



RESPONSE

MillionPlus submission to the BIS Select Committee inquiry into the government's industrial strategy

INTRODUCTION

1. MillionPlus is the Association for Modern Universities in the UK, and the voice of 21st century higher education. Modern universities – in their teaching, research, knowledge exchange and collaborations with businesses – contribute significantly to an innovative and competitive economy. They are key economic, social and cultural powerhouses in their immediate localities, as well as for the UK as a whole. The government should recognise this by adopting a strategic approach to the role of higher education and research that emphasises the value of modern universities in particular to supporting growth across all parts of the UK.
2. MillionPlus believes that there is a need for the government's industrial strategy to ensure that areas outside of London and the South East also benefit. The most recent data from the Office for National Statistics examining the regional gross value add demonstrate that London and the South East continue to dominate in terms of growth, value and share of the total UK economy.¹
3. Therefore, it is essential that the industrial strategy has a regional focus and, as part of this focus, that the government seeks to promote investment in measures and assets that are already successful. MillionPlus believes that the government's industrial strategy should:
 - Recognise the role of modern universities in supporting innovation in businesses and public services that drive economic growth across the country, and the role these universities play in boosting educational participation and attainment to provide individuals with the necessary high level skills to be successful in the workplace
 - Support investment in applied and translational research that enables businesses – particularly small and medium enterprises – to contribute to economic growth
 - Provide targeted regional funding for regional strategies that support collaboration between universities and businesses or public services
 - Create a new Small Business Agency with a regional focus that reports directly into the Department for Business, Energy and Industrial Strategy
 - Increase government funding for research and development to ensure the overall UK investment reaches 2.5% as a percentage of GDP by the end of the parliament.

¹<https://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedincomeapproach/december2015>

- Provide tax breaks to employers to support them to invest in upskilling and professional development for their employees. These incentives would encourage part-time and work-based continuous development, including employer-sponsored degrees.
- Focus on boosting educational attainment and higher education participation to increase the proportion of people in each area of the country acquiring high level skills

SUPPORTING INVESTMENT IN RESEARCH AND DEVELOPMENT

4. Modern universities make significant contributions to important areas of the UK economy with their research activities. The most recent assessment of the research of UK universities demonstrated that 53% of research at modern universities was judged as world-leading, or internationally excellent. In addition, 61% of research at modern universities was judged to have outstanding or very considerable impact. The impact of research is a key indicator for the government when considering the value of its investment.²
5. However, the policies of successive governments have created a disproportionate and concentrated research funding system that threatens the long-term sustainability of substantial amounts of research. Despite the demonstrable success highlighted by the assessments of the government-endorsed research excellence framework, new analysis conducted by MillionPlus shows that in 2015/16 just three universities (2% of the HE sector in England) received 25% of the funding allocated on the basis of these assessments. By comparison, 77 universities (64% of the HE sector in England), shared only 10% of the available funding allocated on the basis of the research excellence framework assessments.³
6. The reality of policies such as these is that the government is failing to build on the achievements of universities that support growth in local economies across the UK. This concentration of funding, and the possible adverse consequences of it, is recognised by the government. Shortly after his appointment as Universities and Science Minister, Jo Johnson MP said in a speech (MillionPlus emphasis):

"At present, 46% of public investment in research goes to the golden triangle. This reflects the strength of internationally-renowned universities in London, Oxford and Cambridge. We must and we will continue to fund research on the basis of excellence and ensure we are competing with the very best in the world.

But we do have to ensure we recognise that other parts of the country have proven research excellence in their universities, and ensure we fund excellence wherever it is found in order to realise the productivity gains that we have seen in the Golden Triangle. To achieve this, we need a new approach – one that promotes and protects our reputation for world-class science, and also drives growth and raises productivity for the whole of the UK."⁴

7. An industrial strategy should seek to mitigate this funding concentration by introducing new investment in applied and translational research, targeted at universities currently in receipt of lower levels of public research funding, that could support innovation in businesses, SMEs and public services to boost economic growth across the country. This investment would better support universities and SMEs in all parts of the country, rather than concentrating investment in a small number of geographical areas. SMEs employ 60% of the UK population and have a combined turnover of £1.8tn. As such, they are vital to the economic success of the country and an industrial strategy needs to ensure that they are able to work effectively with universities to drive innovation and increase economic growth.

² See *Is science and research funding in higher education meeting the challenges of the 21st century*, MillionPlus, September 2016: <http://www.millionplus.ac.uk/policy/policy-briefings/policy-briefing-is-science-and-research-funding-in-higher-education-meeting-the-challenges-of-the-2>

³ See *Is science and research funding in higher education meeting the challenges of the 21st century*, MillionPlus, September 2016: <http://www.millionplus.ac.uk/policy/policy-briefings/policy-briefing-is-science-and-research-funding-in-higher-education-meeting-the-challenges-of-the-2>

⁴ <https://www.gov.uk/government/speeches/one-nation-science>, Jo Johnson MP, 16 July 2015

8. The need to address the imbalanced economic growth in the UK as evidenced by the Office for National Statistics⁵ means that the industrial strategy has to include a strong regional focus to mitigate against the impact of concentrated investment.
 9. A new fund for applied and translational research, targeted at universities, would be one element of this mitigation. However, the government needs to also ensure that the industrial strategy commits to ring-fenced regional funding for specific regional strategies. There are significant collaborations between universities and businesses that successfully apply academic know-how to key industrial challenges, resulting in increased efficiencies which boost economic growth in local areas. Examples of these collaborations include the work of the University of Sunderland with Nissan and the University of Cumbria with the nuclear industry.
 10. These collaborations often fall outside the traditional definitions of original (blue-sky) research or applied research, and as such the right investment route can be hard to identify, despite the benefits they can bring to local areas. In some cases, EU funding for structural investment is used, but the consequences of Brexit mean that this route will become unavailable. The industrial strategy provides the government with an opportunity to rectify this and invest in activity that can boost regional economic growth.
 11. The potential of small businesses to contribute to regional economic growth has often been undervalued in the UK. By comparison, the Small Business Administration in the United States has been strengthened by the Obama Administration to ensure that it can promote investment in economically disadvantaged regions and help innovative small businesses obtain early stage financing.
 12. As part of its industrial strategy, the UK government should establish a well-funded small business agency along the lines of the US example. This agency should be mandated to support innovative small businesses and start-ups as a key step to addressing the imbalances in regional economic growth.
 13. Increasing support for SMEs, providing incentives for entrepreneurial collaboration between universities and businesses and providing targeted regional funding as part of a focused regional element of the industrial strategy is particularly important for a sector such as the creative industries. This sector is comprised of SMEs and micro businesses, which often lack the capacity (both in terms of staff or funding) to enter into research collaborations with other organisations. Although the majority of the creative industries are located in London and the South East, it is also the case that there are high concentrations of creative industries in other regions, adding value to their local economies. The government needs to ensure that the industrial strategy has not only a regional focus, but a focus within regions on sectors such as the creative industries.
- The industrial strategy should seek to redress the concentration of research funding in a small number of universities by creating a new fund for applied and translational research to support innovation in businesses, SMEs and public services to boost economic growth across the country.
 - The industrial strategy should provide targeted regional funding for regional strategies that support collaboration between universities and businesses or public services

⁵<https://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedincomeapproach/december2015>

- The industrial strategy should create a new Small Business Agency with a regional focus that reports directly into the Department for Business, Energy and Industrial Strategy
- 14.** In addition to the government using the industrial strategy to ensure its investment in research and development benefits universities in all parts of the countries, there is a strong argument to increase this investment overall. The UK is way down the list of OECD countries in terms of investment in research and development as a percentage of GDP – a situation that has persisted for at least 15 years. The UK's investment in research and development has hovered around 1.6% of GDP since 2000, with the average across OECD countries being closer to 2.5%.⁶ The UK's 2004-2014 Science and Innovation Framework committed to increase the total UK spending to this 2.5% figure by 2014. The OECD figures suggest that where government investment in research and development begins, so private sector investment follows – in most cases about one-third of the investment comes from public funding and two-thirds from private funding.⁷
- 15.** The rational for supporting innovation in business and industry through research programmes has been recognised by governments with developed higher education university systems, and used to justify public investment in research and development. Countries that do well in this area of investment do so because business and industry are able to build on a strong pattern of government investment in the research base and infrastructure.
- 16.** Therefore, in order for the UK to compete with these countries, overall UK investment needs to reach 2.5% of GDP. This means the government needs to boost its investment to much closer to 1% of GDP compared to the 0.4% it was in 2014 (the latest year for which the OECD has UK data).
- The industrial strategy should include a commitment to increase government funding for research and development to ensure the overall UK investment reaches 2.5% as a percentage of GDP by the end of the parliament.

SUPPORTING HIGHER LEVEL SKILLS

- 17.** Investing in higher education, whether for school leavers and older learners, for people about to enter the employment market or for those already in it, makes economic sense and generates value in the regions. A successful, innovative and competitive economy needs highly-skilled individuals, with the resilience, flexibility and problem-solving attributes to cope with the demands of 21st century workplace.
- 18.** An industrial strategy needs to harness the ability of universities to support businesses in developing their workforce. Modern universities have long-standing traditions of offering more flexible study routes, accrediting workplace learning and developing multi-disciplinary, vocational, professional courses. However, the 2012 tuition fee and funding reforms exacerbated a decline in the part-time enrolment that enabled people already in work to learn while earning, and improve their existing skills.
- 19.** Opening up and promoting higher education to students of all ages, particularly to those already in the workplace, will benefit individuals and employers. Increasing skills and knowledge of employees will

⁶ <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>

⁷ See *The Innovation Challenge*, MillionPlus, September 2014: <http://www.millionplus.ac.uk/policy/reports/research-report-the-innovation-challenge-a-new-approach-to-research-funding>

increase productivity and output, which in turn adds economic value to the UK as a whole and, because universities are dispersed around the country, contributes to more dynamic regional economies.

20. The government's industrial strategy needs to build on the expertise of universities to achieve this, and should ensure that employers and employees are incentivised to take up opportunities for part-time, work-based professional development. This would enable employers to sponsor degrees and other learning opportunities to upskill their workforce. Successive governments have used tax credits to incentivise businesses, particularly SMEs, to invest in research. The same approach should be taken with continuous professional development, and the industrial strategy provides an opportunity to do that.
 - The industrial strategy should provide tax breaks to employers to support them to invest in upskilling and professional development for their employees. These incentives would encourage part-time and work-based continuous development, including employer-sponsored degrees.
21. Ensuring that there are more graduates in the areas where businesses, public services and other organisations need highly qualified staff is an effective investment. It is also shown to impact positively on regions. Analysis for MillionPlus conducted by London Economics shows that, while many graduates will leave a region where they studied to seek work in London and the South East, in other regions very high proportions of graduates reside, study and then work in the same region. In the North-East and the North-West, for example, at least 75% of graduates in work there also studied in the same region.⁸
22. The same analysis also showed that, in the majority of regions in England, the economic impact generated by higher education institutions is retained in those regions. To take the North-East again, 80% of the income generated by higher education institutions in the region (around £1.4bn per annum) stays in that region. In the North-West, the equivalent figure is 76% of the income generated (but a higher figure - £3.3bn per annum). By comparison, less than half the income generated by higher education institutions in London and the South-East is retained within these regions.⁹
23. This economic impact is achieved despite lower educational attainment and university participation rates in some regions. Incentivising and encouraging participation in the regions as part of the industrial strategy is therefore very likely to have positive outcomes in terms of regional growth, as well as having wider positive spill-over effects for businesses, public services and other organisations in regional economies.
 - The industrial strategy should include a focus on boosting educational attainment and higher education participation across the country

⁸ See *Smarter Regions, Smarter Britain*, MillionPlus, 2014 <http://www.millionplus.ac.uk/policy/reports/research-report-smarter-regions-smarter-britain-boosting-regional-growth-through-universities>

⁹ See *Smarter Regions, Smarter Britain*, MillionPlus, 2014 <http://www.millionplus.ac.uk/policy/reports/research-report-smarter-regions-smarter-britain-boosting-regional-growth-through-universities>

SUMMARY

- 24.** MillionPlus believes that higher education and university research can play a vital role in ensuring that the government's industrial strategy creates an innovative and competitive economy. It is vital that the government recognises the role of modern universities in supporting innovation in businesses and public services that drive economic growth across the country, and the role these universities play in boosting educational participation and attainment to provide individuals with the necessary high level skills to be successful in the workplace.
- 25.** An industrial strategy that attempts to 'pick winners' will not be a successful one. Governments often struggle to do this well, with innovative, new ideas and inventions being hard to specifically plan for and encourage.
- 26.** An industrial strategy underpinned by a regional focus that builds on existing success, incentivises further activity in areas that have proved effective, and invests in capacity building measures such as research excellence and higher education participation will deliver benefit to both the UK as a whole, and to local economies. Universities have proved time and again to be organisations that can educate, innovate and drive economic growth. As such, the government should consider them fundamental to a 21st industrial strategy.