Exchange Rates under Geopolitical Fragmentation: Time-Varying Impacts of GPR, Sovereign Risk, and Oil Prices

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This paper examines how geopolitical risk has reshaped foreign exchange dynamics in the post-pandemic era. Extending Masujima (2024), it develops a daily exchange-rate model that integrates three channels—portfolio investment, sovereign credit risk, and trade/commodity exposure—and augments them with global geopolitical risk measured by the Caldara–Iacoviello GPR Index. Using daily data for major advanced and emerging-market currencies against the U.S. dollar from 2007 to October 2025, the analysis compares the Global Financial Crisis, the COVID-19 crisis, and the post-pandemic regime. The results show that geopolitical risk has become an independent, structural, and time-varying determinant of currency valuation. Since 2022, higher GPR has been associated with depreciation of European currencies and the Chinese yuan, while safe-haven behavior has become more asymmetric: the U.S. dollar has strengthened as the dominant haven, whereas the yen and Swiss franc show more conditional responses. Sovereign CDS spreads and oil prices remain important, confirming that fiscal credibility and energy exposure amplify geopolitical shocks. Rolling regressions indicate that GPR sensitivity has intensified and partly decoupled from VIX, suggesting that political risk and financial volatility now operate as distinct but complementary FX drivers. The paper also sketches country-specific GPR and MIDAS extensions to separate global from domestic political shocks. The findings imply that monetary policy alone is insufficient; fiscal discipline, energy diversification, and international coordination are essential.

Keywords: Exchange Rates, Geopolitical Risk, Sovereign Risk
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