

**Financial Markets in India:
Recent Developments and Challenges¹**
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It gives me great pleasure to be with you today at the 9th Annual Conference of Fixed Income Money Market and Derivatives Association (FIMMDA) jointly organised with the Primary Dealers Association of India (PDAI). FIMMDA and PDAI have an important role to play in the development of our debt markets. I am happy to say, these industry bodies have been providing valuable inputs to us, in the Reserve Bank of India in our endeavour to develop our markets, institutions and practices. The development of any market needs a great deal of collaboration and consultation between regulatory authorities and market players. As you are aware, the Reserve Bank has been following a consultative approach for development of the market, new products, regulatory measures etc., and FIMMDA and PDAI have been partners with us in transforming our market into a vibrant and transparent one. I am confident that they would continue to fulfill the important guiding role for nurturing and transforming our debt market along healthy lines.

Many of you would recall that Governor, Dr. Y. V. Reddy when he was Deputy Governor, addressed the FIMMDA-PDAI conference held in Bangkok in 2002. Dr. Reddy had then laid out the road map for the development of the Indian debt markets in a very detailed manner. Most of the milestones identified by the Governor in 2002 have been achieved. The pending reforms in the road map laid out by the Governor on the legal side have also been completed. The Government Securities Act has been made effective from December 1, 2007. This would facilitate lien-marking, pledge of securities for raising loans against government securities facilitating stripping etc. The RBI Act has also been amended and there is greater clarity on the regulation of derivatives. Besides, the Payment and Systems Bill has been recently passed by the Parliament, enabling the Bank to regulate and supervise the payment and settlement systems.

II. REVIEW OF THE MARKETS

Most of you are familiar with the reforms path we have followed and, therefore, I will try to be brief. Financial markets in India prior to the 1990's were marked by administered interest rates, statutory preemptions, captive market for government securities, excessive reliance on central bank financing, pegged exchange rate, and current and capital account restrictions. The reforms have enabled the transition to a regime characterised by market-determined interest and exchange rates, price-based

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instruments of monetary policy, current account convertibility, substantial capital account liberalisation and vibrant government securities and capital markets. The policy measures included a flexible exchange-rate policy, expanded use of monetary policy instruments focusing on interest rates and liquidity conditions, efforts towards fiscal consolidation, strengthening of the financial system and adoption of global standards. The calibrated opening of the capital account has helped minimise vulnerability as the country becomes increasingly integrated with global markets.

Money Market

The reforms introduced in the money market placed greater emphasis on the market mechanism. This necessitated the active development of the money market. Concomitantly, increasing financial innovations in the wake of greater openness of the economy necessitated the transition from monetary targeting to a multiple indicator approach in 1998 with greater reliance on rate channels for monetary policy formulation. Accordingly, short-term interest rates have emerged as a key consideration for monetary policy purposes.

Beginning June 2000, the liquidity adjustment facility (LAF), with daily repo and reverse repo operations, has emerged as the principal tool of liquidity management. In order to insulate domestic monetary conditions from the impact of large capital flows, the LAF window was augmented with the issuances under the market stabilisation scheme (MSS) in April 2004 to absorb liquidity of relatively more enduring nature along with the flexible use of the cash reserve ratio.

Money market instruments such as market repos and collateralized borrowing and lending obligation (CBLO) have provided avenues for non-banks to manage their short-term liquidity mismatches and facilitated the transformation of the call money market into a pure inter-bank market. Furthermore, issuance norms and maturity profiles of other money market instruments such as commercial paper (CP) and certificates of deposit (CDs) have been modified. While prudential limits were set on borrowing and lending in the call money market, migration towards the collateralised segments and developing derivative instruments for hedging market risks were encouraged.

The collateralized market has become the predominant segment of the money market accounting for nearly 70-80 percent of the total volume. In both the CBLO and market repo segments, mutual funds and corporates are the major lenders while banks and primary dealers are the major borrowers. In respect of commercial paper, the preferred maturity ranges from 6 month to one year and non-banking financial companies like leasing and financing companies are the major issuers.

Cumulatively, these measures have widened and deepened the money market in terms of instruments and participants, enhanced transparency and improved the signaling mechanism of monetary policy while ensuring financial stability.

Government Securities Market

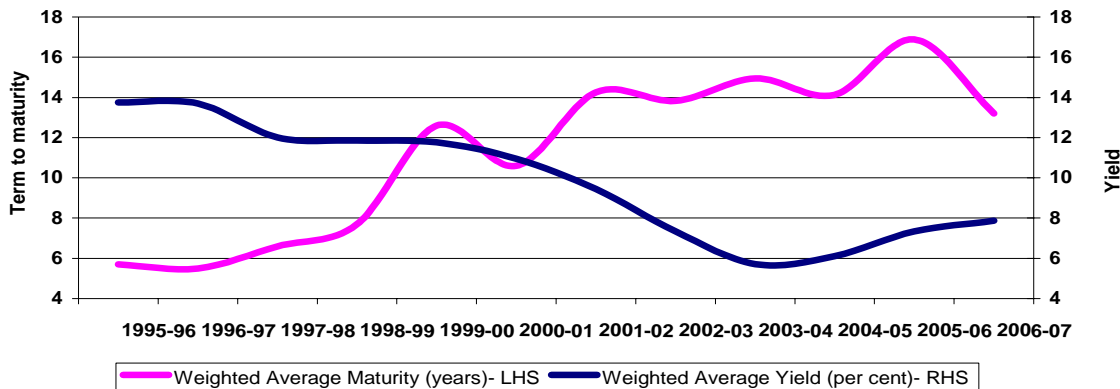
The Reserve Bank has actively pursued the development of the government securities market since the early 1990s with the twin objectives of ensuring success of the Government's market borrowings and facilitating the emergence of a risk free rupee yield curve to serve as a benchmark for pricing other debt instruments as also for effective transmission of monetary policy impulses in a deregulated environment. The reforms initiated in the government securities market, include introduction of auction system for issuance of government securities, reduction in minimum statutory liquidity requirements for banks, fostering market intermediaries in the form of primary dealers and encouraging retail participation in the primary market (through a system of non-competitive bidding in the auctions) as well as in the secondary market although the success in this regard has been limited. In most countries retail participation is mainly through the gilt mutual funds and the players are mostly institutional players. The secondary market activity is therefore predominantly OTC.

In an effort to increase liquidity in the market, the Reserve Bank has, since the late 1990s, pursued a strategy of passive consolidation of debt by raising progressively higher share of market borrowings through re-issuances. This has resulted in building up of a critical mass in key maturities, and is facilitating the emergence of market benchmarks. With the withdrawal of the Reserve Bank from the primary market from April 2006 as per the provisions of the FRBM Act, necessary institutional changes have been introduced by revamping and widening of the PD system to meet the emerging challenges. Other measures taken to deepen the market and promote liquidity include introduction of 'when issued' trading and 'short selling' of government securities.

The various policy initiatives taken by the Reserve Bank over the years to widen and deepen the government securities market in terms of instruments as well as participants have ensured successful completion of market borrowing programmes of both the Central Government and the State Governments. Chart 1 gives information on the weighted average maturity and the yield in respect of Government of India dated securities.

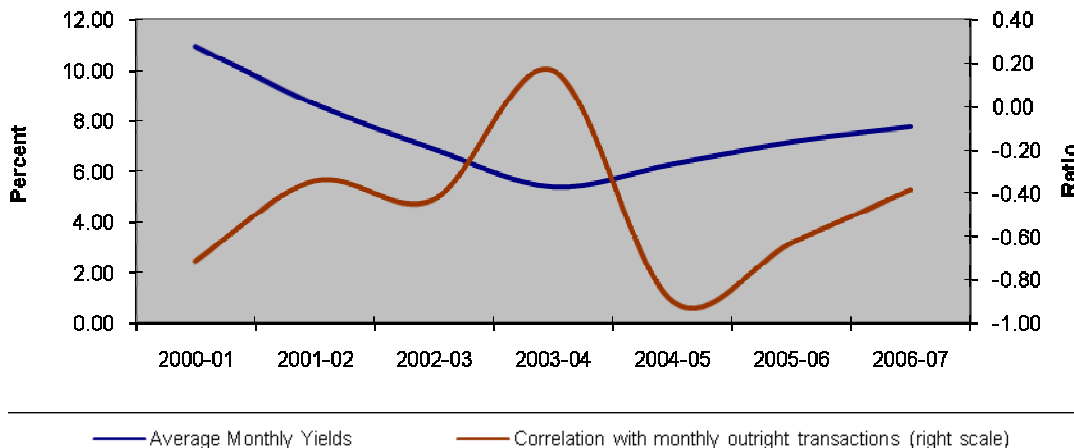
In the following paragraphs I would like to share with you some empirical evidence in regard to the government securities market. Chart 2 illustrates that the market turnover is perhaps becoming increasingly less sensitive to the interest rate cycles, indicating market liquidity and depth.

Chart 1: Weighted average maturity and yields



Data Source: RBI (2007)

Chart 2: Yield-tunover relationship



Data source: RBI (2007) and CCIL (2007)

One of the measures generally followed to examine the efficiency of the primary market is to measure the variance of the primary market auction cut-off yields from the secondary market yields and the impact of new supply of government securities on the secondary market yields. Chart 3 indicated that the price discovery in the primary auctions and secondary market is highly correlated.

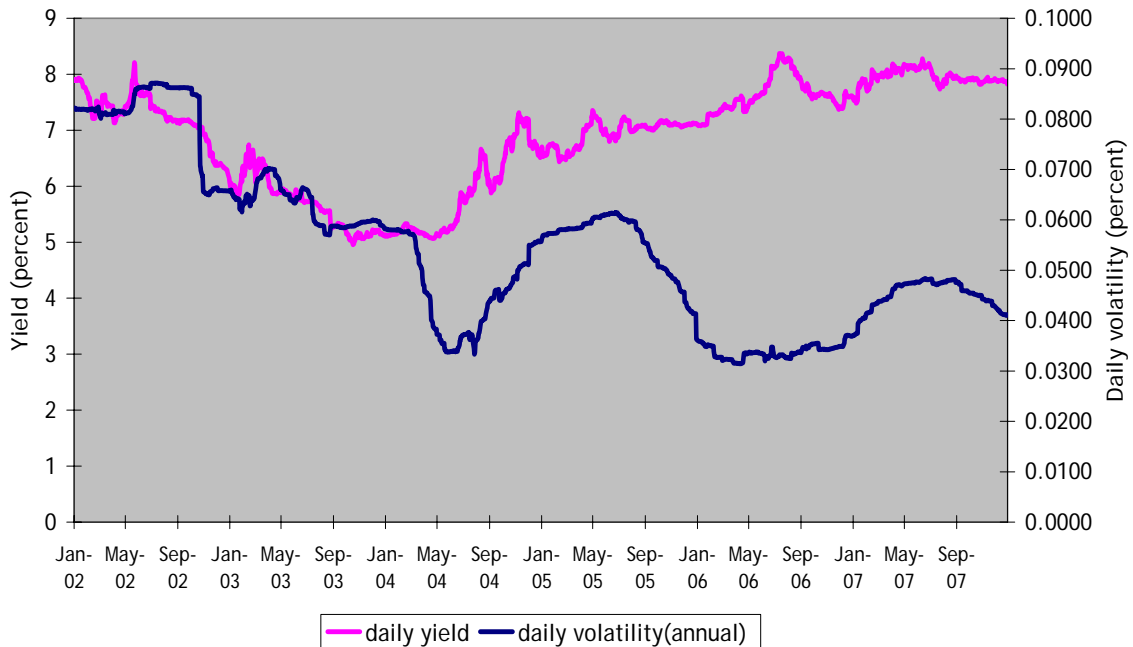
Chart 3: Correlation between the primary auction cut-off yields and secondary market yields as on

| | Previous day of the auction | Auction day |
|------------------|-----------------------------|-------------|
| 2005-06 | 0.96 | 0.99 |
| 2006-07 | 0.97 | 1.00 |
| 2007-08 (so far) | 0.99 | 1.00 |

Data Source: RBI website (auction cut-off yields) and FIMMDA website (Secondary market yields)

Chart 4 illustrates that the daily volatility of the yields (standard deviation of 10 year yields on a daily time varying basis) has been declining indicating, *inter alia*, maturity of the market. To the market participants the reduced volatility has reduced the volatility in earnings.

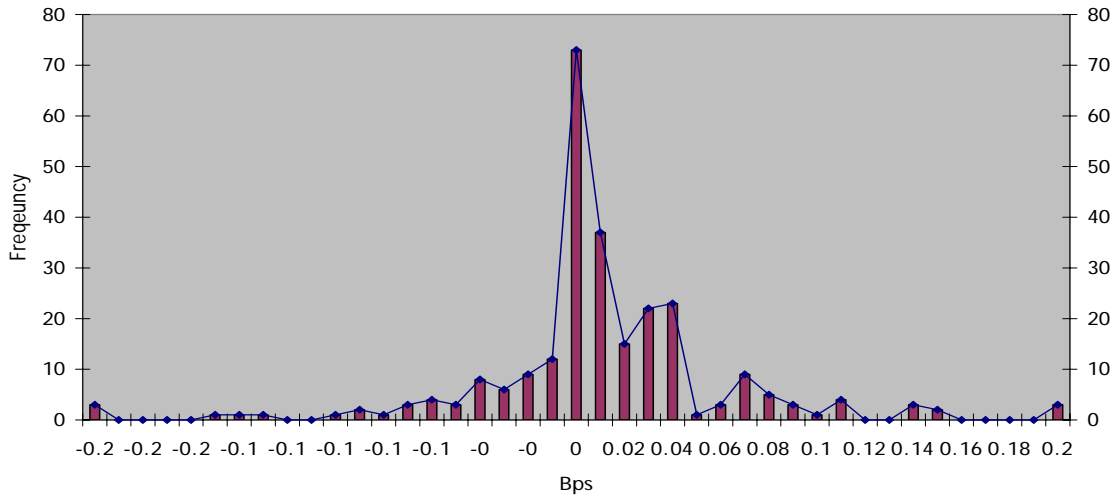
Chart 4: Falling volatility of 10 year yield (Jan, 2002 - December, 2007)



Data Source: Bloomberg.

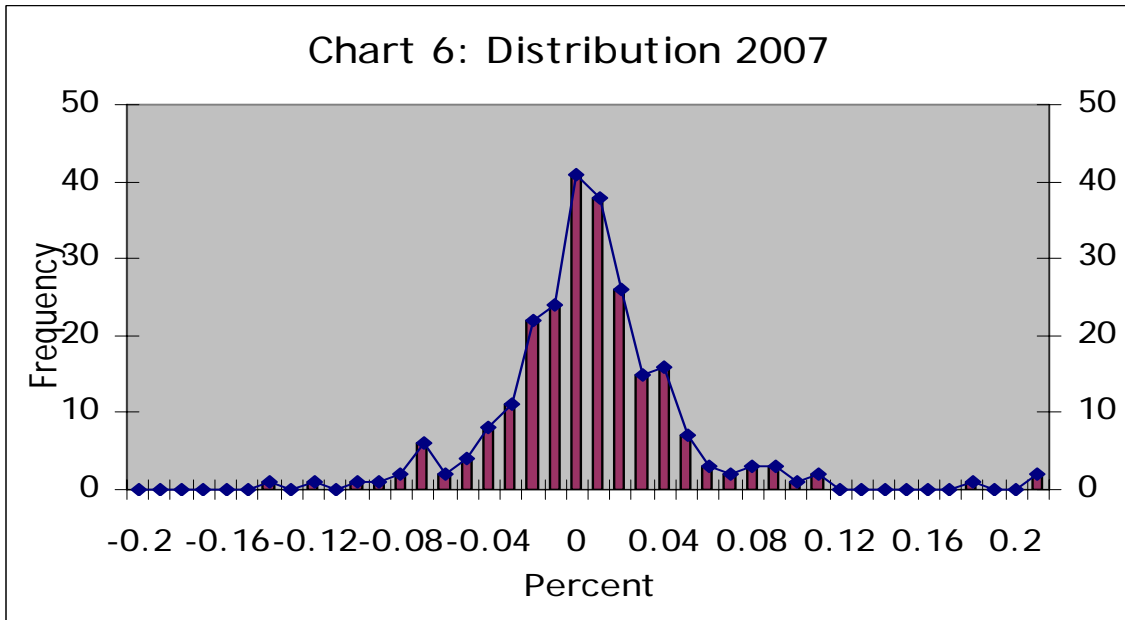
The daily yield changes of the 10 year G-Sec closing yields over the last six years suggest that yield changes are becoming more normally distributed (Chart 5 and 6).

Chart 5: Distribution 2002



Data Source: Bloomberg.

Chart 6: Distribution 2007



Data Source: Bloomberg

The issuance of long-term securities has enabled the development of the yield curve across 30-year maturity, although the curve is illiquid in segments. With the widening of investor base, the holding pattern of government debt has diversified.

Forex and Other Derivatives Markets

The Indian foreign exchange market has witnessed far reaching changes since the early 1990s, following the phased transition from a pegged exchange rate regime to a market determined exchange rate regime in 1993 and the subsequent adoption of current account convertibility in 1994. The replacement of FERA with FEMA has redefined our approach to exchange control from that of control to that of facilitator. Market participants have been provided with greater flexibility to undertake foreign exchange operations and manage their risks. This has been facilitated through liberalization in exchange controls, simplification of procedures and availability of several new instruments. As a result, depth and liquidity of the market have improved significantly over the years. Efficiency in the foreign exchange market has also improved as is reflected in low bid-offer spreads. With the gradual opening up of the capital account, forward premia is getting increasingly aligned with the interest rate differential.

RBI has been vested with powers to regulate forex, interest rate and credit derivatives. Derivatives serve a useful risk management purpose for both financial and non-financial firms. The permissible interest rate derivatives presently are IRS, FRA and IRF while forex derivatives are foreign currency forwards, swaps and options. Comprehensive guidelines on derivatives have been issued by the RBI in April 2007.

Market Infrastructure

I now propose to deal with two institutional measures taken by RBI which have significant impact on the overall development of financial markets. These are the institution of PDs and the setting up of the CCIL i.e. the payment and settlement systems.

Primary Dealers

One of the thrust areas of the G-Sec market reforms process, initiated in 1992, was to develop appropriate institutional mechanism such as, the Primary Dealers. Recently we carried out an internal assessment of the development of the G-Sec market and the performance of PDs during the period 2002-2007. This indicates that the Primary Dealers have made discernible contribution in the process of market development as evident from their performance in the primary and secondary segments of the G-Sec market (Table 1). This includes contributions made by PDs in the areas of debt management and monetary policy operations.

| Table 1: Role of Primary Dealers in Government Securities Market | | |
|---|--|---|
| | Share in Primary Subscription (%) | Share in Turnover (Outright) |
| 2001-02 | 42 | 29 |
| 2002-03 | 32 | 29 |
| 2003-04 | 29 | 25 |
| 2004-05 | 34 | 37 |
| 2005-06 | 41 | 31 |
| 2006-07 | 44 | 29 |

Date Source: RBI (2007b), CCIL(2007)

Today, PDs are an important constituent of the financial system in view of their key role in Government securities market, especially the primary market and participation in the money market. Keeping in view the increased responsibility of PDs in the wake of FRBM in terms of which RBI could not subscribe to the primary market issues of Government, certain measures were taken by RBI to deal with this new situation and ensure a smooth transition. Changes were made in the system of underwriting the issues of Dated Government Securities by PDs. The revised system envisages underwriting the entire issue. The capital backing of PD business was boosted with the permission granted to banks to operate PD activities departmentally. To broad base the PD system, as you are aware, several changes have been brought about in regulation of PDs. In order to diversify the risks inherent in the PD business, PDs were permitted to diversify into other business lines while retaining the requirement of predominance in Government Securities business as also to diversify their investments into corporate debt, money market, equity and securitization instruments subject to certain prudential limits. Concomitantly, PDs were advised to restructure their ownership pattern to ensure that their balance sheets do not get affected by the spillover of risks from other businesses/subsidiaries while the regulation of the PDs remains focused on their Primary Dealership activities.

Resultantly, 9 standalone PDs have merged with parent banks so far. One new bank, viz., HDFC Bank Ltd has commenced PD activities from April 2, 2007. Thus, the number of banks taking up PD business departmentally has increased to 10 and the number of stand alone PDs now stands at 9, with the inclusion of Lehman Brother Fixed Income Securities India Private Limited.

The twin policy measures of expanding the permitted structure of the PD system to include banks and revising the scheme of underwriting have contributed to the successful debt management process, in the post FRBM scenario. A noteworthy feature has been the role of PDs in the repo market (Table 2).

Table 2: Illustrative list of Repo activity

| | Rupees Billion | | | |
|--|----------------|---------------|---------------|---------------|
| | March, 2004 | March, 2005 | March, 2006 | March, 2007 |
| Total sources of Finance | 207 | 153 | 160 | 167 |
| Repo (Market repo, CBLO and LAF) as a source of finance | 29 | 44 | 66 | 71 |
| Share of Repo in total sources | 13.92% | 28.80% | 40.97% | 42.63% |

Source: Returns of the PDs

The experience of the PD system shows that encouraging heterogeneous domestic market players with different investment objectives, capabilities and balance sheet structures, offers stability to the market. Going forward, we may continue to rely on the PD system in our endeavour to further develop the financial markets in general and debt markets in particular.

Payment and Settlement Systems

The quality of the trading, payment and settlement infrastructure in our country is considered on par with the best international practices. Initially, RBI set up the Negotiated Dealing System (NDS) in RBI to (a) provide a screen-based electronic dealing and reporting system for transactions in secondary market for government securities as well as money market instruments such as call money and repo transactions (reporting of term money and Commercial Paper transactions have since been enabled) (b) disseminate information on trades with minimal time lag to market participants (subsequently put on public domain through RBI website) and (c) provide an online electronic bidding facility in the primary auctions of Government securities and OMO/LAF operations.

The NDS was the first step in changing the trading infrastructure in the government securities market. It has helped in achieving paperless settlement of secondary market transactions and has brought about significant improvements in transactional efficiency and transparency.

Subsequently an anonymous order matching trading system on NDS, called NDS-OM, was launched from August 1, 2005 to supplement the telephone trading. Open to NDS member banks and institutions (PDs, MFs, Insurance companies etc), this system has improved transparency in the pricing process. The Clearing Corporation of India Limited (CCIL) is the central counterparty to each trade done on the system. Recently, access to NDS-OM was extended to smaller entities like provident funds, co-operative banks, NBFCs through the CSGL route. This system has elicited good response from the market and of late, more than 70% of the total volumes in G Sec market are dealt on NDS-OM.

The settlement of government securities transactions in secondary market is being done on a **Delivery versus Payment (DvP)** basis (to eliminate settlement risk) in the books of RBI since 1995. Various stages of DvP evolved culminating in the DvP III version in 2005 under which both funds and securities settle on a net basis. Central counterparty guaranteed settlements were introduced with the formation of the **Clearing Corporation of India Limited (CCIL)** on February 15, 2002, which reduced pre-settlement or replacement risk. All transactions by NDS members, either telephone transactions reported on NDS or transactions concluded on NDS-OM flow through CCIL for settlement. After the introduction of RTGS in 2004, all bilateral inter-bank settlements are being settled accordingly and the associated risks to the system have been considerably reduced. Similarly inter-bank forex clearing and settlement has reduced risk exposures for the banks.

Our payment and settlement system has been bench marked against internationally established CPSS-IOSCO principles for securities settlement system. The latest assessment has been made public in November, 2007 and is available on our website (www.rbi.org.in). The assessment indicates that our system is broadly compliant with all the principles. The risk management system of CCIL has also been assessed regularly by RBI and international experts based on CPSS-IOSCO recommendations for central counterparties. The Payment and Settlement Systems Bill, which has been passed by the Parliament recently, is set to facilitate the process by empowering the Bank to regulate and supervise all the payment and settlement systems.

To further develop the settlement system, RBI is now in the process of facilitating multi-modal settlements wherein trades of G-Sec transactions of non-bank entities will be settled through settlement banks. Banks are also now reporting on a CCIL platform transactions in inter-bank swaps.

Financial Markets – Activity Indicators

Contrary to what is often asserted there exists a well-functioning, integrated markets for bonds, currency and derivatives in India. The trading volumes (Table. 3) have generally witnessed significant growth in the various segments of the financial market (Mohan, 2007). I will briefly review the growth in currency, bond and derivatives markets.

| Table. 3: Depth of Financial Markets in India-Average Daily Turnover | | | | | |
|---|---------------|------------------------------|---------------|--------------------------------|--|
| Rupees billion | | | | | |
| Year | Money Market* | Government Securities market | Forex Market# | Equity Market (Cash segment)** | Equity Market (Derivative segment NSE) |
| 2000-01 | 427 | 28 | 212 | 93 | 1.1 |
| 2001-02 | 655 | 63 | 232 | 33 | 4 |
| 2002-03 | 768 | 71 | 242 | 37 | 18 |
| 2003-04 | 287 | 84 | 307 | 63 | 84 |
| 2004-05 | 385 | 48 | 400 | 66 | 101 |
| 2005-06 | 600 | 36 | 564 | 95 | 192 |
| 2006-07 | 888 | 49 | 840 | 118 | 298 |
| *: Includes the call money , the notice money, the term money, the CBLO and the repo markets. | | | | | |
| #: Inter-bank turnover only. | | | | | |
| **: Include both BSE and NSE. | | | | | |

Currency Markets

It is noteworthy that the increase in foreign exchange market turnover in India between April 2004 and April 2007 was the highest amongst the 54 countries covered in the latest Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity conducted by the Bank for International Settlements (BIS). According to the survey, daily average turnover in India jumped almost 5-fold from US \$ 7 billion in April 2004 to US \$ 34 billion in April 2007; global turnover over the same period rose by only 66 per cent from US \$ 2.4 trillion to US \$ 4.0 trillion. Reflecting these trends, the rank of India in global foreign exchange market turnover improved from 25 in April 2004 to 17 in April 2007.

Derivative Markets

Indian forex and derivative markets have developed significantly over the years. The activity in the derivative markets can be assessed from the positions outstanding in the books of the banking system (Table 4). As of September end, 2007, total forex contracts

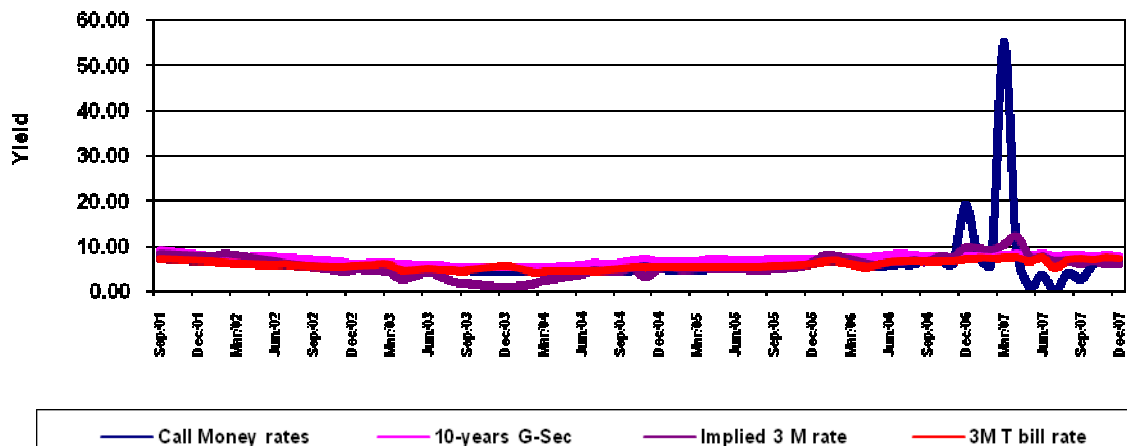
outstanding in the banks' balance sheet amounted to USD 1153 billion (Rs. 46,136 billion), of which almost 84% were forwards and rest options.

As regards interest rate derivatives, the inter-bank Rupee swap market turnover, as reported on the CCIL platform, has averaged around USD 3 billion (Rs. 120 billion) per day in notional terms during Aug-Dec, 2007. The outstanding Rupee swap contracts in banks' balance sheet, as on September 30, 2007, amounted to nearly USD 1814 billion (Rs. 73,000 billion) in notional terms. Outstanding notional amounts in respect of cross currency interest rate swaps in the banks' books as on August 31, 2007, amounted to USD 60 billion (Rs. 2,390 billion).

| Table 4: Outstanding Derivatives of Banks: Notional Principal Amount | | | | | |
|---|---|--------------------|--------------------|--------------------|------------------------|
| (Rupees billion) | | | | | |
| S.No | Description | March, 2005 | March, 2006 | March, 2007 | September, 2007 |
| 1 | Foreign exchange contracts (outstanding) | 13,013 | 17,285 | 29,254 | 46,136 |
| 2 | Forward forex contracts | 12,487 | 15,286 | 24,653 | 38,952 |
| 3 | Currency options purchased | 526 | 1,999 | 4,601 | 7,184 |
| 4 | Futures | 732 | 1,430 | 2,290 | 2,390 |
| 5 | Interest rate related contracts | 13,119 | 21,842 | 41,958 | 72,578 |
| 6 | Of which: single currency interest rate swaps | 12,817 | 21,530 | 41,597 | 72,191 |
| 7 | Total -Contracts/Derivatives | 26,864 | 40,558 | 73,502 | 121,104 |
| <i>Source: Internal Records of RBI</i> | | | | | |

Thus, there has been a significant transformation in the working of various segments of the financial market. These developments, by improving the depth and liquidity in the domestic financial markets, have contributed to better price discovery of interest rates and exchange rates, which, in turn, have led to greater efficiency in resource allocation in the economy. The increase in size and depth of financial markets has paved the way for flexible use of indirect instruments of monetary policy. Greater depth and liquidity and freedom to market participants have also increased integration of the various segments of the financial market (Chart 7). Increased integration not only leads to more efficient dispersal of risks across the spectrum but also improved the efficacy of monetary policy impulses.

Chart 7: Yields on various instruments



Source: RBI (2007)

Briefly therefore the following are the major outcomes of the ongoing reform process:

- The debt market reform process has encompassed trading systems and processes including an efficient clearing and settlement infrastructure, widening of the investor base, an array of instruments, robust regulatory framework, and an enabling legal system. These reforms enabled a systematic process for integration of the different segments of the domestic markets as well as integration of the domestic financial markets with the international markets.
- The reform measures enabled the shift from direct to indirect instruments of monetary management - activating open market operations and developing of secondary market, which have contributed to the stability of the financial system.
- Emergence of a risk-free yield curve enabled better pricing of other debt securities. In general, the development of government securities market provided the platform for the development of money and debt markets while providing tools for the market participants to manage their interest rate risk.
- Smooth completion of the borrowing requirements of the governments was made possible, even under the FRBM stipulation, which prohibits the Reserve Bank from subscribing to the primary issuances of the Central Government from April 1, 2006.

New Initiatives

To further develop the G-sec market, currently we are in close consultation with FIMMDA/PDAI on the following issues:

When Issued Market and Short Selling

When issued market in both reissued securities and new issues has been operational for some time now. Based on the feedback received from market participants we are examining the issue of allowing T+2 settlement in when issued trades. Similarly in consultation with FIMMDA/PDAI, various measures have been implemented, including allowing short covering outside NDS-OM. In regard to “when issued market” considering that the cut-offs arrived in the regular auctions are generally very close to the traded yields in the secondary market it can to some extent be inferred that the efficient primary market does not offer opportunities for when issued trading. The other issue is that of providing exclusivity to PDs on which there is no clear view even among the market participants. In regard to short-selling a number of bank boards have still to approve the banks participation in this market. One of the factors inhibiting this is the consequences of “SGL bounce” in case the bank is not able to deliver the security. These issues are under discussion.

STRIPS

We have been working on introduction of STRIPS for a long time. With the enactment of the Government Securities Act, the legal hurdles in introduction of STRIPS have been cleared. With the development of financial markets, a lot of growth is witnessed in Mutual Funds and Insurance sectors. These sectors along with the Pension fund industry are coming up with new and innovative investment schemes to suit to the varied needs of their customers. This provides an opportunity to broad base the investor base in G-Secs by introducing need based instruments like STRIPS while helping the participants to manage their balance sheet risks and ALM in an efficient manner. We are discussing with FIMMDA/PDAI issues relating to the structure and design and the role of PDs in undertaking the activity of STRIPS including action needed to address warehousing residual risks, taxation issues etc.

Inflation Linked Bonds

The earlier attempt made in 1997 to introduce Capital Indexed Bonds did not elicit much response from market as it offered inflation hedging only for principal while the coupons were unprotected. Also there were difficulties in pricing for secondary market trading. With the experience gained, a discussion paper was placed in public domain in 2004. Later a number of discussions have been held with the market participants involving FIMMDA and PDAI. We are working closely with FIMMDA and PDAI in regard to the product design including the index to which it will be linked, method of issuance etc.

Corporate Bond Markets

An important feature of the corporate bond market in India is the predominance of private placement issuances rather than public issues. The SEBI has recently placed a discussion paper on its website on measures to simplify issuances of corporate bonds. A reporting system of secondary market trades in corporate bonds is in place and FIMMDA is taking action to consolidate the information. In regard to repos it is necessary to recognize that for repos to be successful, the underlying instruments should have a stable and risk free settlement mechanism besides liquidity and transparent price discovery.

Rupee Derivatives

A Working Group is working out the specific operational requirements road map for reactivating interest rate futures. Another Group had in the past recommended relatively less complex interest rate options in the first phase, such as Vanilla caps, floors and collars, European Swaptions and Call and put options on fixed income instruments or benchmark rates. We have been receiving suggestions from market participants to introduce interest rate options. As you are all aware options have non-linear payoffs and when used with complex structures, may make the product non-transparent with speculative exposures. It also has some accounting and valuation issues.

Currency Futures

In the context of growing integration of the Indian economy with the rest of the world, as also the continued development of financial markets, a need has been felt to make available a wider choice of hedging instruments to the market participants to enable them to cope better with their currency risk exposures. There is not much international experience of operation of currency futures in other emerging markets that are not yet fully convertible on capital account. However there are a few countries which have introduced currency futures in the recent past even while there are regulations in the OTC market. Introduction of currency futures even in a regime of capital controls may help improve liquidity besides providing a transparent and efficient price discovery mechanism. In this context, Reserve Bank of India placed on its website the draft Report of the Internal Working Group on Currency Futures which incorporates recommendations made by the TAC. Some of the major recommendations of the Group are (a) initially only USD-INR currency futures contract may be introduced (b) settlement should be only on cash basis in the initial phase, based on spot Reserve Bank reference rate on the expiry date and (c) initially the participation in the futures market may be

restricted to residents. We have received feedback from the market participants on the draft report and final report will also be placed in public domain.

III. Issues and Challenges

I feel the following issues need to be addressed as we continue to develop our financial markets.

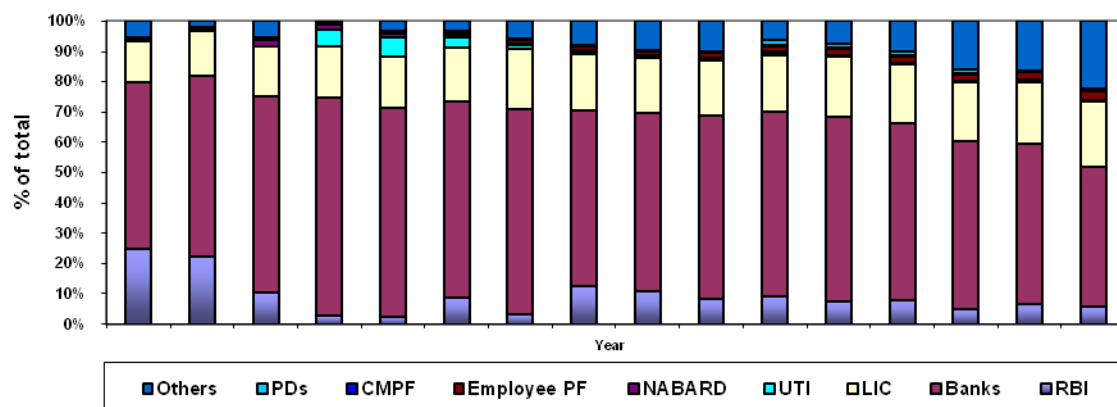
Financial Stability

The recent developments in international markets and the increased uncertainty that these markets are currently experiencing are unprecedented and have brought to fore issues relating to financial stability. In view of these possible destabilising factors from cross-border developments, liberalisation of domestic financial markets in India has been accompanied with prudential safeguards. This approach to development and regulation of financial markets has imparted resilience to the financial markets, vividly reflected in their ability to withstand exogenous shocks witnessed earlier. Nonetheless, it is recognised that domestic financial markets need to develop further, especially in order to support the recent acceleration in the growth momentum of the Indian economy.

Changing Market Structure

The holding pattern of government securities has been changing in favour of long term investors like the pension funds and insurance companies (Chart 8). Given their balance sheet structure, they are active at the longer end of the yield curve. Given the hold to maturity nature of these investments and the growing demand in that segment, the yield curve has been getting flatter. These institutions with longer term liabilities can provide the necessary impetus for the development of the long-term corporate debt market.

Chart 8: Yearly Holding Pattern 1999-2006



Source: RBI (2007)

Development of Term Money Market

While the swap market, especially the OIS swap market has been very active in India and used by banks as well as other entities to manage their interest rate risk more than any other instrument, the absence of a term money market, and therefore a 3 or 6 month benchmark rate, has led to the entire market concentration on the overnight benchmark. This is an area of concern from the long term market efficiency point of view. RBI has set up a working group for this purpose but we look forward to suggestions from all market participants. A well developed term money market and hence, money market yield curve facilitate the derivatives market as also the integration of forex and domestic currency markets. At the same time liquidity and prudential considerations also need to be kept in view.

Derivatives Market

The derivatives market in India has been expanding rapidly and will continue to grow. While much of the activity is concentrated in foreign and a few private sector banks, increasingly public sector banks are also participating in this market as market makers and not just as users. Their participation is dependent on development of skills, adapting technology and developing sound risk management practices. Corporates are also active in these markets. While derivatives are very useful for hedging and risk transfer, and hence improve market efficiency, it is necessary to keep in view the risks of excessive leverage, lack of transparency particularly in complex products, difficulties in valuation, tail risk exposures, counterparty exposure and hidden systemic risk. Clearly there is need for greater transparency to capture the market, credit as well as liquidity risks in off-balance sheet positions and providing capital therefor. From the corporate point of view, understanding the product and inherent risks over the life of the product is extremely important.

Increasingly, banks are offering structured derivative products to their customer. While product innovation is an essential part of the customer service and business development, it is essential that banks not only formally convey all the risks of complicated structured products to their customers, but also ensure that the products are suitable to the business requirements of their customers. This is a serious business risk, whose ramifications need to be fully appreciated by the banks. This is the reason banks should follow robust 'suitability' and 'appropriateness' policies for derivative products offered to customers (users). It is imperative that market-makers offer derivative products in general, and structured products, in particular only to those users who

understand the nature of the risks inherent in these transactions and further that products being offered are suitable to the risk management of the users and consistent with users' internal policies as well as risk appetite.

The extant Reserve Bank guidelines set out the basic principles for appropriateness and suitability tests as well as provide guidance of a prudent system to control the risks in derivatives activities. It is required that all risks arising from derivatives exposures should be analysed and documented and the management of derivative activities should be integrated into the bank's overall risk management system using a conceptual framework common to the bank's other activities.

Valuation and Accounting Issues

Since there is no comprehensive accounting guidelines for Derivatives and Hedge Accounting the RBI issued draft accounting guidelines on investments as well as on derivatives. Since ICAI was in the process of finalizing AS 30, RBI did not finalize the guidelines on Derivatives and Hedge Accounting. IASC has now finalized AS 30 and has made it optional from April 2009 and mandatory from April 2011. RBI is examining these standards vis a vis the draft standards issued earlier and the feedback received from market participants before finalizing them for adoption by commercial banks. A Working Group has been set up for addressing implementation issues and formulation of operational guidelines relating to this Accounting Standard by Banks & Financial Institutions. The Working Group consists of members from various departments of RBI, some of the commercial banks and members from audit profession.

Some of the important issues in this regard are: (i) prescribing certain objective criteria for impairment of assets, (ii) tainting provision relating to HTM assets, (iii) classification of derivatives where fair valuation is not available or credible (iv) treatment of revaluation gains and losses for capital adequacy and NDTL purpose, etc.

Another matter under consideration once decision on some of the implementation issues are resolved is whether to first give priority to the provisions relating to derivatives and hedge accounting and consider implementing the remaining provisions subsequently.

In regard to corporates it is well known that several companies use derivatives extensively not only for the purpose of hedging but also as an independent treasury function. In this context, lack of accounting standards covering both recognition of income and valuation can be a matter of serious concern from the point of view of both transparency and disclosure to users of the financial statements and for the banks

dealing with these entities. Those companies which use complex instruments could consider voluntary adoption of transparency and disclosure and valuation standards to make the financial statements more meaningful.

Role of PDs

PDs need to play a greater role as market makers and reach out to a much larger population other than in metros. PDs having a large network of branches are well suited to offer gilt accounts as one of the savings instruments to corporate, cooperative banks and HNIs.

VI. CONCLUDING REMARKS

The development of financial markets is an ongoing process. Initiatives to further deepen and widen the various segments of the financial market will, therefore, need to be pursued in the days ahead. Financial markets will have to play an even more important role in future to sustain the current growth momentum being experienced by the Indian economy. Financing of the large investment needs of the growing economy will depend heavily upon the ability of the financial markets to raise resources from savers and allocate them efficiently for the most productive uses. Accordingly, development of the term money market, greater flexibility in the use of derivatives, development of the corporate bond market, diversification of investor base through entry of long-term institutional players such as insurance companies and pension funds are some of the aspects of market development that would need to be given due attention for imparting more depth and liquidity to the domestic financial markets.

Growing integration of domestic financial markets with international financial markets across the globe also poses the threat of contagion. Issues of financial stability are, thus, likely to assume even greater importance in future, especially for emerging economies. The policy initiatives to deepen and widen the financial markets further to reap efficiency gains will need to be pursued while ensuring macroeconomic and financial stability in the economy.

FIMMDA can play a meaningful role in this process, through a more diverse membership and through undertaking active role in new product design, overseeing market practices, ensuring adoption of best practices etc. I look forward to the feedback on the deliberations of the conference.

Thank you.

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