Input Substitution, Export Pricing, and Exchange Rate Policy

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Summary

The purpose of this paper is to explain why exchange rates in East Asian economies are usually not as flexible as those in developed countries, i.e., why these economies usually adopt fixed or less flexible exchange rate policies. In this paper, we focus on how trade structure features in East Asian economies, instead of the financial conditions, affect choices of exchange rate policy.

We argue that two important features in the trade structure of these economies: weak input substitution between local labour and import intermediates in the traded good production and extensive use of foreign currency (especially the US dollar) in export pricing may help to explain this puzzle. This is because both features limit the adjustment role of exchange rates, which in turn reduces the desirability of flexible exchange rates.

To explore our explanation, we develop a small open economy stochastic general equilibrium model with sticky prices, where there is vertical trade. Export firms are monopolistic competitive, and they produce differentiated finished goods using imported intermediate goods and local labour. Meanwhile, export goods prices are set in advance and they are in terms of foreign currency.

Following Schmitt-Grohe and Uribe (2004), we use a perturbation method to calculate welfare and show that the presence of low input substitution (or input complementarities) and foreign currency pricing can affect the welfare ranking between flexible exchange rates and fixed exchange rates. That is, a fixed exchange rate can dominate a flexible exchange rate in terms of welfare.

In a sense, our finding also provides a rationale for the "fear of floating" phenomenon in East Asian economies. Controlling exchange rate fluctuation or "fear of floating" in these economies might be central banks' rational reaction when they are constrained by these trade structure features.