

# **Productivity, exporting and financial constraints of Chinese SMEs**

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## **Summary**

Many studies have provided evidence that the correlation between firm-level productivity and export status is driven by more productive firms self-selecting into exporting. Nevertheless, a few studies have also found evidence for a reverse channel of causation. Especially in developing or transition economies, exporters have been found to improve their productivity performance after they enter the export market and start selling abroad. In this study, we provide evidence for one particular channel to explain this finding of learning-by-exporting in a sample of Chinese manufacturing firms.

Our evidence suggests that small domestic firms often fail to fully realize all scale economies that the technology in their industry allows. Estimating flexible translog production functions, we find that in most industries marginal costs have the familiar U-shaped pattern. At low levels of output, scale economies are increasing. It implies that a non-negligible share of firms in our sample would be able to raise productivity if they operated at a larger scale. Entering the export market enables these small firms to expand output and generate

productivity gains by exploiting scale economies. It is indeed the case that more non-exporters than exporters operate below minimum efficient scale.

The question then begs why some domestic firms remain sub-optimally small. We conjecture and provide some evidence that this is due to limited access to finance and weak contract enforcement at home. Once domestic firms accumulate a high outstanding balance of trade credit (accounts receivables), they become reluctant to expand their sales further as awarding additional credit to new clients becomes too risky. We find that the firms with the most outstanding trade credit expand sales the most following export market entry. This is especially true if they operate in industries with higher scale economies or if they are located in provinces with weaker institutions. We further show that the same type of firms also enjoy the largest productivity gains immediately following export market entry.