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Assessing European firms' exports and productivity distributions: The CompNet trade module
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Improving external cost and price competitiveness may be achieved either through a more rapid productivity growth, or through wage moderation, i.e. internal devaluation. However, fostering aggregate productivity growth is generally expected to be more growth-friendly, as an internal devaluation is equivalent to a loss of terms of trade and has a negative influence on aggregate welfare. Understanding how aggregate exports can be sustained by a more dynamic productivity growth is therefore essential for the implementation of pro-competitiveness policies, especially in countries facing rapid current account adjustment.

So far, the evaluation of European countries' competitiveness has mainly relied on Unit Labor Costs (ULCs) indicators, which combine aggregate information about real productivity and wage dynamics. Empirical evidence shows that in Europe during the 2000's, aggregate export performance was imperfectly predicted by the growth of unit labor costs. This apparent puzzle may have different origins, ranging from unobserved macroeconomic shocks (such as the role of capital flows) to the unobserved heterogeneity at the micro level, which we explore in details. Exporters may have indeed different productivity and wage dynamics than non-exporters, leading to an aggregation bias. Also, unobserved microeconomic heterogeneity within sectors, related to the distribution of productivities across firms, and to the concentration of activity among a small subset of firms, may affect the reaction of aggregate exports to external shocks such as exchange rates movements or foreign demand variations.

The objective of this paper is to provide a better understanding of the role of productivity on European countries export competitiveness. We use the information compiled in the Trade module of CompNet to establish new stylized facts regarding the joint distributions of the firm-level exports performance and productivity in a panel of 15 countries, 23 manufacturing sectors during the 2000's.

We confirm that exporters are more productive than non-exporters. We also uncover a strong heterogeneity in terms of productivity within the population of exporters, with permanent exporters being much more productive than new starters or firms that stop exporting. This evidence suggests that beyond the entry in the export market, productivity is also an important determinant of firms' survival over a longer time period. From a macroeconomic perspective, this implies that aggregate exports can be supported by the presence of few highly productive firms, which are able to operate in a highly competitive environment.

At the intensive margin, we show that both the level and the growth of firm-level exports rise with firm productivity, and that the bulk of aggregate exports in each country are made by few highly productive firms. In the short run, aggregate exports performance is therefore closely linked to the performance of these firms. Productivity shocks faced by these very large players, such as those related to management practices or to strategic choices regarding the organization of production, have strong influence on the aggregate export performance of European countries.

Finally, we show that during the crisis, the growth of exports by high productive firms sustained the current account adjustment of European "stressed" economies. This last result confirms that the shape of the productivity distribution within each country can have important consequences from the point of view of the dynamics of aggregate trade patterns.