

Spatial disparities in SME productivity in England

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Improving productivity is critical to increasing economic growth and prosperity in the long-run and a key objective for UK national, regional and local policy. However, a fat lower tail of low-productivity Small and Medium Sized Enterprises (SMEs) and significant spatial variations in productivity characterise the UK economy. There are several theoretical perspectives as to the reasons for spatial variations in SME productivity, relating to industrial organisation, agglomeration, institutions and networks, as well as firm-level resources. Assessing the validity of these theories empirically requires accounting for the hierarchical nature of the problem: SMEs operate within higher-level environments that affect their decisions. These effects are typically uncovered with hierarchically structured data, in the sense that the units (firms) relate to different levels of spatial aggregation (location) and should be analysed as part of a group of firms located in the same geographical area, since the location of SMEs may affect their performance. Consequently, this study employs nested multilevel regression analysis to understand determinants in SME productivity in different localities and effectively account for the contextual environment.

Key findings

Using data from the Longitudinal Small Business Survey on 3,571 SMEs in England (for years 2015-17), and applying multi-level analysis to capture the nested structure of the data, modelling a fixed-effects part at firm level (or level one) and a random-effects part at Local Enterprise Partnership (LEP) level (or level two), our paper presents several important results:

- Regarding firm-level factors, business capabilities to develop and implement business plans, and obtain external finance, as well as receiving external advice in the previous year, positively contribute to labour productivity.
- Digital capabilities, internal to the SME, as well as some types of network membership contribute to higher labour productivity.
- Family businesses are not more or less productive than non-family ones, but, women-led businesses record significantly lower productivity.
- At the LEP level, localities with a more skilled and educated population tend to have higher productivity.
- Improved broadband speeds, in some models, are also associated with higher productivity.

Authors



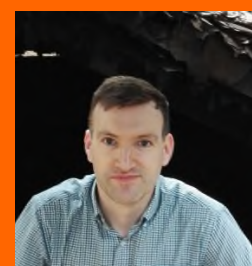
Sara Maioli

sara.maioli@newcastle.ac.uk



Pattanapong Tiwasing

Pattanapong.Tiwasing@newcastle.ac.uk



Matthew Gorton

matthew.gorton@newcastle.ac.uk



Jeremy Phillipson

jeremy.phillipson@newcastle.ac.uk



Robert Newbery

Robert.Newbery@newcastle.ac.uk

Newcastle University
Business School and Centre
for Rural Economy

Policy implications

The results indicate that digital capabilities matter as well as those regarding implementing and developing a business plan and strategy. However, over one-third of SMEs describe themselves as having poor capabilities in e-marketing and only around one-quarter describe themselves as having a strong capability to create or develop their own website. Support programmes to upgrade digital capabilities appear warranted, and should focus on enabling firms to create and sell through their own websites.

After controlling for other factors, women-led businesses record significantly lower productivity. Greater attention should be paid to gender issues, considering the reasons for, and potential strategies to overcome, gender biases in SME performance.

The findings support notions that business network membership affects productivity. Specifically, being a member of a local Chamber of Commerce or using social media based business networks improves somewhat productivity. Support for start-ups and established SMEs often pays little attention to business networks, but rather focuses on internal considerations and this appears misguided.

SMEs located in LEPs with a greater proportion of highly-skilled people (measured in terms of NVQ at level 4 or above qualifications) are positively associated with higher labour productivity. This highlights the importance of upskilling of the population and retraining. Spatial variations in educational attainment are striking and little progress has been made in recent years to reduce this gap. Investments in human capital, while integral to improving long-term firm and regional productivity, may not generate an immediate positive impact. Consequently, some other determinants, identified in the analysis, such as support to businesses in setting up their own website and networking with others, may yield greater short-term rewards.

Full paper link:

<https://www.enterpriseresearch.ac.uk/our-work/publications/?type=research-paper>