Shyamala Gopinath: Financial markets – some regulatory issues and recent developments

Inaugural address by Ms Shyamala Gopinath, Deputy Governor of the Reserve Bank of India, at the Fixed Income Money Markets and Derivatives Association–Primary Dealers Association of India (FIMMDA–PDAI) Annual Conference, Mumbai, 4 January 2010.

* * *

1. It is my pleasure to be here today again, at the FIMMDA–PDAI annual conference as we enter into a new decade. The last decade in the Indian financial sector has been a forward continuum marked by significant developments. It was in 1999 that guidelines for interest rate swaps and forward rate agreements were first introduced. 1999 was also the year when FEMA was enacted and since then it has been a process of measured opening up of the capital account. That was also the time when the LAF framework for modulating short term liquidity was introduced and a plan was put in place for making uncollateralized call money market as a pure inter-bank market. Looking back, we have come along a long way. One thing that perhaps connects through the regulatory approach during this period has been the pursuit of financial stability. Some may be surprised to note that as far back as the start of this decade, the conceptualization of financial stability had been ingrained into the macro-economic and policy framework of the RBI. There was a stated focus on the need to treat financial stability as a dominant objective of macroeconomic management and as a necessary, if not the sufficient, condition for accelerating economic growth.[1] Financial stability, of course, has acquired its rightful place as a key policy objective globally since the onset of crisis.

2. In my address last year, I had touched upon some of the burning issues that the global policy makers were grappling with. The financial markets have since stabilised and there is recovery in risk appetite but this primarily reflects the unprecedented and extraordinary policy measures taken by central banks and governments. Public sector assumed the role of not only the lender but also the risk taker of last resort. Much water has flown in the interregnum and in terms of outcomes, at the very least, we have a common minimum globally agreed program for repairing the financial system. The key elements of this program are: a strengthened capital adequacy and liquidity regime for banks, developing a framework for systemically important entities and resolution arrangements, extending the regulatory perimeter to unregulated pools of money, de-risking the OTC derivatives trading and new frameworks for regulating compensation within the financial sector. The main action on the above program is primarily concentrated on both sides of the Atlantic for obvious reasons. However, most of the other countries, including India, have agreed to the broad commitments being driven by the G20 and the FSB.

3. My address today will be in two parts. In the first part I propose to discuss broad issues relating to financial market regulation and in the second part will briefly review the key developments in major markets in India and certain unsettled issues.

I. Regulatory approach for markets

4. In the post crisis scenario, the new important variable that is being sought to be addressed globally is the oversight of systemic risk. It is being acknowledged that institutional

[1] RBI Annual Report 1999–2000.

regulation alone is not sufficient in capturing and addressing systemic risks and it is imperative to have a mechanism to monitor and act upon the risks inherent in the interconnectedness across the financial system – a macro-prudential approach to regulation and supervision. It is recognized that systemic risk is created endogeneously rather than having exogeneous origins beyond the remit of financial markets.

Macro-prudential regulation – the concept

5. Macroprudential approach, generically, can be defined as policy that focuses on the financial system as a whole, and also treats aggregate risk as endogenous with regard to collective behaviour of institutions. It aims to limit system wide distress so as to avoid output costs associated with financial instability.[2] The underlying philosophy of macro-prudential regulation is that behind the individual prudence of financial firms may underlie systemic problems caused by their collective behavior. A recent Bank of England discussion paper[3] interprets macroprudential policy as lying on a spectrum with monetary policy at one end and microprudential policy at the other, concerned with the stability of the aggregate provision of financial intermediation services to the real economy.

6. The two key elements of macro-prudential regulation[4] that have acquired maximum attention are one, existence of common (correlated) exposures which arise either because institutions are directly exposed to the same or similar asset classes or because of indirect exposures associated with linkages among them (e.g. counterparty relationships) and two, collective homogeneous actions on the part of institutions resulting in amplification of risks because of interconnectedness, the pro-cyclicality element.

7. Integral to the above approach is also the role of financial markets – by and in themselves, different market segments, assessed in terms of the usual metrics such as liquidity, turnover, etc. may be functioning absolutely well, but there may still be underlying systemic vulnerabilities arising out of the interactions of different market participants, both regulated as well as unregulated, across different markets.

8. However, there is still no coherent framework emerging for regulation of financial markets from a stability perspective. Indeed, the joint IMF–BIS–FSB paper on assessing the Systemic Importance of Financial Institutions, Markets and Instruments also acknowledges that the assessment of systemic importance of markets presents more conceptual challenges than for institutions. In the area of reforming markets, the singular area of action has been to address counterparty risks and non-transparency in the OTC market by taking all such markets onto central clearing platforms. Other elements impinging on market functioning flow from the focus on entity regulation such as addressing excessive leverage, higher capital charge for trading and securitization transactions.

9. Holistically speaking, regulation of financial markets per se would involve two separate strands, apart from entity regulation:

(i) policy framework that includes the product specifications, macro level regulations that apply to all entities operating in this market, systemic safeguards, nature of participants, reporting requirements etc.

(ii) operational aspects of trading and post-trade clearing and settlement.

---

[2] Borio, Claudio: *Implementing the macroprudential approach to financial regulation and supervision*, September 2009, Financial Stability Review, Banque de France.

[3] Bank of England, "*The role of macroprudential policy*", November 2009, Discussion Paper.

[4] Borio, Claudio: *Implementing the macroprudential approach to financial regulation and supervision*, September 2009, Financial Stability Review, Banque de France.

10. The concept of market regulation in most of the developed financial centres has largely been concentrated around the operational aspects of trading – the conduct of business part and has left prudential focus to entity regulation. More importantly, there was no explicit policy framework for markets from a stability perspective. Mr. Howard Davies, the previous chairman of the FSA recently admitted that "The political mood, and certainly the mood in the markets, was that regulators should observe how markets evolved and try to craft their regulatory environment to cope with the risks that emerged. We have now seen that an approach of that sort can step too far back... We now can see that if you step too far back, trends can develop in a way which creates trouble, and that there needs to be, I think, more self-confidence in the regulatory world to be prepared to step in at an earlier stage and to challenge the judgments of the markets."[5]

11. It is surprising that this paradoxical approach Mr. Howard Davies talks about is not being altered even now though there is recognition of the need to monitor systemic interconnectedness. The macro-prudential approach to regulation, now being considered imperative for financial entities, is still some way from being applied to financial markets.

12. Just to illustrate, one of the arguments against the way financial products have evolved relates to the problem of information asymmetries: the gulf between the market makers and market takers. Large financial firms run huge positions across multiple assets and have the ability as well as incentive to move markets in a way advantageous for them. This is not merely an exaggerated concern: there are increasing number of articles trying to interpret the link between the creation and selling of CDOs by large investment firms on underlying securities of doubtful nature prior to the crisis and simultaneously going short. In plain words, on the one hand you sell the derivatives to less informed investors betting on the upside, while at the same time place huge bets to gain yourself from the downside. Here comes the systemic perspective in regulation: what may be good for a particular entity may be sowing seeds of instability for the system.

13. As part of general public discourse many interesting issues are being raised and debated fiercely, particularly relating to the social good being contributed by the markets and the systemic implications of some of the innovations. I came across an interesting classification of opinionists in the context of the raging debate on climate change – calamitists and denialists at the two extremes and warners and skeptics somewhere in the middle.[6] Through the crisis, there have been similar voices in the context of the role of markets. On one end of the spectrum are the denialist notions that there is inherently nothing wrong with the markets and the primary drivers for the crisis lay in the macro-economic realm. At the other end, there are the calamitists arguing for a radical shift in the way markets are regulated since they have failed spectacularly. The truth, as usual may lie somewhere in the middle. Some key issues have indeed been acknowledged and are being addressed. There have been broad agreements on the principles, the problem is that these are the common minimum principles and the implementation is being driven by contextual issues in each country.

Interconnectedness

14. The crisis has highlighted the importance of improving our understanding of interconnectedness in the financial system through direct links between financial institutions and the indirect links created through financial markets. The key channels of propagation of risks are maturity mismatches and leverage.

---

[5] Interview to the Wall Street Journal, December 13, 2009, Future of Finance Initiative.

[6] Stewart Brand, "*Four Sides to Every Story*", www.edge.org.

15. In regard to direct links, there is need for bringing all inter-bank/intra-financial system exposures both on and off-balance sheet within the macro prudential framework. While there are prudential requirements for individual bank's exposures to other banks, there is appreciation of the need to prescribe safeguards on the liabilities side of the balance sheet too and to ensure availability of adequate good quality liquid assets.

16. The growth in financial sector over the past few years has been exponential. While many have argued that this has also contributed to real economy growth, behind the numbers lays the critical role of leverage and off-balance sheet financing. As mentioned in the Turner Review, from about 2003 onwards there were significant increases in the measured on-balance sheet leverage of many commercial and investment banks, driven in some cases by dramatic increases in gross assets and derivative positions. This coupled with the growth of "shadow banking" meant that the so-called benefits from financial sector growth have been mostly illusory.

17. Firms whose business models were based on high leverage and excessive dependence on uninterrupted access to secured funding markets were highly vulnerable in the crisis. Many firms relied on excessive short-term wholesale financing of long term illiquid assets including on cross border basis. During the crisis they were faced with lenders demanding substantial cushions or haircuts on the assets they were willing to finance. Moreover, these assets taken as collateral were illiquid and lenders failed to factor in this risk. This combined with excessive leverage accentuated the vulnerability.

18. The excessive dependence of entities on wholesale funding markets such as repo or other collateralised markets is an issue of systemic concern since one, it accentuates systemic procyclicality through haircuts/margins and two, the leverage loop that builds through these markets in high liquidity periods induces rigidity and gets entrenched into funding models of entities. It is therefore imperative to bring the secured funding markets such as repo markets within the regulatory perimeter/macro prudential framework, particularly since many entities participating in these markets are unregulated/lightly regulated. There is need for a cautious approach when the securities that are repo'ed/collateralised carry credit risk and are illiquid.

19. This also raises the issue of interconnectedness of banks to private pools of capital that are largely unregulated. While the reform of the financial system does cover regulation of hedge funds, the general issue of banks exposures to these funds directly as well as through markets needs greater attention. The same applies to private equity which are unregulated entities. These entities rely on funding markets for leverage. From a macro prudential perspective it is not just necessary to regulate banks exposures to these entities but also to limit the overall leverage of these entities if they are permitted to access funds directly from banks and other financial intermediaries and indirectly via funding markets.

OTC market infrastructure

20. A large number of initiatives are underway at the international level to strengthen the infrastructure for OTC derivatives, a clear amplifier of stress particularly in credit derivatives market in the crisis as evidenced by AIG, Bear Stearns, Lehman episodes. The deficiencies within the OTC derivatives market viz. the management of counterparty credit risk and the absence of sufficient transparency have pushed the policy preference to exchange traded/centrally cleared models. However the specific proposals being discussed in various countries do envisage continuance of non-standardised OTC contracts albeit with a stricter bilateral collateralization requirement and higher capital charge.

21. Increasingly more nuanced perspectives on this issue are being articulated, the most recent one being the discussion paper of December 2009 from the HMT and the FSA in UK which argues against the need for mandating the trading of standardized derivatives on organized trading platforms provided steps are taken to improve transparency and mitigate the risks of OTC derivatives. According to this paper regulatory objectives of reducing

counterparty risk and improving transparency can be achieved by other means and they would review progress of initiatives in this area. Moreover, mandating the use of organised platforms would imply a regulatory imposition of trading structure, which they do not believe is necessary. The paper argues that mere standardisability cannot be a sufficient condition for central clearing and other factors such as availability of prices, depth of market liquidity and whether the product contains inherent risk attributes that cannot be mitigated by the CCP need to be considered by regulators.

22. The essence of a CCP arrangement is netting and margining, which are contingent on homogeneity of the underlying asset, availability of reliable prices and sound risk models to capture future potential exposures. The ability of models to capture tail risks has been comprehensively put to question post crisis. How would the exchanges be better able to measure and manage risk where some of the biggest financial firms with the soundest risk management systems failed? This would be particularly true of credit products such as CDS. In this context, the nature of collateral regime becomes extremely important. Any instrument with a credit risk element would inherently not be suitable for a collateral. If these aspects are not addressed by the regulators, mandatory clearing would only result in a potentially riskier system.

23. The real sector i.e. end users are opposing mandatory move to exchanges and clearing platforms on the ground that the crisis was inherently due to complex transactions between financial intermediaries and there should be no increase in cost to the real sector, i.e. genuine end-users, for undertaking derivative trades.

24. Currently, a CPSS–IOSCO Committee is looking into the existing standards for the systemic entities like the CCP. Given the nature of their functions which require incentives for strong risk management and building adequate financial resources in the form of settlement guarantee funds and their systemic importance, it is worthwhile to consider central counterparties as "public utility" and not-for profit entities to reduce moral hazard.

25. A key criticism of the proposed reforms has been that it doesn't address the fundamental issue of speculative use of derivatives and excessive financialisation of all products. In fact, by transferring most of OTC market onto exchanges, it might be further accentuating it. It is not surprising to hear major global exchanges as well as brokers betting on a manifold increase in the CDS market as a result of electronic trading and central clearing. A recent study[7] has found that of the gross CDS position of 23 large US Banks only around 2 per cent was for hedging the rest was for their dealer activities. Though the figures pertain to 2005, they give a fair idea of really how much of the CDS market was actually for pure speculation. Speculation does play an economic role in increasing market liquidity and price discovery but beyond a point, trading without an underlying interest could only increase systemic risk particularly when the same market prices and volatilities get entrenched into the balance sheets of the real sector.

Rating agencies

26. Another area where progress has been slow relates to the rating agencies. There have been some proposals to mitigate conflicts between raters and issuers who pay them but these have largely been in the nature of more disclosures by rating agencies and separation of the consultancy/advisory roles. Some of the fundamental issues have been left unaddressed, particularly the methodological issues, accountability arrangements and over-stretching of rating agencies. A key issue that has not been addressed is the ratings given by rating agencies based on implicit support without the need to disclose the rating status

---

[7] Minton, Bernadette, René M Stulz, and Rohan Williamson, January 2008, "*How much do banks use credit derivatives to hedge loans?*", Fisher College of Business Working Paper Series.

without such implicit support. From the point of view of transparency to investors and accountability there is need for further disclosures in this regard.

Capital account management

27. For emerging countries the macro prudential framework has also to deal with vulnerability arising from cross-border capital flows, currency mismatches and foreign currency liquidity in the financial system. Rapid and volatile capital inflows or outflows can present significant policy challenges – potentially leading to exchange rate overshooting, asset price volatility and financial instability. In this context, appropriate and pragmatic use of capital account regulations may have to be considered by emerging markets in order to maintain financial stability if considered necessary.

Market discipline

28. In the past, it has been argued that market discipline can play a key role in incentivising market participants to limit their excessive risk taking activities. However, the events of the last few years have proved the inadequacy of market discipline and bankers have been engaged in risk-taking activities disguised as value-creation. Time and again market participants have engaged in herd behaviour and put the financial system at risk. It is poignant to note how relevant Charles Mackay's observation in his popular book Extraordinary Popular Delusions and Madness of Crowds, written in 1841, even today. Mackay wrote, "Men, it has been well said think in herds; it will be seen that they go mad in herds, while they only recover their senses slowly, and one by one". The events of the past few years tell us that market discipline expressed via market prices cannot be expected to play a major role in constraining risk taking, and that the primary constraint needs to come from regulation and supervision.

29. So how do we manage the trade-off between financial stability, effective regulations on the one hand and free markets on the other? One, the responsibility for financial stability cannot be fragmented across several regulators; it has to rest unambiguously with a single entity, and that single entity optimally is the central bank. And second, that there is need for coordination across regulators on a regular basis and for developing a protocol for responding to a crisis situation.[8]

30. In my opinion, any regulation that is envisaged should be based on the touchstone of the following: Regulations that does not lead to excessive leverage of not only financial institutions, but also of households and corporates. Regulations that augment the market process and strengthen the invisible hand. Regulations that address the information problems associated with complex financial instruments and improve the transparency of instruments and institutions. Regulations that acknowledge and address the systemically important nature of key markets that have wider implications for the real economy. Regulations that recognize and address the country specific circumstances.

Part II – Indian context

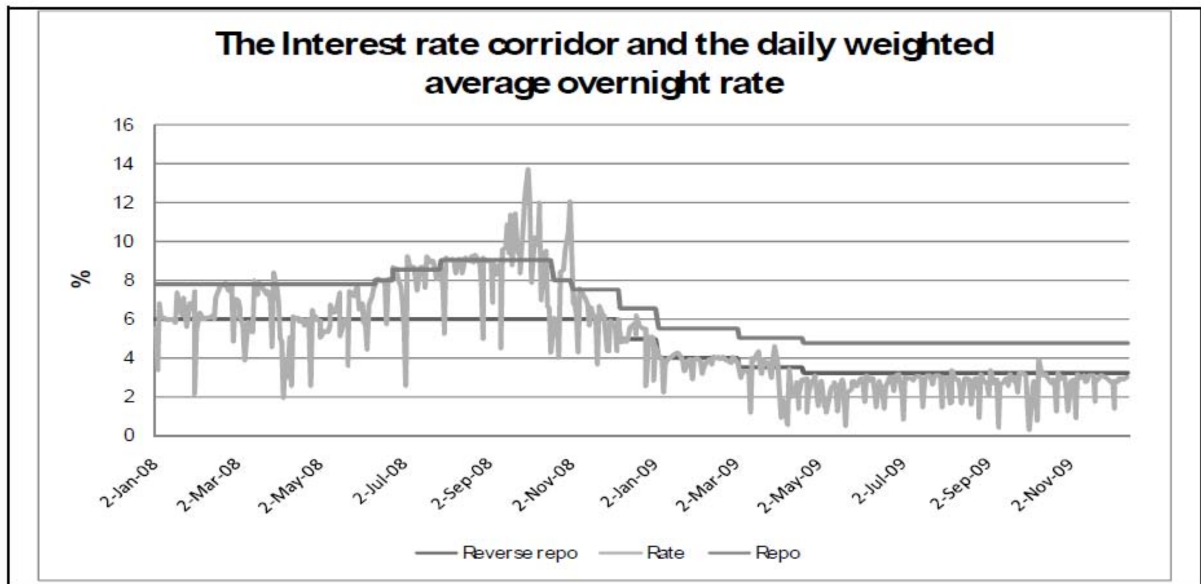
31. Having touched upon some of the broad issues for financial regulation in the context of emerging global consensus, let me turn to the Indian context. I would like to briefly review the key developments in major markets and try to flag some of the unsettled issues.

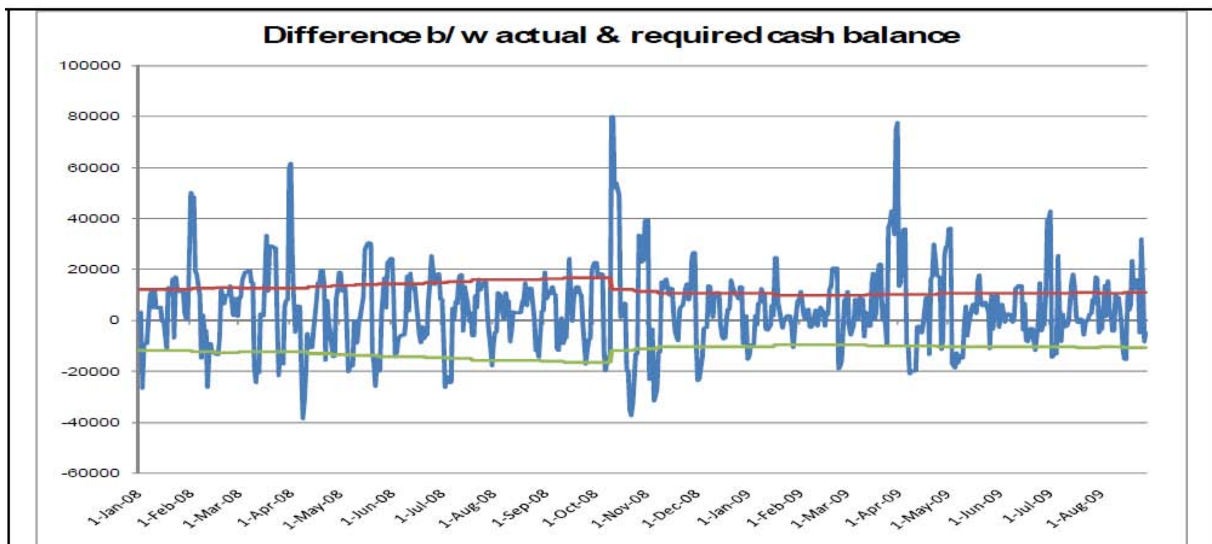
---

[8] Subbarao, Duvvuri, *Financial Stability: Issues and Challenges*, September 2009.

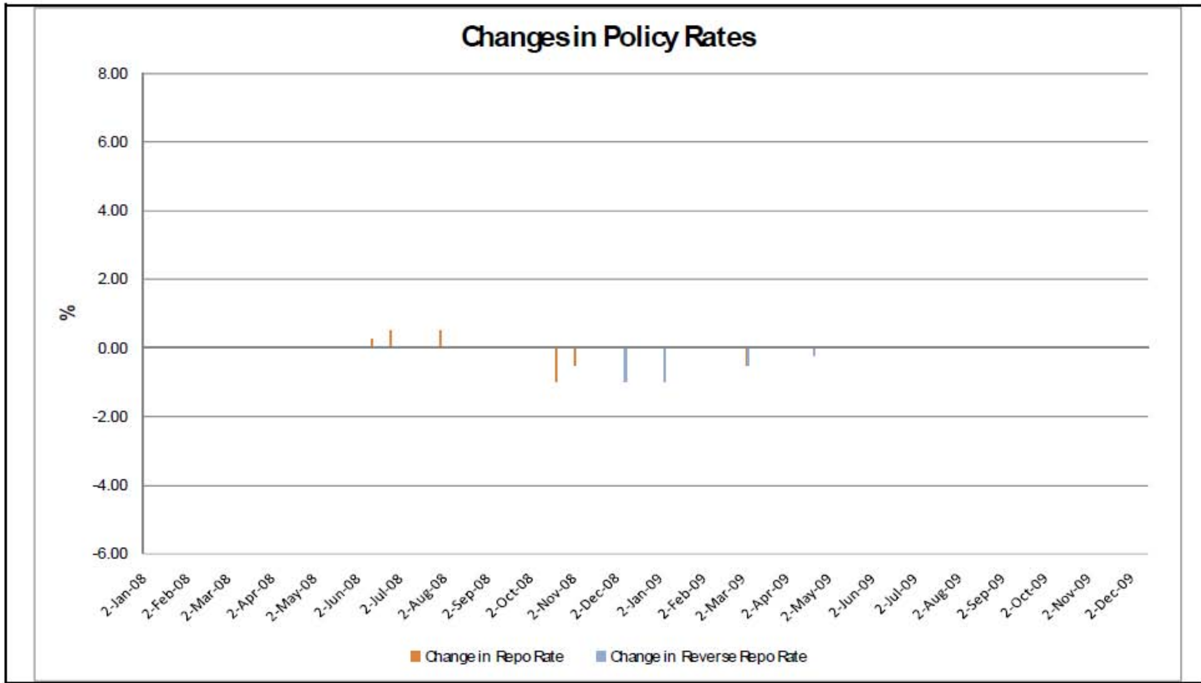
Money markets

32. The overnight rates have an important contributory role in terms of managing day to day liquidity and as a point of origin for building expectations on the term structure of interest rates. Domestically, while the overnight rates have more or less remained around the corridor in the recent past, the daily cash maintained by the banking system with RBI – one of the most important determinants of the overnight rates – have remained highly volatile as compared to the required CRR balances.

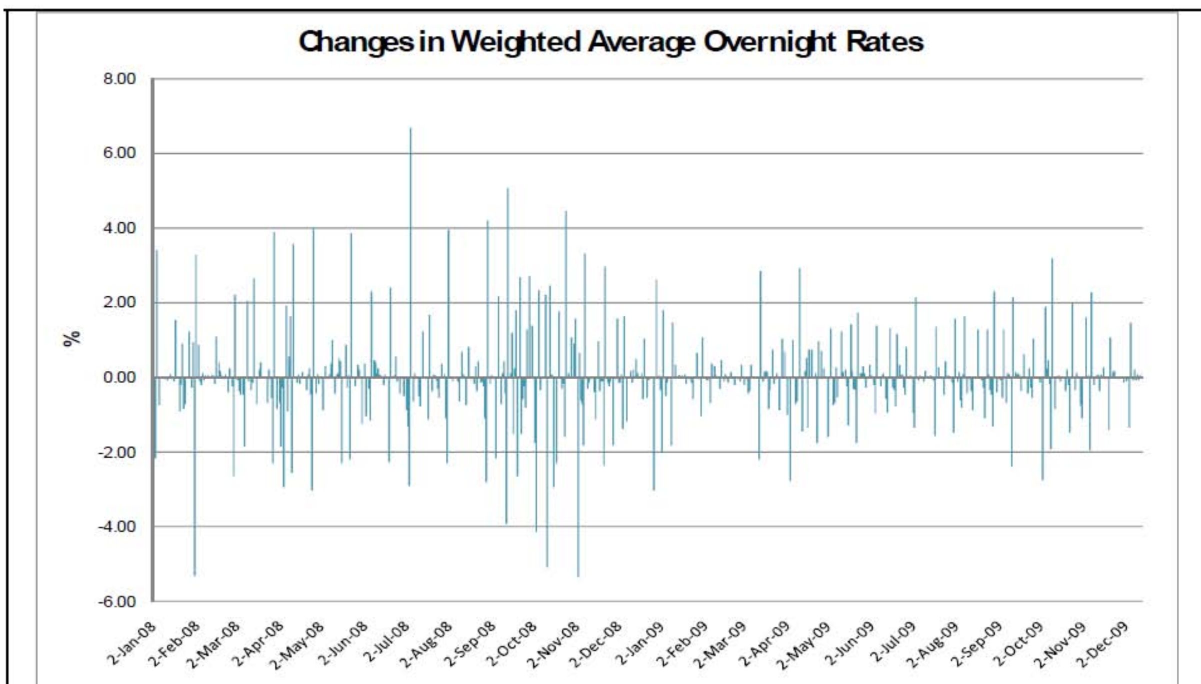




33. Therefore, despite the daily overnight rates remaining around the interest rate corridor, the daily absolute change in the weighted average rates have not been smooth.



34. While we are all aware of the skewed distribution of liquidity in the banking system due to different balance sheet sizes of the banks, the rapid roll-out of RTGS system and the core banking solutions perhaps offers us an opportunity to go back to the drawing board and optimize the day to day liquidity management to reduce the opportunity costs and more importantly improve the ability to lend on term basis. The term money market continues to remain dormant with low turnover despite several initiatives taken by the Reserve Bank, mainly reflecting the inability of the market participants to take a medium-term view on interest rates and liquidity, corporates' continued preference for cash credit and other modes of loan disbursements. However, the CD market is active and reflects the unsecured term money market rates.



35. RBI has addressed the issue of vulnerabilities arising from excessive intra financial sector activity by limiting the unsecured overnight market to banks and primary dealers and imposing limits on unsecured borrowing and lending in overnight markets as also by limiting the gross interbank liabilities.

36. On the market infrastructure side, over the years, the collateralised segment of money market has assumed increasing importance for the entire gamut of market players including non-banks without engendering financial instability. All collateralized trades including market repos are settled through a CCP. These developments have contributed to the increased transparency and liquidity in these markets and imparted stability to the financial markets.

37. On the regulatory front, the gap that existed in the case of NCDs with maturities less than one year has received the regulatory attention. Non Convertible Debentures of maturity of less than one year are being issued with innovative features such as, interest rates linked to overnight rate, American style put/call optionality, which imparts demand liability character to these instruments. Further, the innovative features and the high amount of issuance of such instruments pose systemic risks. The suggestion of the market participants in expanding the eligible entities that can act as Debenture Trustees for the issuance of NCDs with less than one year maturities is being examined by the Reserve Bank. However, the suggestion for relaxing the minimum tenor of these NCDs from the proposed tenor of 90 days to 7 days cannot be acceded to as under the law, corporates are prohibited from issuing unsecured debentures with maturity of less than 90 days. Allowing markets to issue very short-term instruments can have systemic implications. In any case, there are other instruments in the short-end like repo, CBLO and CPs that can meet the requirement of investors.

Fixed income markets

38. The fixed income markets in India, as is the case with the developed world is dominated by the Government securities markets. A lot has been done to develop the market infrastructure for the Government securities markets in the past two decades and most of the issues that remains now have to do with the development of the non-bank non-institutional interests in the government securities. In India, the reasons for lack of retail interest lies in the availability of alternative instruments with higher yields and better tax treatment and the small savings window for those in need of risk free instruments. Nevertheless, the experience gained in the development of the Government securities market microstructure will stand us in good stead in further development of the Corporate Bond markets and certain other segments of the money markets mentioned earlier.

Government securities market

39. Of the various reforms towards development of the Government securities market, the most significant one, I must say was the issuance of G-secs through auction, followed and backed by development of market infrastructure such as trade reporting platforms for real time dissemination, DvP and CCP clearing and settlement. Introduction and gradual relaxation of repo has also significantly contributed to the liquidity. The Reserve Bank has also taken up the revision of repo accounting to reflect the true economic essence of the transaction on the books of both the repo seller as well as the repo buyer. The final guidelines are set to be issued shortly.

Initiatives to widen investor base

40. In last few years, many initiatives have been taken to widen the investor base in G-Sec Market. The Reserve Bank, in consultation with the Central Government and State Governments, has introduced the Non-Competitive Bidding in the Auction of Central Government securities and State Development Loans. NDS-OM has been extended to

insurance companies, qualified Mutual Funds, Provident Funds and Pension Funds in a phased manner. Further, changes have been made in the manner in which bids are submitted in the auctions of the Government of India securities so as to improve the efficiency of the auction procedure as also the timeliness of data dissemination.

41. With the average daily trading volumes of about Rs. 13,000 crore and Rs. 22,000 crore in outright and repo market respectively, the G-sec markets are on the growth path.

Primary dealers

42. With an objective to render the Government Securities market vibrant, liquid and broad based, the Reserve Bank introduced the system of Primary Dealers (PDs) in 1995. In order to broad base the Primary Dealership system, banks were permitted to undertake Primary Dealership business departmentally in 2006–07. Further, the standalone PDs were permitted to diversify into other business activities. With the induction of two new PDs in 2009, there are currently 19 PDs comprising 11 banks undertaking PD business departmentally and eight standalone PDs. As you are aware, in view of the underwriting and market making responsibility of PDs, they have been given access to Current Account facility and Subsidiary General Ledger (SGL) Account facility (for Government securities) with the Bank, permission to borrow and lend in the money market including call money market and to trade in all money market instruments, membership of electronic dealing, trading and settlement systems (NDS platforms/INFINET/RTGS/CCIL), access to the Liquidity Adjustment Facility (LAF) of RBI, access to liquidity support from RBI under a scheme separately notified for standalone PDs and favoured access to open market operations by the Reserve Bank.

Performance of PDs in primary auctions of government securities

43. The share of PDs (ratio of bids accepted from PDs to the total notified amount) in primary auctions of Central Government dated securities (Table 1) has been significant since 2006 when the Bank stopped participating in primary auctions, ensuring full subscription to the Government securities.

Table 1: Performance of PDs in primary auctions of Government securities

(In Rs. crore)

Details	**2006–07**	**2007–08**	**2008–09**	**2009–10***
Notified Amount	146,000	156,000	261,000	295,000
Bids Submitted by PDs	202,462	254,253	349,393	361,325
Bids accepted of PDs	64,727	72,122	111,094	117,023
Bid-to-cover ratio	1.39	1.63	1.34	1.22
Success Ratio	31.97%	28.37%	31.80%	32.39%
Share of PDs	44.33%	46.23%	42.56%	39.67%

* – till end-September 2009
Source: Trend & Progress 2009

Recent initiatives

44. In view of the enhanced borrowings by the Government of India in 2008–09 and 2009-10 as part of the counter-cyclical policy in response to slowdown, structured meetings with PDs and other major investors were taken up on a regular basis to obtain market feedback and exchange views on relevant issues. The major initiatives taken during the current fiscal are:

i. Consequent to the global financial crisis, the spread between corporate bond and Government securities turned out more than 500 bps due to credit crunch in the financial markets. To enable the PDs to raise Tier II and Tier III capital, ceiling on interest rate spread at the time of issue of the subordinated instruments was removed effective from April 1, 2009.

ii. Stand-alone PDs were allowed to categorize a portion of their Government Security portfolio in the HTM category till March 31, 2010.

iii. In order to aid stand-alone PDs in managing their funding requirement, PDs are allowed to borrow from call money market, on an average in a fortnight, up to 225 per cent up from 200 per cent.

iv. In the backdrop of global financial crisis and the need to have strongly capitalized entities to ensure financial stability, the minimum NOF for stand-alone PDs undertaking only G-sec business, was increased from Rs. 50 crore to Rs. 150 crore and for the stand-alone PDs, which intend to undertake other permissible activities, NOF is enhanced to Rs.250 crore from the existing level of Rs. 100 crore. The enhanced level of NOF requirement shall be effective from April 1, 2010.

v. PDs are allowed to deal in Interest Rate Futures (IRFs) for both hedging and trading ***on own account***.

45. The RBI is impressing upon the PDs to expand their outreach to widen the investor base for government securities and act as market makers for the smaller entities in non-institutional segment.

Corporate bond market

46. Corporate bond market segment has received intense attention in recent times as it has been identified as one of the growth engines for further development of the Indian economy with vast infrastructure needs. A well developed corporate bond market not only enables the corporates to tap the markets for their financing needs and result in efficient allocation of resources but also acts as a much desired supplement for the bank financing thereby reducing the systemic stress. There has been a spurt in the secondary market activity in the corporate bond markets. The secondary market volumes have gone up from Rs. 5000 crore in 2007 to about Rs.30,000 crore in 2009. The bond issuance through private placement in the first half of 2009–10 has shown an increase of 25 per cent over the corresponding period previous year, with financial service sector accounting for 71 per cent of the mobilization. The FIIs have been allowed to invest up to $15 bn in corporate bonds. The actual utilization is however very low. The streamlining of clearing and settlement processes by mandating the DvP settlement of corporate bonds is expected to increase the market activity including public issues by mitigating the settlement risks.

47. Introduction of OTC repo in corporate bonds, as already announced, would further enhance the secondary market activity by encouraging more participants to hold bonds. However, we need to tread with prudence since the repo facilitates leverage. As indicated earlier secured funding markets globally were the key leverage-enabling channels that played an exacerbating role during the crisis. While such collateralized funding markets generally help market integration by enabling participants to fund their long positions and deliver into short positions and by helping them to manage their short term liquidity needs,

during times of crisis, the same mechanism may accentuate the crisis by forcing the borrowers into insolvency due to steep fall in the value of collaterals, leading to margin calls and fire sales (Gorton and Metrick, 2009).

48. The feedback received on the draft guidelines has largely been positive but the key issue that has been raised relates to inclusion of short term money market instruments such as CDs/CPs as eligible securities for repo. To begin with, it is proposed to start only with highly rated bonds. The final guidelines in this regard would be issued shortly.

Foreign exchange market

49. There has been a sharp increase in the liquidity in the Indian forex market between 1997–98 and 2007–08, resulting from the nine fold increase in turnover over this period and low and stable bid-ask spreads.[9] The 25% compounded annual growth in turnover and the doubling of the merchant to inter-bank turnover ratio during this period was reflective of accelerated pace of economic growth and increased openness of the domestic financial markets. The turnover is almost equally accounted for by the spot and derivatives markets. The derivatives market is dominated by swaps followed by forwards. Currency futures have also been introduced in recognised stock exchanges since August 2008 to facilitate hedging by residents.

50. The sudden change in the external environment that started around mid-September 2008 led to heightened volatility in the currency market. The Rupee exhibited a sharp downward trend, like other emerging market currencies, in the backdrop of de-leveraging in global financial markets, sharp declines in equities markets and deterioration in the inter-bank money markets prompting investors to shun emerging market assets. While FDI flows exhibited resilience, access to ECBs and trade credits was rendered somewhat difficult. The net outflows under portfolio investment, banking capital and short-term trade credit led to capital account balance having turned negative during the third quarter (October–December) of 2008–09, the first time since the first quarter of 1998–99.

51. In this context, the Reserve Bank took all preemptory actions as necessary to preserve orderly conditions in the markets. Apart from undertaking market operations to bridge the demand supply gap, other measures were also taken such as upward adjustment of the interest rate ceiling on the foreign currency deposits by non-resident Indians, substantially relaxing the external commercial borrowings (ECB) regime for corporates, and allowing non-banking financial companies and housing finance companies to access foreign borrowing. The RBI had also introduced special forex swaps of tenors up to three months on November 7, 2008 in order to provide flexibility to Indian banks in managing their short-term funding requirements at their overseas offices.

52. The average daily turnover of FCY–INR in the foreign exchange market (including forwards and FX swaps) decreased from USD 33.44 billion in July 2008 to USD 29.45 billion in October 2009. While the turnover in the inter-bank segment fell from USD 25.48 billion to USD 20.23 billion, that in the merchant segment increased from USD 7.96 billion to USD 9.22 billion.

Derivatives market

Interest rate derivatives

53. The interest rate deregulation not only made financial market operations efficient and cost-effective but also exposed participants to increased risks. The OIS market is the most

[9] BIS triennial survey 2007. In the aftermath of the failure of the Lehman brothers, bid-ask spreads increased sharply.

widely used OTC derivative instrument in India for hedging interest rate risk, reflective of the absence of the term money market in India. The CCIL launched the reporting platform for OTC Rupee Interest Rate Swaps (IRS/FRA) in August 2007 and commenced non-guaranteed settlement in November 2008.

54. With most of the market microstructure of the G-sec market well established, it set the stage for the re-launch of the Interest Rate Futures market in August 2009. RBI has on its part put in place the physical delivery infrastructure that creates an interface of the Public Debt Office with the clearing houses of the exchanges with near straight through processing ability. RBI has also given its approval to the exchanges to reduce the delivery period in the IRF to one single day. The market participants should ultimately harness the hedging potential that this product has to offer. One of the primary reasons for going in for physical settlement in the IRF as against cash settlement was precisely to link the cash segment with the futures segment, which would be critical for hedging purposes.

55. Unlike in other markets, there is a regulatory framework for OTC markets in cash and derivatives markets in instruments coming under RBI regulatory purview. There is a role for OTC markets since they can meet specific requirements of end users. For the purpose of OTC interest rate derivatives we have classified the participants into market makers and users. These products have achieved considerable amount of standardization that has in turn facilitated technological intervention. We have already achieved significant success in the trade reporting and settlement of these OTC interest rate products. We are therefore, significantly ahead on these parameters compared to most of the developed markets.

56. While there has been a significant buildup of outstanding notional principal[10] the market participation is much skewed. As per the latest CCIL data, the foreign banks dominated the MIBOR swap market with an average share of 81.96% as against the share of the private banks at 11.76%, Primary Dealers at 5.79% and public sector banks at 0.49% during October'09. Further, foreign banks dominated the MIFOR swap market with an average share of 87.38% as against that of the private banks at 11.79% and public sector banks at 0.83% during October '09. There is, therefore, a clear need for some of the participants to scale up their level of participation in these markets.

Currency derivatives

57. The traded volume in USD–INR currency futures contracts traded on all the exchanges gradually increased over the period and touched the high of USD 5.46 billion on December 8, 2009. The average traded volume remained at USD 3384 million during November 2009. On the other hand, the open interest position in the currency futures remained at around USD 1 billion during the month with the average of USD 1105 million.

58. The substantial rise in the currency futures volume, in a sense, is quite natural keeping in view cash settlement, the lack of requirement of underlying exposure and absence of any restriction on cancellation and re-booking, as currently applicable in the case of forward transactions. In case of forward foreign exchange contracts, AD Category-I banks, through verification of documentary evidence, have to be satisfied about the genuineness of the underlying exposure, irrespective of the transaction being a current or a capital account transaction.

59. There has been growing demands from the market participants to allow trading of currency future contracts in other major currency pairs to facilitate direct hedging of their exchange risk in such currencies. Accordingly, in the second quarter review of monetary

---

[10] As per CCIL data, as on November 27, 2009, the total outstanding notional principal (inter-bank and PDs only) under MIBOR OIS stands at Rs. 25,72,339 crore and that under MIFOR-OIS stands at Rs. 7,62,356 crore as at November 27, 2009.

policy, it has been proposed to permit the recognized stock exchanges to offer currency futures contracts in currency pairs of Euro–INR, Japanese Yen–INR and Pound Sterling–INR.

60. RBI had placed on its website the draft guidelines on OTC forex derivatives, in light of the developments in the domestic and international financial markets and based on the feedback received from banks, market participants, industry associations and others. It is proposed in the draft guidelines to permit the importers and exporters having foreign currency exposures in trade transactions, to write covered call and put options both in foreign currency–rupee and cross currency and also receive premia. Accordingly, the facility of zero cost structures is to be withdrawn.

61. There have been concerns on the downside risk involved in allowing the exporters/importers to write covered call and put options. This is the precise reason why the draft guidelines had stipulated stringent preconditions for use of such products. The AD category I banks have to ensure that the customers have sound risk management system, the corporates should have adopted AS 30 and AS 32, the corporates can not combine these options with any other derivative products and moreover, the pricing of the premium has to be done in a transparent manner. We have also received feedback to continue the facility of zero cost structures since some of the companies find the instrument useful in managing currency risks. However, the bundling of asymmetric risks makes it complex in pricing as well as in valuation and can be opaque to the risk managers and top management.

62. It is also proposed to continue to allow persons resident in India, other than banks and financial institutions to use FCY–INR swaps to transform long-term INR borrowing into foreign exchange liability. There have been concerns that the use of FCY–INR swap to convert long term Rupee borrowing into foreign exchange liability may lead to speculative trades in the absence of underlying risk exposures. However, this facility has been in existence for a decade and has supported distribution of foreign currency risks within the Indian market without increasing the overall external debt. Such a facility may come handy for a corporate, especially the exporters, having future foreign exchange receivables. The foreign exchange liability position assumed through FX swap may match with the foreign exchange receivables and provide the benefit of hedging. The issue is should such swaps be limited to only companies which have potential forex exposures.

The road ahead

63. On the anvil is the introduction of credit default swaps. We are at an advanced stage of introducing other currency pairs for currency futures and are examining the issue of allowing plain vanilla currency options in consultation with SEBI.

64. Broadly speaking, the mandate for financial sector development should ideally derive from the regulatory assessments for each market. It has been clearly evidenced during the crisis that financial sector development per se cannot be an objective in itself. It needs to be pursued in the broader context of financial stability and has to necessarily correspond to the level of maturity of the financial system and the needs of the real economy. Reforming financial markets involves improving access to simple, transparent, and easy-to-understand products. Increasing complexity does not facilitate the market mechanism. The purpose of financial instruments is to transfer risk to those that understand these risks, not to hide or camouflage them. Regulatory comfort and assessment should therefore be a critical determinant in pursuing financial reforms.

65. In regard to derivatives, we have both OTC and exchange traded instruments for currency and interest rates. OTC markets in India are well regulated, unlike many other jurisdictions, to address issues of leverage and customer appropriateness and suitability. Only OTC contracts where one party to the transaction is a RBI regulated entity is considered legally valid. Suitable reporting and post trade clearing and settlement

mechanisms are being further strengthened. Given the incentive structures of these market, convergence of regulatory frameworks for OTC and exchange traded markets cannot be an end in itself under present circumstances, though it is a long term goal.

66. The development of markets is also influenced by tax policies. Debt instruments for instance do not enjoy tax exemptions of the nature enjoyed by equity instruments whether on income or capital gains. Mutual funds fixed income products enjoy certain tax examptions not available to banks. But this is outside the regulatory purview. However, if these policies introduce any vulnerability in the financial system there is need to address this through appropriate macroprudential and microprudential regulations.

67. Based on the assessment and experience, further liberalization measures for expanding the product menu could be undertaken. However, participation of foreigners in new products and the financial markets in general would continue to be dictated by the capital account management and financial stability imperatives.

68. Thank you. I wish the conference all success.