

Maximising local economic impacts of R&D investment in the West Midlands

Unattributed summary of CaSE session at the West Midlands Innovation Board meeting on Thursday 5th September 2019.

This roundtable discussion with participants from across the West Midlands’ diverse research and innovation community, including industry, academia and local enterprise partnerships, to explore the distinctive role the West Midlands can play in meeting the Government’s ambition to support prosperous communities across the UK through the Place agenda. The strengths of the West Midlands in meeting this target and the enablers and barriers on the path to meeting this goal were discussed.

This summary is not CaSE policy but will form part of our ongoing programme of work on the Government’s Place agenda. CaSE are leading discussions in the regions to collect an evidence base on place-based R&D interventions and how different sectors collaborate to facilitate local economic growth. This roundtable part of a series focusing on the Place agenda, to understand how best to support the delivery of local benefits and growth from R&D investment and inform delivery of the 2.4% target.

Summary of enablers and barriers of enhancing research and innovation in the West Midlands

ENABLERS	BARRIERS
<ul style="list-style-type: none"> • Home to several world-leading research intensive universities, innovation centres and research headquarters of multi-national businesses 	<ul style="list-style-type: none"> • Lack of autonomy afforded to the region by central UK government
<ul style="list-style-type: none"> • Sense of social purpose to tackle social issues facing the region 	<ul style="list-style-type: none"> • Limited by availability of VC funding
<ul style="list-style-type: none"> • Retention of highly-skilled graduates in the region 	<ul style="list-style-type: none"> • Flexibility of science parks across geographies
<ul style="list-style-type: none"> • Close partnerships between universities, businesses and LEPs 	<ul style="list-style-type: none"> • Regular fundamental changes in national R&D policies

Opening remarks

It was said that there remains a strategic issue where regions across the UK do not get the autonomy, or the punching power, that they should command given their role in research and innovation across the UK. The West Midlands is home to a number of world-leading research intensive universities, UK-leading centres of innovation and research headquarters of several large multinational organisations. The West Midlands Innovation Board steers and helps to stimulate innovation in the region, by giving guidance and help in accessing innovation funding and increases the speed that the organisations can do so. The Board also acts as a facilitator for the Combined Authority to be driver of innovation.

It was also said that in the region, process innovation was just as important as product innovation. The drive to incremental innovations would be key in increasing productivity and unleashing potential in the region.

Strengths

It was reiterated that the West Midlands has world-leading universities that act as centres of innovation, particularly in life sciences, engineering, manufacturing & design and digital. There is also encouraging work going on between universities in the region coming together to tackle social challenges in the West Midlands. These universities were also seen to be good at attracting national and international funding, both from Government sources and from industry. The large multinational industrial organisations invest significantly in R&D in the region which leverages good relationships with universities. This was said to have a cascade effect on the supply chains of these large organisations, facilitating innovation up and down supplying partners.

It was said that in order to be profitable, local businesses needed to be internationally focused so these businesses had to ensure their innovation could have an impact on the global market. In this sense, it was crucial that these businesses weren't underselling themselves.

There was agreement that the strengths of the West Midlands were well identified in the Science and Innovation Audit, but what wasn't well identified is how the West Midlands has distinctive strengths, or how these strengths weigh up against those in other parts of the UK. The Local Industrial Strategy was said to have done a better job of identifying some differential sectors. It was believed that the local impact of R&D capacity and capabilities were extremely difficult to distinguish from national and international impact. As impact from innovation was often a mixture of these, and it was felt much more work would need to be done to more effectively assess local impact of R&D.

The local aspects of R&D were seen to be more important for different types of organisations. For many of those world-leaders in the region, particularly the larger universities, businesses were attracted to work with them because of their work, not because of their location. However, for some universities, upskilling the local population and providing societal benefits to the region were paramount.

There was complete agreement in the room that the most important factor to attracting and supporting businesses in the local area were the availability of highly-skilled people, largely provided by the many universities in the West Midlands. The ability of the West Midlands to retain graduates had been higher than ever before, along with the numbers of people within the UK moving to the area at a higher rate than before, give a strong indication that the West Midlands is strengthening and providing more high quality opportunities for skilled workers.

It was said that businesses are more likely to make a decision on where to operate because of the availability of skilled workers than R&D activities going on in the local area. The challenge was laid down that the impact that having a highly-skilled population had on attractiveness of an area for R&D should be assessed due to its importance. It was said that analysis of improvements in skills provision are not often included in success metrics for research and innovation, and how businesses follow patterns of skilled people, and skills development, should be assessed to look at the R&D environment more holistically.

There were some good examples of how collaborative work between the combined authority, LEPs, businesses and universities in the region, one that was raised was in battery technology. These stories were said to be great in describing the local innovation ecosystem and are powerful in promoting the West Midlands.

Barriers

This discussion started from the fundamental point that innovation requires investment, but the West Midlands had a paucity of equity investment required to support innovation and allow it to flourish. The West Midlands was said to attract 4% of the UK's total VC investment in R&D, which is much lower than it should be.

It was said that the science clusters needed to have better networks in some areas, such as life sciences, to allow them to function better and work with different actors across the West Midlands. In order to better facilitate these links, it was felt that rigid definitions of sectors, and the type of research these sectors carried out, should be softened and focused on research capabilities. Innovations of the future were more likely to have across sectors, so the sooner multidisciplinary links could be forged this could only serve to benefit innovation.

It was felt that science parks didn't get enough recognition in their potential to support cross-disciplinary innovation, particularly from central Government, in conversations about innovation and drawing on the expertise that exists in science parks. It was felt that they were also neglected when new innovation centres or Catapults are proposed, where science parks already have innovation capabilities that could be supported.

It was felt that a barrier was that central Government benchmarking of research and innovation is often short-sighted by only looking at R&D expenditure, rather than the wider environment for innovation.

A lot of R&D policies and initiatives that are run in competitor countries, those nations that have a higher research intensity than the UK, are done away from national Governments and carried out at a local level. The challenge for local regions was that they have little autonomy and it is down to how much power may be afforded to them from central Government to design their own innovation environments. It was felt that this was a key reason behind the lack of investors locating across the country, as they feel most of the power is held in London, so they locate there.

Branding of the 'Midlands Engine'

The brand of the 'Midlands Engine' was seen to have mixed reviews, as it was seen as a useful signaller for foreign direct investment and this has made a difference to international markets. Funding for the East and West Midlands was promised under the Midlands Engine banner to follow the Science Innovation Audit but this funding had not been forthcoming. Within the Midlands Engine, it was felt that

the West Midlands did quite well, owing to the fact that there was a combined local authority where there was not in the East Midlands.

Levers required to enhance research and innovation?

It was felt that the West Midlands lacked the finances or regulatory tools devolved from Westminster to accelerate innovation and help to secure inward investment. It was also felt that the lack of autonomy in areas such as infrastructure projects meant that opportunities to enhance opportunities for collaborations across the region were limited the development of innovation in the region.

How can the West Midlands align nationally?

It was felt that the relationship between the West Midlands Mayor and UK Ministers has been, and will continue to be, crucial in supporting the local region as prominent advocates for the region are key. A lack of powers devolved to the local authority means that regions can be very reliant on the leadership of respective mayors and the relationship they have with ministers.

It was felt that the restructuring of UKRI had an effect on the types of partnerships that were being sought between universities, businesses and regional policymakers in a positive way. Not only were partnerships being formed across different types of organisations, but links were being forged between scientists and social scientists, in part due to the nature of the Strength in Places fund. These changes had also meant that local regions that were able to coordinate more quickly and effectively, like the West Midlands, were able to benefit. Better partnerships, in that sense, had been changed by the availability of money.

Despite the positives arising from these changes, it was also felt that a consistent national picture, funding streams and initiatives for R&D were key for providing a consistent offer to internationally mobile businesses. External customers looking in on the UK needed consistency and uncertainty could serve to disincentivise inward investment. Fundamental changes in the UK R&D environment were seen to not be helpful, particularly at the rate that fundamental changes have been happening in recent years. It was felt that more could be learned from other countries, particularly the US and Germany, where regions have a consistent and coordinated message in local regions whilst also having the autonomy to make decisions about local R&D policies.