A Reappraisal of the Border Effect on Relative Price Volatility

Yin-wong Cheung
University of California, Santa Cruz

And

Kon S. Lai
California State University, Los Angeles

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Summary

The substantial price dispersion observed between similar goods at different locations is indicative of persistent deviations from the law of one price. Specifically, it is found that the national border matters: It has a sizeable positive impact on relative price volatility. The current exercise re-valuates the factors contributing to the border effect. We show that cross-country heterogeneity in price volatility can lead to significant bias in measuring the border effect unless proper adjustment is made to correct it. The analysis explores the implication of symmetric sampling for border effect estimation. Moreover, using a direct decomposition method, we reveal useful information about the channels or sources through which the border effect may come. The border effect is shown to capture both the exchange rate effect and the effect of dissimilar shocks. Decomposition estimates suggest that exchange rate fluctuations actually account for a large majority of the border effect. Unlike the exchange rate effect, the dissimilar-shock effect has not been well analyzed in the literature. Exploring this non-exchange rate channel may help identify alternative sources of the border effect. Analytically, any micro or macroeconomic factors that can induce significant differential price movement across countries may be a potential contributor. This analysis suggests that macroeconomic shocks can be sufficiently dissimilar across countries to generate extra volatility in cross-border relative prices by inducing differential relative price movement.