

# Small Business Performance: A Regional Perspective on innovation

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The Longitudinal Small Business Survey (LSBS) allows for more consistent SME analyses for the UK than ever before by tracking the same firms over time. Our research looks at the regional context, as well as firm specific variables, that are associated with labour productivity outcomes for SMEs. The paper considers the role of City-Region characteristics, as defined in terms of labour market, business dynamics, R&D spend and City-Region agglomeration on labour productivity, alongside firm-level associations.

The paper addresses a research gap in our understanding of how City-Region characteristics support the SME community in Britain by seeking to tease out the channels through which the benefits might accrue. Improving our knowledge of these channels could potentially enable more effective support provision from a policy perspective.

### Key findings

This paper uses the unbalanced panel of longitudinal data on British SMEs from 2015 to 2017. The LSBS is matched to additional government-held data, through the secure data laboratory and City-Region (CR) labour market measures constructed from NOMIS. Using two different regression approaches, we attempt to capture the CR-effects on firm level labour productivity. We control for a number of firm level factors, including size, age, exporting behaviour, innovation behaviour and leadership diversity characteristics (women or minority ethnic led). At the CR-level, we test whether local labour market conditions, business dynamics or the degree of specialisation or diversification in local industrial composition have a role to play in explaining firm level labour productivity.

At the CR-level, innovation is captured by BERD data on spend on R&D, skills and labour market measures are derived from NOMIS data on CR share of skilled workers, population growth and unemployment rates, incorporated in a single factor. Business dynamics are measured using CR change in business counts and agglomeration is measured using a measure based on Duranton and Puga's (1999) methodology for specialisation and diversification (based on employment shares in sectors).

Taken together, our findings from both methodological approaches show considerable stability across the coefficients at the firm level.

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One notable finding is a negative coefficient associated with women led organization, which is in part driven by faster growth in employment compared to growth in turnover, but this clearly warrants further investigation. Most other firm level variables are consistent with *a priori* expectations.

At the CR-level, we see some differences across the two methodologies. Using the random effects model, two variables are statistically significant. Lagged R&D spend is found to be positive and specialization is found to be positively significant at the 5% level. Thus, it appears as though firms located in CRs that have a concentration of firms in the same broad industrial sector benefit, supporting the idea of Marshallian agglomeration.

The multilevel analysis indicates that CRs provide a meaningful level of geography for regional impacts on SME labour productivity. However, we were not able to isolate a regional innovation influence on firm performance. Weak, positive evidence was identified in relation to business dynamics, suggesting that firms existing in more dynamic regions are likely to perform better. These results provide limited evidence of the channels for regional effects on SME productivity.

This level of geography offers an alternative to Local Enterprise Partnerships (LEPs) which are important in policy circles as the current UK Industrial Strategy is now focussed on Local Industrial Strategies at this unit of analysis. One drawback for LEP-level analysis has been the changing nature of the boundaries and overlapping LEPs.

## Implications for policy and practice

The recent Industrial Strategy (BEIS, 2017) puts innovation at the heart of the strategy, committing to a target of 2.4% of GDP for R&D spending by 2027. To achieve this, SMEs will need to be active innovators. Given their resource constraints, the innovative environment in which they sit will be all the more important. Recent academic and policy attention has been directed at the growing regional inequality that has been observed in Europe over the past 30 years, whereby concentration of resources into cores and increased levels of joblessness are observed in certain peripheral regions. Iammarino et al (2019) argue that this 'great inversion' requires policy designed to enhance development in all types of regions rather than a 'one size fits all' policy designed with the purpose of convergence and redistribution. Recent government strategy initiatives are recognizing this. LEPs are developing Local Industrial Strategies (BEIS, 2018) are putting productivity at their heart.

Our findings support this view by indicating that economically meaningful regions matter to the performance of SMEs. However, different resources may operate at different levels geography. The implication, therefore, in order to design more region-specific policies to support firm performance, is that a better understanding of the context specific to regions is essential. Further work is thus required on which regional mechanisms can support innovation in SMEs and this is an area to which our attention must now turn.