Productivity, Market Penetration and Allocation of Sales

Summary:

This paper investigates how firm productivity is associated with the sales allocation of Chinese exporters. We demonstrate that highly productive firms are less export oriented compared with less productive ones. This negative correlation between firm productivity and export intensity among exporters remains robust when we control firm ownership, factor intensity, and rule out impacts of processing trade.

This finding is in stark contrast with Melitz (2003) predictions where high productivity firms enter more markets and sales are proportional to firm productivity conditional on market entry. Thus, sales ratio across markets are independent of firm productivity and high productivity firms are associated with high export intensity due to the large number of markets they enter.

In order to rationalize our empirical findings, we extend the Arkolakis (2010) model to allow marketing cost elasticities to be heterogeneous across markets. A higher marketing cost elasticity domestically gives rise to a faster sales expansion in the home market as firm productivity grows. The fact that this negative correlation is more pronounced among firms who belong to advertising intensive industries supports the model predictions. Further evidence helps to rule out alternative explanations such as the effects of variable markup and product quality.