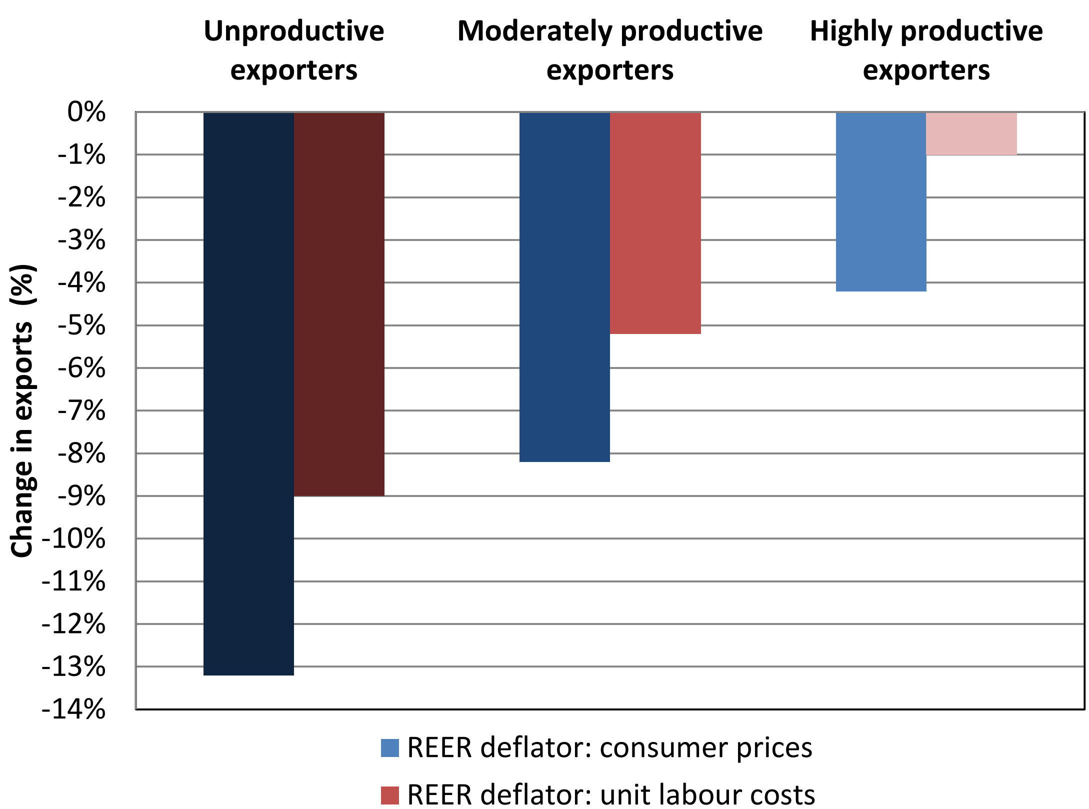
A strong euro is less harmful to the most productive exporters

By Antoine Berthou

The effects of the exchange rate on the exports of European firms depend to a large extent on their productivity. The exports of the most productive firms are less affected by exchange rate variations than those of the less productive firms. At the macroeconomic level, this tends to reduce the effects of the exchange rate on trade.

Chart 1: Smaller impact of the REER on highly productive exporters
(Firms' exports in value terms, changes in %)



Average change in exports in value terms following a 10% increase in the REER. Ranking on a productivity scale defined by country and sector. Source: Berthou and Dhyne (2017), estimates based on CompNet data, Manufacturing (2001-2011).

The sharp appreciation of the euro vis-à-vis the dollar since the beginning of 2017 has once again raised fears that an overly strong euro will penalise the exports of European firms and hinder the current recovery.

In a study to be published as a Banque de France working paper (Berthou and Dhyne, 2017), we estimate the impact of a variation in the Real Effective Exchange Rate (REER) on the exports of European firms located in eleven countries, including France (data for Germany are not available).

We show that a 10% appreciation in the REER reduces firms' exports in value terms by between 5% and 8% on average (see Chart 1). The strongest effect is obtained when the REER is constructed using consumer price indices. The lower elasticity obtained with the REER constructed using unit labour cost indices results from a low transmission of production costs to prices.

Limited effect of exchange rate fluctuations on productive exporters

Do firm characteristics play a role in determining the effects of the exchange rate? Estimates show that there is a very high degree of heterogeneity in the response of exporters when ranked by size or productivity. In each country and within the same sector, the exports of the least productive (smaller) firms appear to be very sensitive to variations in the REER, while the exports of the most productive firms appear to be relatively insensitive (see Chart 1).

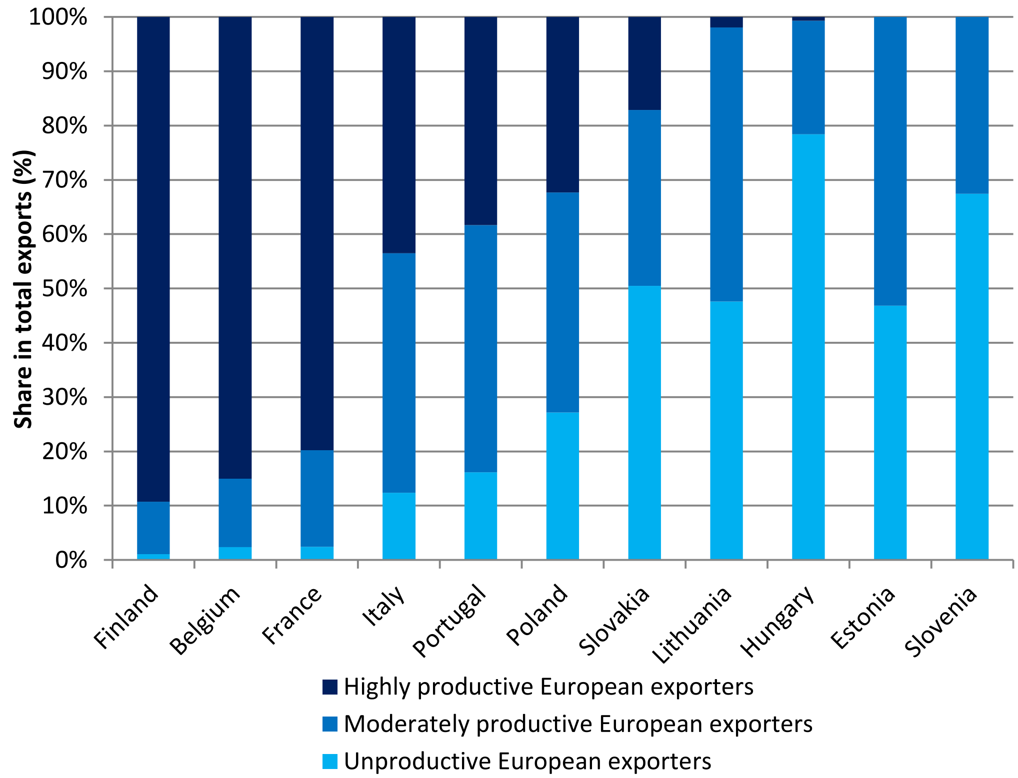
Similar results are obtained if exporters are ranked on a European scale of productivity (11 countries) rather than a national one, within the same sector: the most productive European exporters (larger ones) are less impacted by exchange rate fluctuations than the least productive (smaller) exporters.

The reaction of productive exporters limits the aggregate impact of the exchange rate

In each European country, a small group of high-performing firms account for a very large share of exports. In France, about half of all exports are made by the 20% most productive exporters.

How do French exporters fare in terms of productivity compared to their European competitors? If French exporters are ranked, no longer on a national scale, but on a European scale of exporters operating in the same sector, we find that about 80% of French exports are made by exporters ranked among the most productive (top 30%) out of eleven European countries (excluding Germany in the absence of data), ahead of Italy and behind Finland and Belgium (see Chart 2).

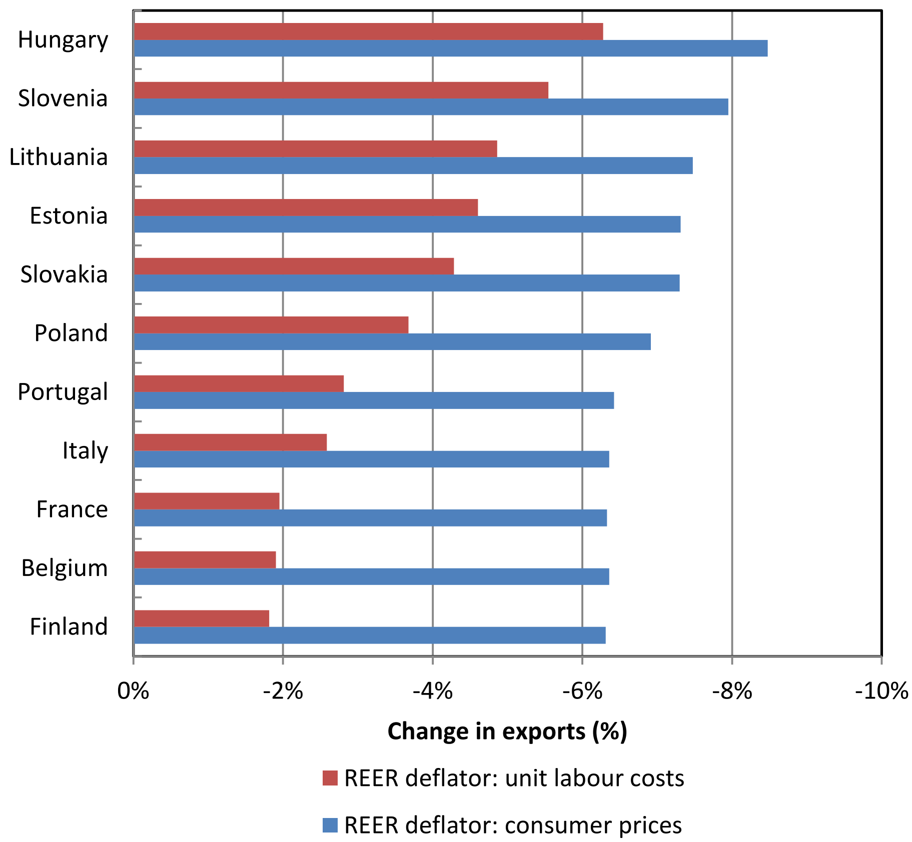
Chart 2: Weight of exporters ranked as highly productive out of 11 countries.



Ranking of exporters on the basis of a European scale of productivity defined for each sector. Unproductive (highly productive) exporters: 30% of the least (most) productive exporters. Source: Berthou and Dhyne (2017), based on CompNet data for the manufacturing industry.

A key factor is the weight of highly productive exporters in each country's total exports. In the countries where the most productive European exporters are concentrated (Finland, Belgium, France), changes in the REER have a low impact on exports in value terms. On the contrary, in the countries where the least productive European exporters (Hungary, Slovenia, Lithuania) are concentrated, changes in the REER have a greater impact on exports, all other things being equal (see Chart 3).

Chart 3: The greater the weight of productive exporters, the lower the impact of the REER



Change in the country's total exports in value terms following a 10% increase in the REER. Elasticities are based on an 11-country ranking of exporters in terms of productivity within each sector. Source: Calculations based on the estimation results presented in Berthou and Dhyne (2017).

Reasons behind the lower sensitivity of large exporters to the REER

Are the most productive European exporters "insensitive" to exchange rate fluctuations? Research work using French data has shown that large exporters tend to transmit less exchange rate variations into their export prices expressed in the importer's currency (for example in US dollars), which also explains why export volumes respond only slightly.

A first explanation is based on the export price-setting strategy: in the event of an exchange rate appreciation, an exporter may choose to leave its price unchanged in the importer's currency in order to maintain its market share. The volume of exports remains stable, but the firm-level price-cost margin declines. The lower sensitivity of exports to exchange rate movements is explained by a lower price elasticity of demand made to these firms.

Our work on data for European exporting firms also shows that imports provide exporters with a natural hedge against exchange rate fluctuations: an exchange rate appreciation lowers firms' export price competitiveness, but reduces the price of imported intermediate goods and thus the cost of production. The exports of firms that import intermediate goods appear less sensitive to exchange rate movements.