Currency Substitution and Monetary Policy Effects: The Case for Latin American Countries

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In this paper, we empirically investigate to what extent currency substitution transmits the foreign monetary policy shocks to the domestic countries and evaluate the central bank's response to real exchange rate movements in three inflation-targeting Latin American countries under currency substitution: Chile, Mexico and Peru. Our model is based on a small open-economy dynamic stochastic general equilibrium model that incorporates currency substitution and incomplete financial markets. We derive a tractable model expressed in terms of the output gap, the domestic inflation rate, and the real exchange rate gap and estimate it using Bayesian estimation techniques. Our empirical results are as follows: (1) The degree of currency substitution are higher in Mexico, while negligible in Chile and Peru, which reflects the slight differences in parameter values capturing the preference for domestic currency among these countries. (2) The estimated coefficients of the real exchange rate gap in the monetary policy rule are high, meaning that the central banks in these countries actively respond to real exchange rate movements to diminish the unpleasant results of real exchange rate volatility. (3) Domestic monetary policy influences on the domestic economy through the real interest channel. On the other hand, foreign monetary policy affects significantly in Mexico, while insignificant in Chile and Peru. It means the potential instability of currency substitution in the sense that the slight changes in parameter values capturing the preference for domestic currency alter the degree of insulation from foreign monetary policy shocks.

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