

## **EXPORT SOPHISTICATION AND ECONOMIC PERFORMANCE: EVIDENCE FROM CHINESE PROVINCES**

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### **NON-TECHNICAL SUMMARY**

In this paper, we use disaggregated data on China's trade over the period 1997-2007 to examine the recent upgrading of China's exports and its consequences on the country's economic performance. To quantify this upgrading, we use a measure of export sophistication initially proposed by Hausmann, Hwang and Rodrik (2007), which infers the average productivity level of a country's exports, from observed world trade flows. Using the distinction made in the data between firm ownership types, as well as between assembly trade and ordinary trade activities, we are able to identify the contributions of each to the total upgrading of exports. We find, in line with recent studies on the topic, that the upgrading of exports is mainly attributable to the assembly trade sector, and to non-domestic firms. However, domestic firms, which mainly operate in the ordinary trade sector, have also experienced a significant increase, in level, of their exports' sophistication.

Next, we test the impact of this rise in sophistication on the economic performance of China's provinces. This measure serves as a proxy for a country's or region's capacity to specialize in the production and export of sophisticated goods. According to Hausmann, Hwang and Rodrik (2007), countries or regions that engage in the cost discovery process of developing more sophisticated goods should be able to grasp greater gains from trade, beyond those associated to traditional comparative-advantage induced specialization. Our study thus provides a test of this theory, with the advantage that, by comparing the economic performance of China's provinces,

we are able to mitigate issues of omitted variables associated to different legal and institutional systems, likely to arise in cross-country studies.

Our results indicate that the sophistication of exports positively influences the export and growth performance of provinces, after controlling for fundamental determinants of this performance. We find that the benefits from export upgrading are restricted to the sector of ordinary trade, in which the main part of the value chain is being produced in China. We also find that the export structure of foreign entities has no direct impact on economic performance, but that it has an indirect one, through its positive influence on the sophistication of domestic entities, suggesting the presence of spillovers. Our results are robust to the use of internal instruments (GMM), necessary in order to address the endogeneity issue arising from the inclusion of lagged performance in our specification. In the final part, we investigate whether the gains from specialization in sophisticated exports is conditional on other features of provinces. We find evidence that these gains are more important in provinces more outward oriented, that is to say more opened to trade and Foreign Direct Investment (FDI); and in those enjoying better access to foreign markets. We also find evidence of increasing returns to export sophistication. Taken together, these results tend to point to the likelihood of a future widening of spatial economic disparities across China.

*J.E.L. Classification:* F1, O1, R1.

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