Navigating the Trilemma: Capital Flows and Monetary Policy in China

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Summary

The trilemma paradigm of open economy macroeconomics asserts that a country may not simultaneously target the exchange rate, run an independent monetary policy, and allow full capital mobility. As China slowly liberalizes its capital account, the trilemma has become more evident and monetary authorities have faced a challenge in maintaining domestic monetary and price stability. In particular, growing balance of payments surpluses through both the current and financial accounts have put increasing upward pressure on the currency. To limit this currency appreciation, Chinese monetary authorities have intervened in the foreign exchange market and accumulated massive amounts of foreign reserve, particularly since 2005.

We measure the degree to which the China has been able to insulate monetary base money growth from the liquidity effects associated with rapid foreign asset accumulation. We demonstrate that "sterilization" of the effects of foreign asset accumulation on the monetary base has changed over time, rising until 2006 and then sharply declining as the authorities found it increasingly more difficult to limit the liquidity effects of ongoing foreign reserve growth.

We incorporate this information into an empirical model that addresses the broader monetary and inflationary impacts of the foreign reserve buildup. Under a scenario of rapid foreign exchange reserve accumulation, limited exchange rate flexibility, and rapid economic growth—the economic environment of recent years--the model predicts a rapid increase in inflation, even with increases in bank reserve requirements. However, an alternative scenario with slow economic growth but continued rapid monetary base growth predicts a decline in inflation over a three year horizon.