

*Volatility in Capital Flows: Some Perspectives**

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As the crisis is ebbing, capital inflows into emerging market economies (EMEs) have resumed - a consequence of a global system awash with liquidity, the assurance of low interest rates ruling in advanced economies over 'an extended period' and the prospects of robust growth in EMEs. According to the IMF, net private financial flows to emerging and developing economies increased from US\$ 254 billion in 2006 to US\$ 689 billion in 2007 and then declined, at the height of the global financial crisis, to US\$ 179 billion in 2008 and US\$ 180 billion in 2009. The resumption of capital flows has triggered familiar concerns in EMEs about macroeconomic and financial stability. This has also sparked off a vigorous debate internationally on the policy approach to capital flows at the country level and at the international level. My comments as chairman of this session will cover the theoretical arguments for and against capital flows, the collective experience to date in managing capital flows and issues on the way forward. I will also allude to India's approach to capital account management.

Arguments For and Against Capital Flows

2. The theoretical arguments in support of capital flows are quite persuasive. Capital flows aid growth by providing external capital to sustain an excess of investment over domestic savings. By affording the opportunity of using the world market, an open capital account permits both savers and investors to diversify their portfolios to maximise returns and minimise risks. Capital flows could also potentially develop nascent financial markets, promote financial

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discipline and reduce the borrowing costs both for the government and the corporates.

3. On the flip side, however, capital flows are known to be procyclical and they complicate macroeconomic management. An open capital account interferes with the simultaneous management of a fixed/managed exchange rate peg and an independent monetary policy – a phenomenon familiarly known as the 'Impossible Trinity'.

4. Large and persistent capital flows can potentially jeopardise financial stability. Large speculative flows in 'search for yield' typically go into investment in assets leading to rapid and destabilising build up of asset prices. Since such speculative flows are volatile by nature, they can impair the orderly functioning of the financial markets. When investors exit from securities markets abruptly in a herd, stock and bond prices get affected, and when investors take the redemption proceeds out of the country, the exchange rate gets affected. Should the central bank intervene to stabilise the forex market, the resultant tightened liquidity can affect the money markets. Thus, speculative flows affect all financial markets - the securities markets, the forex market, the money market and the credit market, with contagion spreading from one market to another rapidly. If not contained, these swift developments can threaten financial stability and lead to output and employment losses.

Managing Capital Flows

5. Surely, capital flows are important to meet the investment needs of EMEs.

Problems arise when the flows are largely in excess of the economy's absorptive capacity and also when they are highly speculative in nature. EMEs have responded to managing the adverse macro impact of volatile capital flows through a variety of policy actions. Stylistically, these can be categorised into three options. The first option is to do nothing (exchange rate option) in which case the exchange rate will appreciate. The second is to allow the flows to come in but intervene in the forex market (reserve accumulation option). The third option is to deploy capital controls. Typically, EMEs have adopted a mix of all the options. Let me briefly discuss the implication of these options.

The Option of Exchange Rate Adjustment

6. The most straight forward option for the central bank is to allow flows to come in without any intervention. However, when capital inflows are large, this can lead to currency appreciation unrelated to fundamentals and trigger a 'Dutch Disease' syndrome. Experience has shown that a flexible exchange rate system is prone to overshooting, and this has engendered the 'fear of floating' among many countries.

The Option of Reserve Accumulation

7. The second option for a central bank, confronted with a surge of capital flows, is to intervene in the foreign exchange market to dampen disorderly movements of the exchange rate. This will result in accumulation of foreign exchange reserves and release of additional liquidity into the system. If left unsterilised, the additional

liquidity so generated in the system will have potential inflationary implications. Typically central banks have sterilised the flows, either partly or fully, using a variety of tools including open market operations, tightening the access of banks to the discount window, adjusting reserve requirements, using a foreign exchange swap facility, easing restrictions on capital outflows and prepayment of external debt. In theory, each of these tools holds out the prospect of achieving the same effect as open market operations. However, one should be mindful of the law of unintentional consequences. Such intervention would prevent the domestic money market interest rates from falling which would attract more inflows and thus actually accentuate appreciation pressure, the problem that was sought to be contained in the first place. In the case of EMEs, intervention may also entail large quasi-fiscal costs if the domestic assets yield higher returns than the foreign exchange reserves.

8. Notwithstanding the costs of accumulating and holding reserves, reserves so built up come handy in preserving financial stability in the face of outflows. In fact, besides being an intrinsic good, foreign exchange reserves confer several other important advantages such as automaticity, fungibility and usage in both crisis prevention and crisis resolution. Because of the potential for rapid outflows and the associated liquidity risks, EMEs have tended to build up reserves as a means of self-insurance. During the recent crisis, EMEs which had built up reserves as self-insurance found that they could weather the crisis more effectively. The very possession of an ample level of reserves

helped to maintain market confidence as measured by lower spreads on credit default swaps and also blunted the penetration of the crisis in these economies.

9. Such self insurance has, however, faced intellectual inclement. It has been criticised as being costly and inefficient and also as contributing to global imbalances. To wean EMEs away from self insurance, international financial institutions like the IMF have recently come up with revised instruments such as a flexible credit line and high access precautionary arrangements. There were also cases of regional swap arrangements during the recent crisis. It is not yet clear if such external safety-nets can fully substitute for national level self-insurance in terms of speed, effectiveness and autonomy.

The Option of Capital Controls

10. The third standard option for EMEs is to impose controls on capital flows. Experience in this regard has been mixed. Protagonists of controls have argued that capital controls are distortionary, difficult to implement, easy to evade, and that they become ineffective fairly quickly and entail negative externalities. On the other hand, proponents of capital controls contend that controls are desirable because they preserve monetary policy autonomy, save sterilisation costs, tilt the composition of foreign liabilities toward long-term maturities, and ensure macroeconomic and financial stability. The challenge for policy makers is to design and implement controls where the cost of compliance is lower than the cost of evasion.

11. Capital controls were a central issue during the Asian crisis, but the orthodox view that 'controls are not desirable' largely survived the crisis. Capital controls are now once again a central issue, as the recent crisis witnessed, across emerging economies, a rough correlation between the extent of openness of the capital account and the extent of adverse impact of the crisis. Surely, this should not be read as the denouncement of open capital account, but a powerful demonstration of the tenet that premature capital account opening hurts more than it helps.

12. The advisability of a Tobin tax has figured prominently in the discussion on capital controls in the post crisis period. Several countries have used variants of Tobin tax to discourage heavy, short-term capital inflows. It has been argued that the tax helps reduce exchange rate volatility and consequently curtails the intensity of "boom-bust" cycles engendered by international capital flows. However, Tobin tax has been criticised on many counts: the tax can be evaded easily through modern financial instruments like derivatives; it reduces liquidity in the markets; and to be effective, the scope of the tax needs to be continuously widened which may lead to inefficiencies. The efficacy of a Tobin type tax remains a debatable issue.

13. Refreshingly, the IMF has shed its long held orthodoxy against capital controls. The policy note of the IMF published in February 2010¹ has referred to certain 'circumstances in which capital controls can be a legitimate

component of the policy response to surges in capital flows'. The IMF's Global Financial Stability Report (April 2010) has gone further into this issue and observes that capital controls are reasonable instruments in the 'toolkit' of developing/EME economies facing volatile capital flows. The World Bank and the Asian Development Bank too have echoed the view that capital controls may be advisable, indeed inevitable, in certain circumstances.

India's Approach

14. India has experienced both 'floods' and 'sudden stops' of capital flows. Net capital flows to India increased from as low as US\$ 7 billion in 1990-91 to US\$ 45 billion in 2006-07, and further to US\$ 107 billion during 2007-08, the year just before the crisis. They dropped to as low as US\$ 7 billion in 2008-09 at the height of the crisis. Capital flows are estimated to have recovered to around US\$ 50 billion in 2009-10.

15. India has followed a consistent policy on allowing capital inflows in general and on capital account management in particular. Our position is that capital account convertibility is not a stand alone objective but a means for higher and stable growth. We believe our economy should traverse towards capital convertibility along a gradual path - the path itself being recalibrated on a dynamic basis in response to domestic and global developments. We will continue to move towards liberalising our capital account, but we will revisit the road map to reflect the lessons of the crisis. As regards a Tobin type tax, we have not so far imposed nor are we contemplating one. However, it needs reiterating that no policy

¹ Ostry, Jonathan D. and Others (2010), "Capital Inflows: The Role of Controls", IMF Staff Position Note, SPN/10/04, February 19, 2010.

instrument is clearly off the table and our choice of instruments will be determined by the context.

16. Among the components of capital flows, we prefer long term flows to short-term flows and non-debt flows to debt flows. The logic for that is self-evident. Our policy on equity flows has been quite liberal, and in sharp contrast to other EMEs which liberalised and then reversed the liberalisation when flows became volatile, our policy has been quite stable.

17. Historically, we have used policy levers on the debt side of the flows to manage volatility. Contrary to popular perception, we have used both quantity and price based variables to moderate debt flows. There is a ceiling on the extent of FII investment in sovereign and corporate debt (quantity variable) and there is also a withholding tax (price variable). External commercial borrowings (ECB) by corporates come in through both an automatic route and an approval route. ECB flows under both the automatic and approval routes are moderated by interest rate ceilings (a price variable) and those under the automatic route through an additional ceiling on total quantity (a quantity variable). Non-Resident Indians (NRI) deposits are monitored through an interest rate ceiling, a price variable.

18. Our exchange rate policy is not guided by a fixed or pre-announced target or band. Our policy has been to intervene in the market to manage excessive volatility and disruptions to the macroeconomic situation. This 'volatility centric approach' to exchange rate also stems from the source of volatility which is capital flows. Despite not having a fully open capital account, we

have experienced large volatility in capital flows as the data for last four years suggests (See Table below). The exchange rate of the Indian rupee *vis-à-vis* US dollar appreciated when there were large capital inflows; and it depreciated when the capital inflows thinned out. The two way movement is a clear demarcation of our flexible exchange rate policy.

19. India's exchange rate policy is said to have imposed some costs. Last fiscal (2009/10), the rupee appreciated by 13 per cent in nominal terms but by as much as 19 per cent in real terms because of the inflation differential between us and our trading partners. This has implications for our external competitiveness at a time when world trade is recovering and concerns about protectionism are resurfacing. Also, if we have a flexible exchange rate, and if other countries which are our trading partners or competitors for the same export markets have a fixed exchange rate, we get disadvantaged.

20. Although India does not have a deliberate strategy of building up reserves for self insurance, our reserves got built up as a result of our relatively flexible exchange rate policy. The reserves so built up have

Table : Trends in India's External Sector

	2006/07	2007/08	2008/09	2009/10
CAD (% of GDP)	1.0	1.3	2.4	2.5
Net Capital flows (% of GDP)	4.8	8.7	0.6	3.8
Capital flows in excess of CAD (\$ billion)	37	92	(-) 20	14
Rupee appreciation (+) depreciation (-) <i>vis-à-vis</i> US\$ during the year	2.3	9.0	(-) 21.5	12.9

been used to contain volatility in the event of capital flow reversals.

21. There has been much discussion post-crisis on the cost effectiveness of self-insurance. The main refrain has been that accumulation of reserves by EMEs as a safety-net entails domestic costs while also leading to global imbalances. Be that as it may, in evaluating the level of reserves and the quantum of self insurance, it is important to distinguish between countries whose reserves are a consequence of current account surpluses and countries with current account deficits whose reserves are a result of capital inflows in excess of their economy's absorptive capacity. India falls in the latter category. Our reserves comprise essentially borrowed resources, and we are therefore more vulnerable to sudden stops and reversals as compared with countries with current account surpluses.

Way Forward

22. For several decades now, EMEs have struggled with capital flows in their own ways. The orthodox view that capital controls are inherently inefficient and should not be resorted to has inhibited mainstream research on the topic. But that orthodoxy has now changed, and a more flexible and open-minded approach is gaining ground. For example, the April 2010 Global Financial Stability Report of the IMF says, "there are a number of different types of controls that can be imposed with varying degrees of success under different country circumstances. Overall, the message is that one size does not fit all. Since the use of capital controls is advisable only to deal with temporary inflows, in particular those

generated by external factors, they can be useful even if their effectiveness diminishes over time." There is a need to follow up this revised world view with research. The IMF and other multilateral bodies and research institutions must embark on researching the negative externalities arising from large and volatile capital flows, the ways to address the negative externalities, explore when it is appropriate to use controls, what kind of controls work best and under what circumstances.

23. Another area where IMF research would be value adding will be in creating an informative and exhaustive database on capital flows including cross border bank exposures. This may include standardisation of the definition of capital flows, maintaining data at higher frequencies and collecting information on the counterparties involved in the transactions. Such tracking would help countries determine which types of flows are potentially unstable and need reserve backing. The IMF should undertake an independent study on capital flows based on such data and pinpoint the vulnerabilities, if any, in the international monetary system so as to enable countries to take preventive action against potential pressure points.

24. There has been some discussion on the role of the IMF in evaluating the capital account stances of countries. It would be preferable for the IMF to play only an advisory (and not jurisdictional) role on capital account issues as our collective understanding is not yet complete and differences in views/perceptions/experiences need to be accommodated. Within this advisory role, even-handed treatment, in the sense that sources of volatility and potential

vulnerability are given as much emphasis as the issue of capital controls, is important.

Conclusion

25. In its January 28, 2010 issue, The Economist said, "Capital, like water, tends

to flow around such obstacles (taxes). Try to dam its movements at one point, and slowly but remorselessly, it will find its way around." To learn to 'dam' the flows so that the benefits of capital flows exceed their costs remains an intellectual and policy challenge for EMEs.