

Some Reflections on the recent global financial turmoil – an Indian perspective¹

Every year, this forum provides an opportunity to collectively review and analyse the developments of the past year in the forex market. But the past year has been like never before and now the focus is on the impact of the financial crisis on the real economy. The financial meltdown has resulted in effective nationalisation of major financial institutions in the US, UK and Eurozone. So far global banks, mortgage lenders and insurance firms have announced write downs of over US\$ 800 billion. There has been a massive increase in central bank lending to the banking system and rescue packages totalling almost US\$3 trillion have been announced by governments around the world. Monetary policy has been eased aggressively but given the lagged impact attention has shifted to fiscal policy. From this side, I can say that the past year has indeed been a challenging one which has reinforced the futility of finding clean corner solutions to evolving situations and each decision necessarily involves managing different objectives while finding the immediate focus points without dissipating the gains of reforms undertaken.

Forex markets in India – Recent Developments

2. As far as the Indian foreign exchange market is concerned, during the last five years the sources of supply and demand have changed significantly with large transactions emanating from capital account unlike in the past when current account transactions dominated the foreign exchange market. The behaviour as well as the incentive structure of the participants who use the forex market for undertaking current account transactions differ significantly from those who use the market for capital account transactions. Therefore managing the capital account, particularly debt flows, even while we are getting more integrated is an important instrument in our overall macroeconomic management. In the last few years we had to address the challenge of large capital inflows and had therefore in consultation with Government taken certain measures to calibrate these flows by requiring external commercial borrowings (ECB) to be used for foreign currency expenditure. Measures to liberalise outflows for resident individuals, mutual funds, and corporates were also pursued. The global financial crisis and deleveraging have now led to reversal and / or modulation of capital flows particularly foreign institutional investor flows, ECBs and trade credit.

3. In response to the emerging global developments, the RBI has taken a series of measures to augment forex and domestic liquidity. Some of the measures taken to augment forex liquidity are:

¹ Keynote address by Ms. Shyamala Gopinath, Deputy Governor, Reserve Bank of India at the Annual Conference of Foreign Exchange Dealers' Association of India (FEDAI) at Kolkata on January 10, 2009. Assistance of Mr. Vaibhav Chaturvedi in preparation of the remarks is gratefully acknowledged.

- USD dollar swap lines of up to USD 10 billion for Indian banks with overseas branches and subsidiaries. The actual utilisation, as of January 9, 2009 is only USD 247 million.
- Increasing interest rate ceilings for FCNR(B) and NRE deposits to LIBOR / SWAP rates plus 100 basis points and LIBOR / SWAP rates plus 175 basis points respectively.
- ECB policy, which is an instrument of capital account management, has been liberalised to revert to the pre-May 2007 period. It may be recalled that due to large capital flows, the end use of ECB proceeds was limited to foreign currency expenditures. Further liberalisation in terms of expanding eligible borrowers and end use has also been undertaken viz:
 - Housing Finance Companies, registered with National Housing Bank (NHB) have been permitted to raise short- term foreign currency borrowings
 - NBFCs, which are exclusively involved in financing of the infrastructure sector, may avail of ECBs from multilateral / regional financial institutions and Government owned development financial institutions for on-lending to the borrowers in the infrastructure sector under the Approval route.
 - Payment for obtaining license/permit for 3G Spectrum will be considered an eligible end - use for the purpose of ECB.
 - The corporates in the Hotels, Hospitals and Software sectors to avail of ECB up to USD 100 million per financial year, under the Automatic Route, for foreign currency and / or Rupee capital expenditure for permissible end-use.
 - Spreads on ECBs and trade credits were increased and the all-in-cost ceilings on ECBs were dispensed with under the Approval route.
- Limit on overseas borrowings by banks was enhanced from 25 percent to 50 percent of unimpaired Tier I capital. Overseas borrowings for on-lending to exporters continue to remain outside the ceiling.
- In order to enable EXIM bank to continue to offer buyers credit against lines of credit as well as pre-shipment and post shipment finance, RBI has extended a line of credit of Rs 5000 crore.
- EXIM is also eligible to avail of swap facility up to USD 1 billion under the facility permitted for banks.
- The FII limit for investment in corporate bonds has been hiked to USD 15 billion from USD 6 billion.

4. The Indian foreign exchange market has grown significantly in the last several years. The daily average turnover has gone up from about USD 5 billion per day in 1998 to more than USD 50 billion per day in 2008. There is also evidence of growing merchant turnover reflecting the huge increase in external transactions. The bid offer spreads are also narrow.

Table 1 Forex Market Activity

	April'05- Mar'06	April'06- Mar'07	April'07- Mar'08	April'08- Dec'08
Total turnover (USD billion)	4,404	6,571	12,304	9,621
Inter-bank to Merchant ratio	2.6:1	2.7:1	2.37: 1	2.66:1
Spot/Total Turnover (%)	50.5	51.9	49.7	45.9
Forward/Total Turnover (%)	19.0	17.9	19.3	21.5
Swap/Total Turnover (%)	30.5	30.1	31.1	32.7
Source: RBI				

5. The spot foreign exchange market remains the most important segment but the derivative segment has also grown. In the derivative market foreign exchange swaps account for the largest share of the total turnover of derivatives in India followed by forwards and options. Significant milestones in the development of derivatives market have been (i) permission to banks to undertake cross currency derivative transactions subject to certain conditions (1996) (ii) allowing corporates to undertake long term foreign currency swaps that contributed to the development of the term currency swap market (1997) (iii) allowing dollar rupee options (2003) and (iv) introduction of currency futures (2008). I would like to emphasise that currency swaps allowed companies with ECBs to swap their foreign currency liabilities into rupees. However, since banks could not carry open positions the risk was allowed to be transferred to any other resident corporate. Normally such risks should be taken by corporates who have natural hedge or have potential foreign exchange earnings. But often corporate assume these risks due to interest rate differentials and views on currencies.

This period has also witnessed several relaxations in regulations relating to forex markets and also greater liberalisation in capital account regulations leading to greater integration with the global economy.

6. Cash settled exchange traded currency futures have made foreign currency a separate asset class that can be traded without any underlying need or exposure and on a leveraged basis on the recognized stock exchanges with credit risks being assumed by the central counterparty.

Since the commencement of trading of currency futures in all the three exchanges, the value of the trades has gone up steadily from Rs 17, 429 crores in October 2008 to Rs 45, 803 crores in December 2008. The average daily turnover in all the exchanges has also increased from Rs 871 crores to Rs 2,181 crores during the same period. The turnover in the currency futures market is in line with the international scenario, where I understand the share of futures market ranges between 2 – 3 per cent.

The Broader Theme

7. In my remarks today I thought it would be appropriate and relevant to touch upon the big picture and underline some lessons that we can draw from the crisis relevant to regulation, financial markets and the market infrastructure and reflect on these. We will continue to learn from the lessons as the crisis is still evolving but these are certain topical issues.

(i) As was to be expected, the financial sector turmoil has triggered a reassessment internationally of the existing theoretics and metrics about the financial sector developments of the past two decades and the simultaneous evolution of the global regulatory framework enshrined in the Basel framework. Questions are being asked and answers being sought to some of the key issues regarding leverage, transparency, and liquidity underlying at the heart of the crisis.

(ii) What the current crisis has done is to question the very fundamentals of the entire financial framework. What is the role of the financial system in an economy vis-à-vis the real sector? If the financial sector exists, as traditionally conceived to intermediate financial resources for optimal channelisation to productive sectors, then over the last few years the script has gone terribly bad. The world of finance, as had come to be epitomized in the market volumes and turnovers and derivative outstandings got disconnected by far from the real sector.

(iii) The importance of containing systemic leverage has been underlined. While obviously there can't be market stops and starts for this purpose but the whole incentive structure built in the public policy framework needs to be aligned with the objective of disincentivising leverage beyond a point. Any future financial market reform measure and introduction of new innovations/products must be preceded by an assessment of the resultant leverage for the system in quantifiable terms.

(iv) Financial sector entities need to be seen and regulated as risk repositories in the system – any notion of their risks being dissipated into or outside the system is inherently flawed. There is therefore need for limits, prudential safeguards and adequate capital to support the risks. It is

also necessary to understand the substance of a product and not merely the nomenclature.² Once this understanding is there the income recognition and accounting treatment becomes clear. Receipt of premia/fees for assuming a contingent liability will then not be treated as income but as funds for meeting potential future liabilities.

(v) It is now recognised that the current microeconomic-driven prudential regulatory framework, including Basel II is procyclical which further worsens the impact of crises on institutions. In 2000, the Bank of Spain introduced a dynamic, rules-based loan-loss provisioning system in which provisions increase in periods of higher credit growth and economic expansion, and decrease in times of low or negative growth, thereby contributing to smooth income and capital over time. RBI also did something similar when we increased the risk weight as also the general provisioning requirement on exposures to sectors which showed high credit growth. This was reduced recently when growth moderated.

(vi) The increasing focus on holistic approach towards regulation of financial entities is a welcome change from the view that allowed a growing proportion of products and participants to go unregulated on the grounds that they had no systematic impact. This approach resulted in the shadow banking system made up of unregulated SIVs and conduits distributing opaque structured products containing risky assets with the active marketing of rating agencies.

In India also, one view used to be that only deposit taking NBFCs need regulation to protect the interest of depositors and that the non-deposit taking NBFCs do not pose any such risk and therefore need not be regulated. It was, however, realised that the inter-linkages of these NBFCs with the other components of the financial system have grown over the years and their growing presence in various financial markets could, in the absence of regulatory steps lead to risk transfers which could have systemic implications. You are well aware how in the recent past, through a gradual non-disruptive process, an attempt has been made to bring systemically important non-deposit taking NBFCs under a more harmonised regulatory framework, including the capital adequacy norms and exposure norms. These measures have reduced the unlimited leverage possibilities available to NBFCs.

(vii) Another important aspect has been the treatment of off balance sheet exposures and consolidation of off balance sheet vehicles and conduits. While applying prudential norms, there

² For instance, in the context of CDS, the Superintendent of the New York State Insurance Department Mr. Eric Dinallo recently mentioned in his deposition before the Hearing of a US Senate Committee on "The Role of Financial Derivatives in Current Financial Crisis" that "*The Insurance Department has determined that covered credit default swaps are insurance and therefore potentially subject to state regulation... Our goal is to ensure the terms of credit default swaps are written as a mechanism for protecting buyers against actual losses and not for betting on the credit quality of a third party.*"

is need to treat off-balance sheet transactions similar to on balance sheet transactions for the purpose of capital adequacy norms and risk management. In the case of off balance sheet vehicles a broader view needs to be taken from a prudential point of view on consolidation. The critical issue should be not merely the ownership but where the risk resides. In this context, a review of the current conversion factors and risk weights for off balance sheet items is necessary. Similarly it is recognized that the potential liquidity risks also need to be captured.

Pursuant to the announcement in the Annual Policy Statement of April 2008, the RBI over a period and after consultations with market participants has announced the following measures:

- Strengthening of the capital adequacy norms for off balance sheet transactions covering foreign exchange and interest rate exposures. It mandated use of current exposure method for measuring the credit equivalent amount i.e. the exposures had to be marked to market, and prescribed provisioning requirement for the exposure amount as applicable to standard assets of the concerned counterparty. Credit conversion factors were also increased across maturities.
- In regard to asset classification it was clarified that the amount due on a derivative contract will be treated as NPA if not received within 90 days. In that case all other funded facilities granted to the client will also be classified as non-performing asset following the principle of borrower- wise classification as per the existing asset classification norms. However, in the case of complex derivative contracts that were entered into between April 2007 and June 2008, the RBI suggested that the unpaid amounts may be parked in a separate account and borrower wise classification will not apply.
- In cases where a derivative contract is restructured, the MTM value of the contract on the date of the restructuring should be cash settled.

(viii) While the factors responsible for the crisis are many, one that is being debated widely is the contribution of fair value accounting framework for complex and conventional financial instruments in amplifying the crisis. The problem lies in the procyclical nature of the standard and the difficulty in valuing financial instruments when markets are illiquid or in distressed conditions.

Although fair value may increase transparency of the company accounts, it may not always reflect the true intrinsic value in both upswings and under excessively stressed market conditions. There is a need to distinguish the basic financial and prudential analysis from a purely “financial” accounting framework.

There is also need to clearly appreciate that the accounting reporting has a role as a source of information and as such will indicate the value of the company at the moment of the statement of accounts. Fair value for prudential purposes is more forward looking in its approach as it includes not only incurred losses but also expected losses. This tension can be addressed by the regulators addressing the regulatory and prudential aspects in the case of banks. Keeping in

view the systemic implications of the standards, regulators will have to carry out an indepth assessment of the concepts and tools relating to valuation.

(ix) Great emphasis is now being laid on implementing a central counterparty for OTC derivatives particularly for credit default swaps. Well regulated counterparties reduce potential for disruption in financial markets and promote operational efficiencies and transparency.

In India as early as in 2001, the Clearing Corporation of India was set up to settle interbank spot forex transactions and all outright and repo transactions in government securities whether negotiated or order driven systems. CCIL has also introduced a collateralised money market instrument called CBLO which is also settled through the CCP. CCIL has also commenced non-guaranteed settlement of OTC trades in interest rate swaps on 27 november 2008. Guaranteed settlement of these trades will commence later once we clarify the exposure requirements. In the near future it will also act as central counterparty for forward contracts which will mitigate risks releasing counterparty exposure limits. The margins are in the form of cash and government bonds ensuring the quality and liquidity of the settlement guarantee fund.

(x) Recent developments will also pave the way for more effective regulation rather than reliance on self regulation, credit rating agencies assessments or setting of standards by industry participants.

(xi) Lastly, on the issue of selling of complex products, we have to collectively work towards a viable framework. What is the solution? In this context I would like to recount the application of a surprisingly simple idea to the realm of public policy that has received tremendous attention after being advocated by Richard Thaler and Cass Sunstein in their international bestseller "**Nudge**". The authors advocate the use of "choice architecture" by businesses or governments to influence choices in ways that encourage choosers to make decisions in their best interest. They call it "libertarian paternalism." This involves utilizing "nudges" such as the wording of choices in ways that influence individual actions, designing default choices (in the absence of action) that do not penalize individuals, limiting choices to those that are more comprehensible, taxing detrimental choices, and providing full disclosure to better inform decision-makers. Can we take a cue?

I will urge FEDAI to take it up as a special assignment and suggest a framework that is both practical and implementable while ensuring the best interests of all stakeholders.

8. The experience and lessons of the present crisis will be extremely useful for us in going forward with the process of financial market liberalisation. While there is not and should not be any stifling of innovations in the financial sector, it is important to distinguish financial innovation from conventional product, service or process innovation in terms of the systemic costs these

entail. Socially useful as it is, financial innovation should not be allowed to outpace its understanding by the multitude of market participants and stake holders – a process facilitated by appropriate reporting, accounting and governance standards and enforced by regulatory and supervisory regime.

9. FEDAI plays a special role in the foreign exchange market for ensuring smooth and speedy growth of the market in all its aspects. All authorised dealers are required to become members of the FEDAI and execute an undertaking to the effect that they would abide by the terms and conditions stipulated by the FEDAI for transacting foreign exchange business. As the forex market grows in the spot and derivative segments including currency futures, the FEDAI as a self regulatory organisation needs to focus on supporting orderly growth, promoting market integrity and sound practices with the ultimate objective of supporting the real economy.

I wish the conference all success.
