

Exchange Rates and the Margins of Trade: Evidence from Chinese Exporters

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Summary

Many regard China's currency policy as a main driver of the looming global imbalance. Despite the heated discussions in the media and among policymakers, there is little evidence or consensus on the relation between bilateral real exchange rates and countries' trade balances with China. The large literature that focuses on developed countries finds a small exchange rate elasticity of net exports, adding another example to the "Exchange Rate Disconnect" puzzle (Obstfeld and Rogoff, 2000). However, recent studies cast doubt about the evidence of a low exchange rate elasticity. It is claimed that the estimates based on aggregate data can be biased if firm heterogeneous responses to exchange rate shocks are not properly controlled for in the estimation. With existing evidence in hand, how much can we say about the impact of a revaluation of China's currency, the RMB, on global trade balances?

Using data that cover the universe of export transactions in China over 2000-2006, we examine the impact of exchange rate movements on firms' export behavior. We find that exchange rate movements have a significant impact on various extensive margins of exports. A real exchange rate appreciation increases the probability of firm exit from exporting, and decreases the probability of firm entry into exporting. Specifically, a 10% real appreciation of the renminbi is associated with a 1 percentage-point decline in the probability of entry, and a 0.2 percentage-point increase in the probability of exit. The effects among foreign-invested enterprises almost double for both entry and exit. Despite the seemingly large effect on the extensive margins, exchange rates alone can only explain about 4% of entries and about 1.6% of exits during the sample period.

A real exchange rate appreciation of the Chinese currency also lowers the firm's likelihood of adding a new product to a market, and raises its likelihood of dropping a product. The exchange-rate elasticity of exports is estimated to be around 0.4 in the first year after the shock, with most of the adjustment taking place in the first six months. The finding of a relatively fast response to exchange rate shocks is consistent with anecdotal evidence about intense competition in the Chinese export sectors.