

**Policy Panel at the NBER Conference on  
International Dimensions of Monetary Policy**

**Monetary Management in Emerging Market Economies:  
Concerns and Dilemmas**

**Comments  
by  
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**Introduction**

Thank you Marty for inviting me: it has been a humbling experience in finding out how much I don't know about monetary policy making, and why I need to go back to graduate school.

In these 7 minutes I will try and present the key dilemmas we are facing in India, but which I believe almost all the developing countries in Asia are facing. The result is that none of us are really following what seem to be well accepted principles of monetary policy making. And yet we have collectively exhibited the highest growth in the world in the last 25 years +, while also experiencing generally low inflation.

As has been the theme of this conference, in recent years, the growing integration of goods and financial markets has transformed the environment in which monetary policy operates. While monetary policy has been successful in keeping inflation low in many countries since the early 1990s, some are arguing that its ability to do so in the future can be questioned. Domestic inflation may no longer be a function of domestic slack; rather, it is the global output gaps that perhaps matter for domestic inflation. On the one hand, the integration of China, India and other EMEs has helped to enhance global supply, but on the other hand their impact on global demand for commodities is leading to inflationary pressures. Similarly, long-term interest rates are being increasingly influenced by trends in the global savings-investment gap and, as has been discussed in this workshop, are bearing a weaker relationship with short-term policy rates. There is also some disconnect between current account balances and exchange rate movements on the one hand and between exchange rates and prices on the other hand. This raises some questions over the efficacy of the exchange rate

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<sup>1</sup> Comments by Dr. Rakesh Mohan, Deputy Governor, Reserve Bank of India at Policy Panel at the NBER Conference on International Dimensions of Monetary Policy at S'Agaro, Catalonia, Spain on June 12, 2007.

channel. Furthermore, risk premia remain close to record lows, even as global imbalances and the threat of disorderly adjustment persist. Finally, despite the glut of global liquidity, consumer price inflation remains relatively benign, notwithstanding some hardening over the past year. The question that arises is whether the glut will eventually lead to higher goods and services inflation or that in asset prices. Indeed, interestingly the price and output stability witnessed in major economies in the last two decades has not been accompanied by stability in asset prices and exchange rates. These monetary policy puzzles raise a number of issues on the conduct of monetary policy in open economies: the conclusion of this conference is perhaps that these are really not puzzles – at least in the Europe, and the US (Mohan, 2005).

### **Concerns and Dilemmas**

Against this backdrop let me set out the concerns and dilemmas facing authorities in the emerging market economies (EMEs), particularly in Asia, in the conduct of monetary policy in a globalised world.

In view of the rising trade openness, economies are more vulnerable to external demand and exchange rate shocks. This can necessitate significant changes in trade and other current account flows in a short span of time, as was reflected in the aftermath of the Asian financial crisis when a number of economies in this region had to make substantial adjustments in their current accounts. Central banks are required to take into cognizance such eventualities in the conduct of monetary policy.

Currently, the more serious challenge to the conduct of monetary policy, however, emerges from capital flows in view of significantly higher volatility in such flows as well as the fact that capital flows in gross terms are much higher than those in net terms. Swings in capital flows can have a significant impact on exchange rates, domestic monetary and liquidity conditions and overall macroeconomic and financial stability.

Global capital flows reflect not only the domestic economy's growth prospects but also reflect the relative interest rate differentials. Reflecting the fairly low interest rates in major advanced economies, the search for yield has led to a large volume of capital inflows to emerging economies, vastly in excess of current account deficits, and, in many cases, such capital flows are in addition to continuing surpluses on current

accounts. In fact, according to the World Bank's **Global Development Finance 2007**, reserve accretion of all EMEs put together, is roughly equal to total net private flows to them. Large capital flows can render domestic currencies overvalued and can get intermediated to speculative activities such as real estate/stock markets. In their efforts to maintain external competitiveness and financial stability, the central banks in EMEs have absorbed the forex surpluses. Further, in view of the price stability objective, these central banks have sterilized the monetary impact of their foreign exchange intervention operations through open market operations (OMOs), issuances of central banks bills, treasury bills and bonds, further liberalisation and, more recently, greater flexibility in exchange rates. Given the large volume of capital flows, central banks in the past year have also been forced to resort to unorthodox methods, such as, raising reserve requirements of banks in order to manage the liquidity situation. And, in the case of Thailand, controls on inflows including the use of unremunerated reserve requirement have also been imposed.

Furthermore, external borrowings of many emerging market economies are usually denominated in foreign currency. Large devaluations not only lead to inflation but can also cause serious currency mismatches with adverse impact on balance sheets of borrowers (banks as well as corporates) as has been discussed. A financial accelerator mechanism can exacerbate these effects and threaten financial stability. The experience of living with capital flows since the 1990s has fundamentally altered the context of development finance, while also bringing about a drastic revision in the manner in which monetary policy is conducted. The importance of capital flows in determining the exchange rate movements has increased considerably, rendering some of the earlier guideposts of monetary policy formulation possibly anachronistic. On a day-to-day basis, it is capital flows which influence the exchange rate and interest rate arithmetic of the financial markets. Instead of the real factors underlying trade competitiveness, it is expectations and reactions to news which drive capital flows and exchange rates, often out of alignment with fundamentals. Capital flows have been observed to cause overshooting of exchange rates as market participants act in concert while pricing information.

In the fiercely competitive trading environment where exporters seek to expand market shares aggressively by paring down margins, even a small change in exchange rates can develop into significant and persistent real effects. A key point is that for the majority of developing countries, which are labour-intensive exporters, exchange rate volatility can, therefore, have significant employment, output and distributional consequences. Moreover if large segments of economic agents lack adequate resilience to withstand volatility in currency and money markets, the option of exchange rate adjustments may not be available, partially or fully. Therefore, the central bank may need to carry out foreign exchange operations for stabilizing the market. On the other hand, in the case of advanced economies, the mature and well-developed financial markets can absorb the risks associated with large exchange rate fluctuations with negligible spillover on to real activity. Consequently, the central banks in such economies do not have to take care of these risks through their monetary policy operations.

The experience with capital flows has important lessons for the choice of the exchange rate regime. The advocacy for corner solutions is distinctly on the decline. The weight of experience seems to be tilting in favour of intermediate regimes with country-specific features, without targets for the level of the exchange rate, the conduct of exchange market interventions to ensure orderly rate movements, and a combination of interest rates and exchange rate interventions to fight extreme market turbulence. In general, emerging market economies have accumulated massive foreign exchange reserves as a circuit-breaker for situations where unidirectional expectations become self-fulfilling. It is a combination of these strategies which will guide monetary authorities through the impossible trinity of a fixed exchange rate, open capital account and an independent monetary policy

For developing countries, considerations relating to maximising output and employment weigh equally upon monetary authorities as price stability. Accordingly, it is difficult to design future monetary policy frameworks with only inflation as a single-minded objective. Thus the operation of monetary policy has to take into account the risks that greater interest rate or exchange rate volatility entails for a wide range of participants in the economy. Both the fiscal and monetary authorities inevitably bear these risks. The choice of the exchange rate regimes in some developing countries, therefore, reveals a

preference for flexible exchange rates along with interventions to ensure orderly market activity, but without targeting any level of the exchange rate. There is interest in maintaining adequate international reserves and a readiness to move interest rates flexibly in the event of disorderly market conditions.

### **Indian Specifics**

Like other EMEs, the conduct of monetary policy is increasingly influenced by the evolving dynamics of capital flows. In this context, a brief discussion of a few relevant stylized facts of the Indian economy would be useful. First, real GDP growth has recorded strong growth since 2003-04, averaging 8.6 per cent per annum over the four-year period ending 2006-07. This growth is significantly higher than world economic growth. This would suggest that equilibrium real interest rates for a country like India would be higher than world interest rates. Second, inflation in India has averaged between 4.5 and 5.0 per cent, which remains higher than that in major advanced economies. These growth and inflation differentials taken together would lead to nominal interest rates being relatively higher in a growing economy such as India. Moreover, the growth in India has been achieved in an environment of macroeconomic stability. Thus, both push factors and pull factors have made India as an attractive destination of global capital flows. Third, since the early 1990s, India has witnessed a progressive opening up of the economy to external flows. There has been a sustained increase in capital flows and capital flows have remained significantly in excess of the current financing need. Fourth, it is pertinent to note that, unlike many other economies running surpluses on their current account, India has been running a deficit (except for three years) on the current account. The current account deficit has averaged close to one per cent of GDP since the early 1990s and this would suggest that exchange rate in India has been fairly valued.

Fifth, the challenges for monetary policy with an open capital account get exacerbated if domestic inflation firms up. In the event of demand pressures building up, increases in interest rates might be advocated to sustain growth in a non-inflationary manner but such action increases the possibility of further capital inflows if a significant part of these flows is interest sensitive and explicit policies to moderate flows are not undertaken. These flows could potentially reduce the efficacy of monetary policy tightening by enhancing liquidity. Such dilemmas complicate the conduct of monetary policy in India if

inflation exceeds the indicative projections. During 2006-07, as domestic interest rates hardened on the back of withdrawal of monetary accommodation, external foreign currency borrowings by domestic corporates witnessed a significant jump in India, leading to even higher flows. In case, there are no restrictions on overseas borrowings by banks and financial institutions, such entities could also annul the efforts of domestic monetary tightening.

In this environment, leaving the exchange rate to be fully determined by capital flows can, as noted earlier, pose serious setbacks to exports and, over time, external sector viability. Indeed, as the Asian financial crisis showed, real appreciation can lead to future vulnerability and avoidable volatility in the economy. Thus, like other central banks grappling with the impossible trinity, the Reserve Bank has been operating in an intermediate regime. The Indian rupee exhibits substantial two-way movements and the Reserve Bank intervenes in the foreign exchange market to smoothen out volatility. A multi-pronged approach has been followed to manage the external flows to ensure domestic economic and financial stability. The key features of the package of measures include: liberalisation of policies in regard to capital account outflows; encouraging pre-payment of external borrowings; alignment of interest rates on non-resident deposits; and, greater flexibility in the exchange rate. These measures have been supplemented with sterilisation operations to minimise the inflationary impact of the flows and to ensure domestic financial stability. Operations involving sterilisation are undertaken in the context of a policy response which has to be viewed as a package encompassing exchange rate policy, level of reserves, interest rate policy along with considerations related to domestic liquidity, financial market conditions as a whole, and degree of openness of the economy.

Sustained and large capital flows and their sterilization through open market operations, however, led to a dwindling stock of Government securities with the Reserve Bank by early 2004. Given the provisions of the Reserve Bank Act, a market stabilization scheme (MSS) was introduced in 2004 to provide the Reserve Bank greater flexibility in its monetary and liquidity operations<sup>2</sup>. As noted earlier, large capital flows to EMEs

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<sup>2</sup> In early 2004, it was recognised that the finite stock of Government paper with the Reserve Bank could potentially circumscribe the scope of outright open market operations for sterilising capital flows. The Reserve Bank cannot issue its own paper under the extant provisions of the Reserve Bank of India Act,

including India in the past few years are partly the reflection of extended monetary accommodation by G-3 central banks. In case monetary conditions were to tighten further in the major advanced economies, the flow of capital to the EMEs could reduce vastly. Similarly, the possibility of increased risk aversion by foreign investors cannot be ruled out and this could be associated with large and sudden withdrawal from the EMEs as was evidenced in May/June 2006 and March 2007. Thus, authorities in the EMEs should be fully prepared for large and unanticipated withdrawal of funds by foreign investors. In such a scenario, a scheme like the MSS – absorption at times of heavy inflows and unwinding of balances at times of reversal/lower inflows – can smoothen domestic liquidity conditions. Thus, the MSS, as operated in India, can be viewed as a truly market-based stabilization scheme.

In recognition of the cumulative and lagged effects of monetary policy, the pre-emptive monetary tightening measures which were initiated in September 2004 continued during 2006-07 and 2007-08. Since September 2004, the repo rate and the reverse repo rate have been increased by 175 and 150 basis points, respectively, while the cash reserve ratio (CRR) has been raised by 200 basis points. In view of the need to maintain asset quality against the backdrop of strong and sustained growth in credit, monetary measures were reinforced by tightening of provisioning norms and risk weights. In the context of large capital inflows and implications for liquidity and monetary management, the interest rate ceilings on non-resident deposits have been reduced by 75-100 basis points since January 2007.

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1934 and such an option has generally not been favoured in India. Central bank bills/bonds would impose the entire cost of sterilisation on the Reserve Bank's balance sheet. Besides, the existence of two sets of risk-free paper – gilts and central bank securities – tends to fragment the market. Accordingly, the liquidity adjustment facility (LAF), which operates through repos of government paper to create a corridor for overnight interest rates and thereby functions as an instrument of day-to-day liquidity management, had to be relied upon for sterilization as well. Under these circumstances, the Market Stabilisation Scheme (MSS) was introduced in April 2004 to provide the monetary authority an additional instrument of liquidity management and sterilisation. Under the MSS, the Government issues Treasury bills and dated government securities to mop up domestic liquidity and parks the proceeds in a ring-fenced deposit account with the RBI. The funds can be appropriated only for redemption and/or buyback of paper issued under the MSS. The ceiling for the MSS is decided in consultation with the Government; effective October 4, 2007, the ceiling is Rs.2,000 billion.

## **Concluding Observations**

This is a brief snapshot of some of the issues facing Asian EMEs and India in particular. Our monetary policies, in general are not following conventional rules, but it would certainly be true to say that we do all emphasize low inflation and price stability, but in the context of financial stability as an equally important objective.

Globalisation has clearly affected what we do. Globalisation has transformed the environment in which monetary policy operates, leading to progressive loss of discretion in the conduct of monetary policy. Much of the discussion in this conference has, however, concluded that for the US and EU, globalisation has little relevance for monetary policy making. This reminds me of a comment that T.N. Srinivasan made at a presentation I made in 1977 in my Ph.D thesis on a dynamic CGE model of India. I had concluded that my model exhibited the same quality of robustness that the Indian economy did: that nothing much happened to the model despite significant shocks to the system. His comment was: "Your model is so robust that you can throw it off the Empire State Building and nothing will happen to it!". Perhaps looking for the effects of globalisation on US monetary policy has the same problem. As the largest economy in the world whose currency is the key reserve currency, should we expect the same effects of globalisation on monetary policy as we would on smaller economies?.

With the opening up of the economies and greater integration, monetary authorities in EMEs are no longer concerned with mere price stability. Financial stability has emerged as a key objective of monetary policy, especially in emerging economies. The adverse implications of excess volatility leading to financial crises are more severe for low-income countries. They can ill-afford the downside risks inherent in a financial sector collapse. Central banks need to take into account, among others, developments in the global economic situation, the international inflationary situation, interest rate situation, exchange rate movements and capital movements while formulating monetary policy. At the same time, central banks in the EMEs would need to take initiatives to further widen and deepen their financial markets that can increasingly shift the burden of risk mitigation and costs from the authorities to the markets.



Several countries in Asia have followed a relatively flexible exchange rate policy to ensure smooth adjustment along with corrections in the world economy. Such flexibility has served these countries well. However, the world has to guard against any new risks arising out of any large corrections in the exchange rates of the world's major currencies accompanied by rising inflation and interest rates. First, the protectionist tendencies need to be curbed in keeping with the multilateral spirit of trade negotiations. Second, we need to work collectively towards developing a sound international financial architecture, the lack of which, it may be recalled, has led to excessive caution on the part of developing countries in building large reserves. Third, given the need for financial stability alongside monetary stability, central banks need to be cautious before joining the recent trend of separating the monetary and supervisory authorities, particularly in view of the muted responses to the pricing channels of monetary policy.

## **References**

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