

Exchange Rate Regimes, Specialization and Trade Volume

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Summary

We compare two different exchange rate systems: a perfectly flexible exchange rate system and a common currency exchange rate system in a monetary model of international trade. Our objective is to examine whether different exchange rate systems give rise to higher levels of trade volume between countries. Our motivation is recent empirical research that demonstrates much higher trade volume between countries with a common currency relative to countries with other exchange rate systems, all other things equal.

The link between trade and exchange rate systems that we model depends upon a particular aspect of common currency arrangements. In an uncertain environment, a common currency arrangement, through the common price level, redistributes the effects of shocks to one economy throughout the other economies in the arrangement. This redistribution effect can affect resource allocation decisions. With uncertainty, resource allocation decisions reflect a simple trade off: *comparative advantage*, a tendency toward specialization, and *diversification of risk*, which provides a tendency against specialization. Since the common currency arrangement reduces the risk faced by a country, it permits greater specialization of production and hence trade volume than occurs under the flexible exchange rate system.

The effect on trade volumes from adopting a common currency arrangement depend upon the nature of the underlying shocks to the economies involved. We find little effect when the most important shocks are productivity shocks – shocks that favour one country's production process over that of the other country. We find greater effects when we consider relative demand shocks – shocks that favour the consumption of one country's production over that of the other country. We also demonstrate that economic welfare is higher under a common currency arrangement though the welfare gains are in most instances small.

Relative to the empirical literature, our results, while qualitatively correct, are not of the same magnitude. Nonetheless, the effects are non-trivial and possibly one part of the larger story.