

International Journal of Population Data Science

Journal Website: www.ijpds.org



Exploring the relationship between international trade and firm-level productivity using linked administrative and survey data.

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Objectives

Linking administrative data on Trade in Goods with survey data from the Office for National Statistics (ONS) we explore the mechanisms through which a firm's engagement in international trade impacts labour productivity across its lifecycle and the wages they subsequently pay workers.

Methods

Using a novel linking and apportionment process, we link HMRC Trade in Goods data to the ONS's Interdepartmental Business Register (IDBR). We then link to the UK's Annual Business Survey (ABS). Utilising firm-level data on labour productivity and services trade from the ABS we provide a holistic view on the association between productivity and international trade in both goods and services trade. Focusing specifically on goods trade, for which we have near population level data, we employ a difference-in-difference design to estimate the causal boost in productivity following a firm's first reported goods export.

Results

Consistent with the literature, we find that while most of the productivity gap between exporters and non-exporters is due to selection, beginning to export goods still drives a 10 percent increase in labour productivity. Using a differences-in-differences design, we find that goods exporters-to-be are 40 percent more productive than firms that never export even before the time of first export.

Comparing firms who will ever export, we find that while there are no differences in productivity before exporting, there is a 10 percent increase in labour productivity of an exporter compared with future exporters, after they enter international markets. At the intensive margin we find that productivity benefits accrue only to larger exporters. These estimates are particularly relevant for policymakers aiming to use export support policy to support UK growth.

Conclusions

This work demonstrates the important role administrative data and microdata linking can play in filling key evidence gaps in the UK's most pressing policy areas. We provide reflections on the challenges researchers face whilst working with administrative data and the role working collaboratively with government can play in supporting impactful policy relevant research.

