Exchange Rate Volatility, Exports and Global Value Chains

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Abstract

Global value chains (GVCs) have become a dominant feature of world trade, and the impact of GVCs on the export responsiveness to exchange rate volatility is an important research question. To address how and to what extent GVCs affects the relationship between exchange rate volatility and trade, we conduct panel estimation using the bilateral and detailed sectoral data covering 29 countries and 18 manufacturing sectors over 1997 to 2012. To measure the participation of a country in GVCs, we follow the method developed by Koopman *et al.* (2014) and Wang *et al.* (2013) to decompose bilateral gross trade using the YNU-GIO (Global Input-Output) table. Calculating two measures of the GVC participation rate, we investigate whether the effect of exchange rate volatility on exports can be mitigated by the GVC participation. The main finding is that exchange rate volatility has negative effect on exports, but this effect is conditional on the participation of a country in GVCs. On average, the participation in GVCs reduces negative impact of exchange rate volatility on exports by 74 percent. Furthermore, if a country's participation in GVCs above the threshold level, exchange rate volatility would have a positive effect on that country's exports.

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