

## **Exchange Rate Volatility and Global Food Supply Chains**

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This paper analyzes the impact of exchange rate risk on global food supply chains. Although the theoretical literature suggests ambivalence regarding the sign and magnitude of this effect, most empirical studies indicate a negative association between exchange rate volatility and international trade flows. We contribute to the ongoing debate by investigating the relationship at the product level using a sectoral gravity model and relying on detailed retrospective trade and exchange rate data for a balanced panel of 159 countries for 2001 to 2017. We study the relationship for 781 agricultural and food products and estimate the trade effects of short-run and long-run exchange rate volatility. Our findings indicate significant heterogeneity in the trade effects of exchange rate risk. While the mean trade effects are positive for short-run and long-run volatility, these effects vary substantially according to product and industry characteristics. We find a positive association between exchange rate volatility and trade effects for upstreamness and a negative association for downstreamness. We show that the significant and adverse trade effects in earlier studies result from model misspecification and measurement errors. This research enhances the understanding of the implications of exchange rate volatility which is a primary source of international risk exposure for global food supply chains.