

The Synthetic Dollar Funding Channel of US Monetary Policy^{*}

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Abstract

This paper proposes a novel transmission channel of US monetary policy through the FX swap market: the *synthetic dollar funding channel*. First, I show empirically that a contractionary US monetary policy shock widens deviations from covered interest rate parity (CIP) in the post-global financial crisis period. Then, I construct a two-country New Keynesian model with financially-constrained banks and a FX swap market. In the FX swap market, US banks are suppliers of synthetic dollar funding and obtain CIP deviations as intermediation fees arising from the limit to arbitrage while non-US banks are demanders for matching currencies for holding US capital. In equilibrium, CIP deviations are endogenously determined so that the FX swap market clears. From the calibrated model, a contractionary US monetary policy shock widens CIP deviations because it tightens the leverage constraint of US bank. This implies that the gap between cost of synthetic dollar funding and direct dollar funding becomes larger. Then, spillover to non-US and spillback to US output, investment, and inflation are amplified compared to the counterfactual case in which CIP holds. Finally, I show that central bank swap lines can attenuate the synthetic dollar funding channel of US monetary policy.

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Keywords: CIP deviations; Synthetic dollar funding; Monetary policy; Transmission channel

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