MIDLANDS ENGINE OBSERVATORY ACADEMIC INSIGHTS
Regional R&D and Innovation

Theme:

Regional R&D and Innovation

Area of Focus:

Identifying patterns of public and private R&D investment across the region and impacts on innovation and economic growth.

Key Findings:

- Private R&D investment per head in the region (about £400) is 4-5 times greater than public R&D funding (£83) (Jones and Forth, 2020)
- Comparatively, Londoners receive around £300 per capita in public R&D funding and the ‘golden triangle’ encompassing London, Oxford and Cambridge accounts for 46% of all public and charitable spending on R&D, 31% of business R&D and 21% of the population..
- A recent study conducted by City-REDI with the West Midlands Combined Authority (WMCA) maps the inflows of various kinds of public R&D investment into the region, focusing on the UKRI as the main national funding agency for university research.
- The analysis found that, although overall public funding was low compared to other regions, the West Midlands does relatively better at securing some kinds of funding, notably Innovate UK and Catapult finance, than other regions (11% of the national pot over 5 years to 2020). Perhaps more significantly the region tends to attract funding in a relatively narrow range of areas, notably ‘manufacturing, materials and mobility’.
- This pattern of funding is both a cause and effect of the strong regional legacy as a manufacturing powerhouse. Assets, capabilities and expertise in local firms, large and small, and in universities, underpin this strength.
- But there is a danger that the region’s strong reputation in this relatively narrow specialism, underlying the West Midlands’ ‘identity’ nationally and internationally, hides other R&D strengths which also have the potential to boost growth in recovery.

Region	2015-16	2016-17	2017-18	2018-19	2019-20	Total
East Midlands	23.2%	23.6%	26.0%	21.0%	20.4%	22.7%
West Midlands	25.0%	20.4%	19.9%	28.0%	27.1%	24.5%
England - Other	26.0%	27.2%	31.3%	27.9%	27.8%	28.0%
London/SE/East	28.2%	25.4%	31.8%	24.4%	28.7%	27.5%
Northern Ireland	9.6%	24.9%	18.5%	25.5%	19.4%	19.4%
Scotland	25.5%	23.7%	31.5%	29.7%	33.9%	28.9%
Wales	20.5%	24.7%	31.0%	38.4%	27.1%	29.4%
Total	**26.2%**	**25.3%**	**30.3%**	**26.7%**	**28.3%**	**27.3%**

Graph above shows the award rate (%) based on value of competitive funding received vs sought from the Research Councils (not including Innovate UK). The West Midlands received a higher amount - 24.5% - compared to the East Midland’s 22.7%.

Midlands Engine Impact:

- We have seen a jump in funding for ‘clean growth and infrastructure’ in the past two years and the region has a strong track record for sustainable energy innovation and some aspects of AI and data analytics, creative industries and the life sciences. We have clusters of innovative assets and expertise which could be the source of new areas of growth, attracting new investment and broadening the industrial demography of the regional economy. But we need to showcase these additional strengths and provide a coherent vision about the region as a prime location for these new areas of growth, alongside historical strengths.
- Finally, as well as improving competitiveness and productivity, growth has to be more sustainable and inclusive. R&D funding in and with universities can also target these outcomes. Reduced C02 emissions in line with net-zero targets, can be achieved through new sustainable materials and housing insulation, recycling and energy conservation innovations. industries are expected to play a crucial role in improving and levelling up the Midlands’ skills base. Specifically, the tech sector has the prospect of generating 52,000 new jobs in the region by 2025, thus contributing to the UK economy by £2.7 billion.

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