy is required, that new disciplines and emerging research areas should be valued and that all universities are part of the solution to the country's ambitions. In comparison in England, research funding is increasingly seen as 'a closed shop'. This limits opportunities for business and the not-for-profit sector to access excellent research from universities in their localities but it also creates more inequity in the unit of resource for students who are entitled to access research facilities and research informed teaching in whichever university they choose to study.

The consequences of policies which have resulted in the hyper-concentration of research funding are clearly set out in this report but we also outline a series of recommendations and lay down a challenge to the political parties as they prepare their 2015 general election manifestos. These recommendations set out in detail how growth by research can support the regeneration of Britain.

- The UK Government should increase its investment in science and innovation and set a target to be in the top ten of OECD countries by the end of the next Parliament in 2020.
- New approaches are needed to ensure taxpayer investment is more widely distributed so that businesses, wherever they are located, can benefit from the expertise of research staff and students also get a better deal
- The UK Government should continue to fund excellent research wherever it occurs in universities but amend the criteria to avoid critical mass thresholds excluding smaller units of researchers from funding allocations
- Funding for 2* research should be restored and an expanded science and innovation budget set aside to invest in research of national significance
- Account should be taken of the impact of government investment strategies in research on the institutional unit of resource available to invest in the student experience
- All universities with research degree awarding powers which currently do not benefit significantly from other taxpayer research funding should be guaranteed funds to invest in research infrastructure and staff capacity
- A new stream of funding should be established to support translational research in universities which receive less research funding from the Funding and Research Councils
- The importance of investing in STEM subjects is accepted but under-investment in social science and research associated with the creative industries must be addressed