



Regional Growth and Innovation – LSE Research Briefing

Weak growth has been persistent in the UK, and debates on how to nurture growth in local areas continue. Data-led research from LSE's Professor Neil Lee and Max Herbertson identifies how innovation can be an important driver of regional economic growth, and how policy changes and better support can make good on the Government's ambitions.

Key Points and Recommendations:

- The UK over-focuses on frontier science and **under-invests in diffusion, adoption and adaption.**
- **Regional innovation policy must be tailored to “real places,”** with incremental innovation and diffusion particularly powerful in weaker local economies.
- **Policymakers must engage closely with large, innovative businesses across all sectors** - including finance, professional services and creative industries – to determine next steps.
- **Innovation support should be included in the new Local Growth Plans** to be developed by devolved authorities.

Diffusion, Adoption and Adaption

- Two characteristics of the UK's innovation policy thus far are:
 - a strong belief that scientific excellence will lead to growth; and
 - support for firms tends to come through R&D tax credits rather than direct support. As a share of GDP, the UK provides more public support for business R&D than any other OECD country, disproportionately driven by generous R&D tax credits.
- The research finds that **current UK innovation policy over-prioritises the science base rather than commercial needs of businesses.**
- This approach comes with trade-offs, most notably making it harder to integrate innovation policy to industrial policy.
- Most commercially successful innovation happens in the private sector - government plays a vital role in research and is important in 'driving' innovation, but **for this to lead to growth requires partnerships with the private sector.**
- Other countries, such as Austria, have a stronger focus on applied, government-funded research institutions. These can be more easily tailored to the specific economic circumstances of particular regions.



- Applied innovation does not require agglomeration in the same way frontier science does and there is a current lack of robust data, evaluation and clear understanding of “what works” in innovation policy.
- Policy makers need to engage with large, innovative businesses across all sectors - including in finance, professional services, and the creative industries to determine what is needed, what works and what doesn't.
- **UK innovation policy needs to be more than science policy: commercially successful innovation largely comes from the private sector, and many of our most innovative businesses are not science-focused.**

Support Tailored to Real Places

- Policies to **encourage incremental innovation and technology diffusion** can be highly effective even in weaker local economies. These places may not have the capacity to lead in creating cutting-edge technologies but they can still benefit significantly from adopting and adapting existing innovations to improve productivity, competitiveness, and job creation.
- By **focusing on improving technology adoption and building absorptive capacity** in these areas - through skills development, applied research, and fostering collaborations between local firms and universities - weaker local economies can move closer to the innovation frontier.
- Such a multi-tiered approach would recognise the varied starting points of different parts of the UK and ensure that innovation policy contributed to economic growth both in stronger and weaker local economies.
- For example, the researchers highlight regional constraints including lab-space shortages, infrastructure gaps and weak absorptive capacity. However, regions outside the Golden Triangle have complementary strengths and can host scale-ups if supported.

Jobs and Skills

- **Research shows that ten new high-tech jobs in a local economy create seven local ‘multiplier’ jobs in areas such as services, construction, and health.**
- This reduces unemployment but these jobs are not always well paid. This means that policy should consider complementary actions around employment quality as well as job creation from innovation clusters.



- In particular, **countries which have been most successful at increasing innovation while increasing shared prosperity have tended to focus on both advanced and intermediate skills**, including in maths, economics, and other social sciences.

Local Growth Plans

- A key problem with the current system of local economic development is that it does not fully incentivise local and devolved governments to promote economic growth or innovation.
- Local Growth Plans (LGP) that include innovation should allow areas to determine what their core economic assets are and what their currently 'adjacent' assets that can be developed are.
- Part of the focus of LGPs should be on solving the binding constraints to growth and innovation in local areas, such as lab space and housing in Oxford and Cambridge, or public transport infrastructure in Leeds, Manchester, and many northern cities.
- Alongside this, they should also **identify existing niches that can be built on with coordinated and sustained investment from the public sector**. This should be focused on diffusion and the more advanced stages of innovation, instead of the frontier innovation which is better supported at the national level.
- A consistent finding from research on skills, innovation and infrastructure policy programmes is that the effectiveness of those policies is enhanced by complementary levers working in tandem. For example, transport policies that increase the potential labour force of cities will work best when combined with spatial planning so transport links are built where demand (including future demand) from residents will be highest.
- Places have been working off existing strategies - Local Industrial Strategies, COVID-19 economic recovery plans, inclusive growth plans, and others. These should act as starting points for LGPs.
- Regardless of the starting point, use of evidence is essential when developing or renewing a Local Growth Plan.

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