

# Lessons on the “impossible trinity”

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Many economists think of possible policy responses to capital flows in terms of the so-called “impossible trinity,” or “policy trilemma”, according to which, with an open capital account, a central bank cannot simultaneously exercise monetary control and target the exchange rate. This framework helps highlight the trade-offs faced by policymakers in small open economies and what choices they have made in order to resolve them.

Indeed, a review of monetary frameworks around the world suggests that over the past two decades or more, many countries have concluded that the best way to resolve the impossible trinity is by seeking to maintain open capital accounts, and then allowing the exchange rate to float so as to exercise domestic monetary control – often in an inflation targeting framework. The countries represented in this panel are prominent examples.

In practice, however, the choices made by policymakers are not so clear-cut. I will illustrate this by discussing:

- the implications of central bank intervention in foreign exchange markets under floating exchange rate regimes;
- much more briefly, the fact that floating might not give as much monetary policy independence as one might have expected; and
- the renewed interest in capital controls.

## Central banks intervene under floating

Even when committed to floating, *many authorities still enter the foreign exchange market*. One motive is prudential, to have enough foreign reserves to deal with episodes of financial stress. Thus, authorities in many emerging market economies (EMEs) accumulated large amounts of foreign currency during the period of capital inflows up to 2008, and deployed them successfully to counter interruptions in external financing after the Lehman bankruptcy.

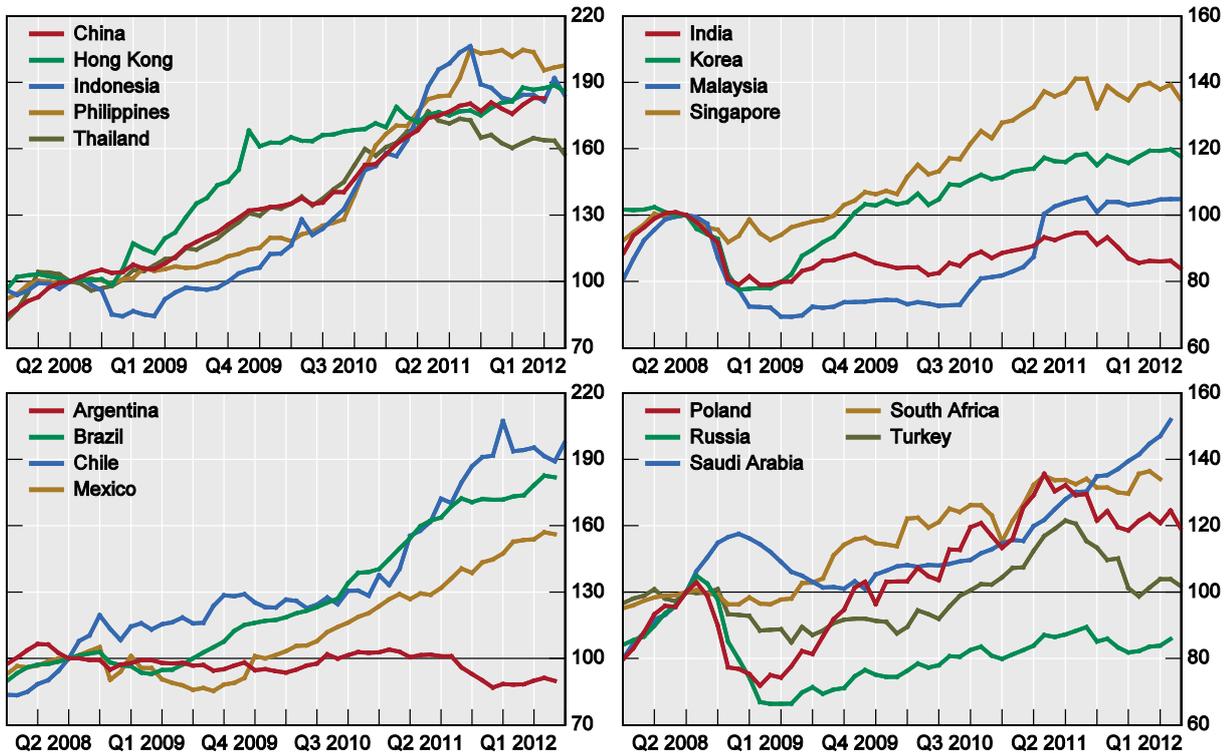
However, it is hard to tell when foreign reserve holdings are enough. Recent experience and related research suggest that we cannot rely exclusively on some popular rules of thumb, such as a 100% foreign reserve cover for short-term external debt (the so-called Guidotti-Greenspan rule). Prior to the Lehman bankruptcy, this ratio was above 100% in many EMEs, and experience in the aftermath of Lehman suggests that foreign reserves were sufficient or even ample in most countries and appeared to be too small only in a few cases. Nevertheless, as shown in the graph, many EMEs have continued to accumulate foreign reserves so that they exceed pre-Lehman bankruptcy levels.

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Graph  
**Foreign reserve accumulation**

June 2008 = 100



Sources: IMF, *International Financial Statistics*; national data.

Why is foreign reserve accumulation continuing, thus ensuring the regular presence of central banks in foreign exchange markets? One explanation is that what may be considered the appropriate level of foreign reserves varies over time, in response to changes in risk aversion or “beauty contest” effects, in which authorities face pressure to raise foreign reserves to match those of their peers or risk costly downgrades in sovereign ratings. Another explanation for continued foreign reserve accumulation is concerns that self-insurance might be inadequate in the face of a very large global shock. For example, some BIS research suggests that in the aftermath of the Lehman bankruptcy, international policy responses to provide additional US dollar financing were more effective than foreign reserve drawdowns in stabilising markets (Baba and Shim, 2010).

Given the impossible trinity, a pertinent question is whether continuing central bank entry into foreign exchange markets poses risks for monetary control. The following points may be highlighted:

- Central banks in many cases implement their foreign exchange reserve accumulation so as to minimise the impact on exchange rates, for example by preannouncing a fixed schedule for foreign reserve accumulation.
- Some central banks will occasionally intervene in the foreign exchange markets to influence exchange rates in some way, which can lead to a loss of monetary independence, particularly if the goal is to target an exchange rate level. A number of Latin American authorities, however, stress that they do not target an exchange rate level, which could expose them to speculative attacks, but seek to dampen exchange rate volatility, or correct persistent deviations of the exchange rate from some estimated equilibrium.

- Finally, foreign reserve accumulation can lead to costly changes in the size and composition of a central bank's balance sheet. This can raise concerns about the ability of central banks to sterilise, although such concerns are mitigated by the widespread use of interest rate operating targets. Another concern is exposure by central banks to possible losses (eg from changes in the exchange rate or the value of the foreign reserve assets held), which some argue can lower the capacity to exercise monetary control.

## **How much monetary independence under floating?**

Floating exchange rates can provide monetary independence by allowing central banks to adjust the policy rate to achieve their inflation target. However, capital flows can affect monetary conditions even when central banks don't intervene. For example, periods of large capital inflows can lead to lower bank deposit and lending rates, as well as lower bond rates – even if the central bank policy rate remains unchanged. An implication is that efforts by central banks to adjust monetary conditions may be countered by continuing capital inflows even if the policy rate target is met. This has generated interest in other instruments that can potentially be used to influence financing conditions without attracting capital inflows, such as reserve requirements or macroprudential instruments. The merits of alternative instruments and their effectiveness are the subject of ongoing research. If you are interested in this topic, I would like to invite you to attend the second BIS panel on “Financial stability and macroprudential policies”.

## **The revival of capital controls**

Many EMEs, including Chile and Mexico represented in this panel, have in recent years favoured the maintenance of open capital accounts and flexible exchange rates. However, some authorities have recently sought to restrict capital inflows, notably foreign portfolio debt investments. The reasons vary. Some authorities appear to want to limit persistent movements of the exchange rate away from equilibrium. Others appear to be concerned that foreign investments in domestic financial markets can impair the effectiveness of monetary policy measures. Many commentators now see a role for capital controls in the menu of instruments available to EMEs. Charles Engel will discuss some of the pros and cons.

## **References**

Baba, N and I Shim (2010): “Policy responses to dislocations in the FX swap market: the experience of Korea”, *BIS Quarterly Review*, June.