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Weather Shocks and Exchange Rate Flexibility

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ABSTRACT: This paper assesses the stabilization properties of fixed versus flexible exchange rate regimes and aims to answer this research question: Does greater exchange rate flexibility help an economy's adjustment to weather shocks? To address this question, the impact of weather shocks on real per capita GDP growth is quantified under the two alternative exchange rate regimes. We find that although weather shocks are generally detrimental to per capita income growth, the impact is less severe under flexible exchange rate regimes. Moreover, the medium-term adverse growth impact of a 1 degree Celsius increase in temperature under a pegged regime is about –1.4 percentage points on average, while under a flexible regime, the impact is less than one half that amount (–0.6 percentage point). This finding bolsters the idea that exchange rate flexibility not only helps mitigate the initial impact of the shock but also promotes a faster recovery. In terms of mechanisms, our findings suggest that the depreciation of the nominal exchange rate under a flexible regime supports real export growth. In contrast to standard theoretical predictions, we find that countercyclical fiscal policy may not be effective under pegged regimes amid high debt, highlighting the importance of the policy mix and precautionary (fiscal) buffers.

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