

Global Geopolitical Conflicts, Network Connectivity, and Exchange Rate Risk Spillovers

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Abstract

Global geopolitical conflicts are key drivers of exchange rate risk spillovers. Understanding the relationship between external shocks and exchange rate risks is essential for maintaining the stability of the international financial landscape. Using quarterly panel data for 34 economies from 2008 to 2024, this study employs the TVP-VAR-DY model to construct an exchange rate risk spillover network. From the perspective of network connectivity characteristics, this study explores the effects and mechanisms by which global geopolitical conflicts influence exchange rate risk spillovers. The results show that an increase in global geopolitical conflicts significantly enhances the exchange rate risk spillovers of economies. This effect is more pronounced in advanced economies, export-dependent economies, and economies with higher levels of financial openness. Mechanism analysis indicates that the “diversification” and “regionalization” characteristics of the exchange rate risk spillover network mitigate the amplifying effect of global geopolitical conflicts on exchange rate risk spillovers. Network diversification reduces dependence on the exchange rate of a single currency, while network regionalization enhances risk resilience by strengthening intra-regional linkages. Furthermore, network connectivity characteristics exert a significant U-shaped moderating effect on the relationship between global geopolitical conflicts and exchange rate risk spillovers. It means that an appropriate level of network density helps mitigate the diffusion of conflict-induced exchange rate risks. This study not only extends research on the international transmission of financial risks from global geopolitical conflicts from a network perspective, but also provides important implications for strengthening international financial security and national financial risk prevention capacities.

Keywords

Global Geopolitical Conflicts, Exchange Rate Risk, Network Connectivity, Currency Network, TVP-VAR-DY Model