Dollar Funding, Bank Currency Mismatch and the Transmission of Exchange Rate Policy

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Abstract

Banks in emerging markets fund themselves in US dollar and lend in the local currency, and bear foreign exchange risk if the hedging is imperfect. The currency mismatch exposes banking sector to exchange rate fluctuation and risks an economy to the sudden stop. This paper studies the novel transmission of exchange rate policy through financial institutions in emerging markets. I focus on a large and unanticipated currency depreciation episode following the US Fed's decision to taper the size of security purchase and exploit the heterogeneity in bank pre-determined exposure to currency risk. Using loan-level data in Taiwan during 2012-15, the article first provides evidence that the effect of depreciation on credit supply is contractionary. Banks with higher net USD liability cut more lending and are less likely to extend credit to the borrowers with existing relationship upon depreciation than the counterpart banks do. Borrowers with more dependence on the affected lenders could hardly switch to other funding source and disproportionately decrease investment and employment as compared to other firms that rely less on these banks. The credit-supply effects of depreciation on investment and employment are economically and statistically significant beyond the conventional wisdom including the trade channel or the borrower collateral constraint channel. The findings in this paper advocate better risk management and prudential policy to regulate financial intermediation usage of dollar funding.

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