Developing Bond Markets in Emerging Economies :
Issues and Indian Experience*

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It gives me great pleasure to deliver the keynote address at the Asian Bond Conference organised jointly by the Thai Bond Dealing Centre (Thai BDC), Fixed Income Money Market Dealers Association of India (FIMMDA) and Primary Dealers Association of India (PDAI). It is a matter of significance that some of the major self-regulatory organisations (SROs) in the debt markets of Asia have taken this initiative to exchange ideas and experiences of the emerging economies from Asia and I am sure that this Conference would be mutually beneficial as each one of us gains valuable insights by absorbing the experience of other countries.

The importance of developing domestic bond markets to diversify risks in the financial system is being realised since the crisis in Asia in 1997, and development of the Government Securities Market is of course integrally linked to the development of bond markets. Worldwide, interest in the subject in the recent past is evident from several initiatives taken. For example, the Asia Pacific Economic Co-operation (APEC) has launched a collaborative effort on the subject. The IMF and the World Bank are currently finalising guidelines on public debt management. The IMF is also conducting select country studies in public debt management and India has agreed to be a case for study. The Asian Development Bank Institute (ADBI) recently released its policy recommendations for Designing New and Balanced Financial Market Structures in Post-crisis Asia. I am happy that Mr.Yoshitomi will share the recommendations later this afternoon. The theme for the Deputy Governors Meeting at the Bank for International Settlements (BIS) last December was Development of Debt Markets in Emerging Economies. I would draw heavily from these discussions in flagging issues for consideration while the Indian experience would illustrate the complexities in addressing some of these issues in a specific country context.

My address today initially provides an overview of the reasons advocated for the development of a bond market, followed by a second section giving the possible motivations for development of bond markets. The third section explains the rationale for development of Government Securities market and the justification for the central bank to be actively involved in it. While section four outlines the key issues relating to the market for Government Securities, the fifth section mentions some aspects relating to the non-Government or corporate bond market. The sixth section on select institutional issues deals with the role of institutional investors, self-regulatory organizations, banks in bond markets, credit rating agencies and tax regime. The concluding section makes a few observations on the road ahead for development of debt markets in India.

1. Why Develop Debt Market?

First, the basic philosophy of developing a diversified financial system with banks and non-banks operating in equity markets and debt markets is that it enhances risk pooling and risk sharing opportunities for investors and borrowers. More specifically, the case for ensuring the presence and development of debt markets is made on several grounds. First, in the absence of a debt market, the banking system would be larger than it otherwise would be. Prevalence of a

domestic debt market can move a crisis outside the banking system making it easier for the Government to stand back. As Alan Greenspan has argued, coexistence of domestic bond market and banking system helps each to act as a backstop for the other. In the past, countries like Japan have developed with almost total reliance on bank intermediation but the risks of such excessive reliance are more in a relatively open economy since non-bank intermediation may get located outside the country. It is also argued that domestic bond market helps in avoiding the double mismatches of currency and maturity.

Second, it is argued that debt markets facilitate efficient financial intermediation as they use market mechanism for allocating and pricing of credit. In particular, debt markets are expected to facilitate availability of long-term funds for specific uses such as for infrastructure. They also infuse greater transparency in the process of credit allocation in view of the information that is contained in market determined rates. In fact, e-commerce makes information sharing less costly, and hence it is easier to develop bond market infrastructure in the current environment for facilitating transparent market-based allocation of credit. It may be difficult for Government to intervene through debt market for directed subsidised lending as compared with the banking system. Hence, it is claimed that debt markets facilitate the reduction of bad loans. Furthermore, since debt instruments are mostly rated, investor awareness and monitoring is greater, which mitigates the moral hazard arising out of deposit insurance as in the case of banks.

Third, debt market can help develop the derivatives market thereby facilitating hedging mechanisms and enabling greater diversification of risks by participants. Also, the variety of instruments possible in the domestic debt market may result in gains to savers and borrowers.

It is also essential to recognise that domestic debt markets may not be able to deliver in reality all that is sought from them. The efficiency of bond markets would depend on the efficiency of credit rating agencies (CRAs), standards of accounting, auditing and disclosures, institutional infrastructure, prevalence of an environment for enforcement of contracts, etc. Bond markets may not necessarily reduce systemic risk since banks themselves could be major players in bonds as issuers, investors and underwriters. Development of a debt market for long-term instruments would also require complementarity of policies such as flexibility in interest rates, enabling legal environment, etc. Though higher degree of transparency is to be expected, it has been argued that where sophisticated instruments like options exist, transparency in debt markets may not be automatically ensured. Furthermore, a domestic bond market by itself need not necessarily address the fundamental issues of risk management and pricing of risk.

On balance, the current realities would lead one to believe that the banking system will continue to be at the centre of the financial system in emerging economies. In fact, banks are likely to have significant direct or indirect presence in the debt market as issuers, investors or underwriters. If the overall environment in the financial sector contains problems in pricing of risks by banks, bond markets too can suffer infirmities in pricing. As the financial system is evolving, bank loans and bond contracts must be treated as complementary and to some extent as substitutes. In view of the undeniable benefits of a multi-institutional financial structure, a number of countries are rightly devoting considerable resources and attention to the development of domestic bond markets, though each country may have different motivations for doing so.

2. Motivations for Development of Domestic Debt Markets

The main provocation for undertaking the task of development of debt markets would depend to some extent on the different histories and cultures of countries, but predominantly on economic factors such as experience with high inflation, transition from Planning, restructuring economies after crisis, etc. More specifically, and in the context of the financial system, the objectives may relate to financing Government deficit, funding bank restructuring, creating a more complete financial markets, avoiding banks from taking on excessive credit, risk diversification in the financial system, conducting monetary policy, sterilising capital inflows, providing a range of long-term assets for pension funds, etc.

The impetus in Hong Kong for instance, seems to have come as a market development strategy towards achieving efficient financial intermediation and making the market more complete. Similarly, Singapore reportedly views the debt market as a means of financial intermediation to help credit allocation, and development of corporate bond market was given high priority as an alternative funding source in order to reduce reliance on bank intermediation.

In a restructuring economy like Hungary, the motives appear to have been different, viz., reducing the monetisation of Government deficit, increasing competition to banks which had wide spreads between deposits and advances and encouraging foreign investment in Government debt in domestic currency. In the second half of the 1990s, monetary policy considerations relating to the information content of the yield curve and concerns with the transmission mechanism of monetary policy must have added impetus to the development of debt markets.

Recapitalisation of banks appears to have been the driving force in Indonesia. In Chile, the debt market developed mainly as an offshoot of pension reforms. The growing pool of savings needed Government instruments for investments, whereas the Government had a surplus. The history of over hundred years of inflation seems to have created a demand for inflation indexed bonds.

China views Government borrowing as the most important reason for financial deepening and the Government Securities market provides the lead in development of the bond market. Furthermore, it would be possible to develop the corporate bond market with an efficient benchmark of Government Securities.

In India also, large Government borrowings have provided the impetus for development of bond market. A system of the Reserve Bank of India (RBI) funding on an automatic basis, the Government's budget deficit at concessional rates of interest was replaced in April 1997 by a system of RBI financing the temporary mismatches between expenditure and revenue of Government at market aligned interest rates. Consequent to the dismantling of the administered interest rate regime, the borrowing requirements of the Government are now largely raised from the market at market related rates. As India experienced capital inflows and considered intervention or addition to foreign exchange reserves, it used domestic eligible marketable bonds in its portfolio whenever it wanted to sterilize the money expansion. A deep and liquid debt market naturally facilitates this process and in this sense the linkage between capital inflows, sterilization and development of debt markets can also be considered to be an additional reason for development of debt market.

3. Need for Widening and Deepening the Government Securities Market

The relevance of Government Securities can be viewed from three points of view, namely from Government which wants to borrow; from their role in financial markets especially debt markets and from the operation of monetary policy. First, from the viewpoint of the Government/fiscal authorities, the development of a deep and liquid Government Securities market facilitates public borrowings at reasonable costs and avoidance of automatic monetisation of Government deficit by the central bank. Broad and well-functioning secondary markets are particularly important where the Government's borrowing needs are substantial. A well developed Government Securities market provides flexibility to the debt management authorities to exercise various options to optimize maturity as well as interest cost to the Government, to minimize the market impact of large or lumpy Government debt operations and, facilitate better co-ordination between monetary policy and debt management.

Second, the Government Securities market provides the backbone of most fixed income markets across the world since it helps pricing of various debt instruments through creation of a benchmark, enables a proper evaluation of risk and acts a conduit for convergence of interest rates in other markets. In addition, the gilts market acts as the channel for the integration of various segments of the domestic financial market and help establish inter-linkages between internal and external financial markets. It is sometimes argued that it is not always necessary to develop a Government securities market. Some countries do not have Government Securities market because their Governments have no funding requirements and in such countries, alternate benchmarks have developed so that price discovery has shifted from a single Government market to a range of non-Government markets. Thus, inter bank repo rates, collateralised obligations, interest rate swaps and top rated corporate bonds have gained acceptance as benchmarks in such markets.

Third, a number of countries are moving away from the use of direct instruments to indirect instruments such as repos and direct open market operations. Government Securities facilitate the development of implementing indirect instruments of monetary policy. Typically, Treasury Bills and Government Dated Securities are ideal instruments for conducting repos in many emerging economies. While the T-Bills market serves the objective of raising finances for the Government, it also spurs the development of the money market. An important ingredient in the development of money market is the terms under which liquidity is available from the central bank. If liquidity adjustment support is available with certainty in regard to quantity and price, it could impede the development of the money market as banks will desist from entering into transactions with each other. In fact, the link between development of money market and the Government Securities is an important aspect of development of debt markets.

The primary interest of the Reserve Bank of India (RBI) in financial markets is because of their criticality in acting as the transmission channel for monetary policy especially while RBI is moving towards reliance on indirect instruments of monetary policy. The Government Securities market is the predominant part of the overall debt market and interest rates in this market provide benchmarks for the system as a whole. Currently, the RBI is the monetary authority, regulator of Government securities market, issuer and manager of Government borrowings, for both the Centre and the States, and regulator of money markets as well as forex

markets. The RBI's concern in development of the Government Securities market should be seen in this light, while recognising that the regulation of debt market as a whole, in the context of public issues by corporates and trading in stock exchanges where debt is traded, is in the regulatory jurisdiction of the Securities Exchange Board of India. In India, the RBI considers that well functioning markets for Government Securities are necessary for both effective Government debt management and monetary management, while serving the broader interest of development of financial markets in general and debt markets in particular. Accordingly, RBI has taken a number of initiatives in developing both the primary and secondary markets for Government Securities.

4. Key Issues Relating to the Government Securities Market

There are several motivations for and objectives in a central bank being interested in developing Government Securities market and hence the issues involved vary in significance from country to country as also in the context of the stage of development of markets. The key issues are : relevance of the money market, operational aspects relating to the primary market, significance of secondary markets, policy conflicts in debt and monetary management and dilemmas in market intervention.

Relevance of Development of Money Market

A money market supports the bond market mainly through the process of liquidity. In addition to the importance of money market for financing positions, money market prices liquidity and anchors the short end of the yield curve. The existence of a repo market helps the development of an active Government Securities market and *vice-versa* since lending and borrowing under a safe environment can be fostered through repos. Where interest rates are liberalised and debt management and monetary policy functions are with the central bank, policy coordination needs to be maintained between the Government Securities and money markets.

In regard to the money market in India, the basic objective in recent years has been to develop a short-term yield curve with deep liquidity. A four-fold strategy has been adopted in this regard. First, a liquidity adjustment facility has been in operation, comprising repo and reverse repo operations through auctions conducted with a view to equilibrating the liquidity and keeping the short-term interest rates within an informal corridor. Second, the call money market is being developed as a pure inter-bank market with a phased withdrawal of non-bank participants who are currently lenders in the call money market. Third, the traditional sector-specific refinance support is being rationalized and additional recourse to the established liquidity facilities is being made increasingly market-based. Removal of established facilities on fixed terms and moving to a full-fledged Liquidity Adjustment Facility (LAF) is on the active agenda. Fourth, the other money market segments, especially the repo market are being developed with lending as well as borrowing access to the non-banks in these markets. To help the process, a Clearing Corporation of India Ltd. (CCIL) has been established.

Operational Issues Relating to Primary Market

Ensuring efficient price discovery process is a dominant objective of operations in primary markets and for this purpose putting in place credible systems and ensuring transparent mechanisms are critical.

Auction Technique and Central Bank Participation in Auctions

Auctions are the most common method for sale of Government Securities, though securities are also distributed through tap sales, syndication and book building process. In many countries, direct participation in auction is restricted to select investors while a larger investor base is permitted to enter auctions through designated intermediaries such as banks and Primary Dealers. The actual modalities of reaching the investor base would be governed by pragmatism and in fact even choices in auction techniques or even combination of techniques may in some circumstances be linked to permitted pattern of participation. As regards technique, discriminatory price auctions keep away investors because of the winners curse, whereas there are dangers of irresponsible bidding and of collusion in a uniform or Dutch type of auction. Countries have moved between discriminatory and uniform price auctions, but there is no settled wisdom as to which type of auction is better. An interesting variant that merits further consideration is a combination of the features of both auctions, i.e., discriminatory price auction with a ceiling, in order to mitigate winners curse.

In general, central bank participation in auctions is best avoided, but if it becomes necessary, a central bank ought to participate without competing with other bidders. There is a distinction between a central bank buying Government Securities on its own accord and being compelled to do so. In many countries, either there are laws prohibiting central bank participation in primary auctions such as in Indonesia and Peru or central banks voluntarily restrict themselves from participation as in the case of Malaysia, Philippines and Hungary.

In India, auction method has been the most favoured, though such auction could be based on yield, price or discount, with or without some underwriting commitment of Primary Dealers at the discretion of RBI. Both discriminatory and uniform price auction techniques are used but the former is dominant and multiple price auction format is predominantly used for Government Securities issuances while uniform price auction is used for 91-Day T-Bills. In the context of the need to attract retail investors, bids received on non-competitive basis within the notified amounts are cut-off at the weighted average yields derived in an auction.

The question of central bank participation as an outsider in primary auction does not arise in India since the RBI itself conducts the auction. The RBI, however, used to take private placements liberally in the past but more recently it does so only in extraordinary situations, and it has also decided to voluntarily move out of devolvements on itself. The Fiscal Responsibility and Budget Management Bill, which is under consideration, proposes an explicit provision that prohibits the RBI from purchasing Government Securities in the primary market.

Instruments

Countries have experienced with different types of instruments, to suit their unique circumstances, to broaden the markets. Hungary for instance has gradually moved away from short maturity bonds to long-term fixed rate Government bonds enabled by the fact that it avoided hyper-inflation. Similarly, Israel favoured the simple plain vanilla bonds although there is a presence of a variety of instruments such as (Consumer Price Index) CPI-linked, fixed-rate and variable-rate bonds and it has progressively lengthened maturities. Chile favours inflation-indexed bonds.

The RBI has experimented with different types of instruments such as the fixed coupon bonds, zero coupon bonds, capital indexed bonds and more recently floating rate bonds. Most of the bonds, however, are of the fixed coupon variety though recently Floating Rate Bond issues have proved to be attractive.

Maturity Profile

On the maturity profile, there is no ideal solution, but trade-offs between long-term and short-term maturities on considerations of market preference, cost to Government, bunching of maturities, and development of yield curve should be recognised. Development of Government benchmark securities is an essential element of a well functioning Government Securities market and this requires the issuer to make conscious efforts to avoid fragmentation and where necessary consolidate issuance. Typically, benchmark securities in domestic markets are 2, 3, 5 and 10 years, while countries like the USA issue securities up to 30 years.

In India, Government revived borrowing at market rates in 1992-93, and most of the new maturities were compressed below 10 years. This was necessary at the time as it coincided with the period of the high interest rate cycle, and the successful implementation of the auction system in the early stages of a move to market related rates of interest required a shortening of the maturity structure. This resulted in bunching of maturities as well as rendering liquidity management difficult. In the last two to three years, the RBI's preference has been towards longer maturities, at fixed rates to bring about a balance in the maturity structure. There would be times when Government is reluctant to lock in what it perceives to be high rates, and the banks face larger asset liability mismatches and greater interest rate risk. Recognising this, the RBI has reintroduced floating rate bonds and is attempting to develop the STRIPS market in the Government Securities segment. As regards consolidation, RBI has extensively used the technique of re-openings of existing securities on the basis of price-based auction. Thus, advantage was taken of large gross borrowing programme to lengthen the maturity profile and consolidate the profile.

Issuance Calendar

Based on first principles, it is better to provide a clear and timely information about the borrowing programme through an issuance calendar, in addition to maturity profile of outstanding stock, redemption calendar, etc. In operational terms, issuance of a calendar has to tackle the trade-off between certainty to the market and flexibility to the issuer in terms of market timing.

The uncertain trends in terms of cash flow pattern of the Government of India constrains the publication of issuance calendar. In respect of T-Bills, a pre-announced issuance calendar for auctions has been evolved. Recognising that a large market borrowing programme and uncertainties in cash flows make issuance of full-fledged calendar somewhat difficult at this stage, the Finance Minister announced in the budget speech recently, that there will be a calendar of auctions of Government from the financial year beginning April 2002.

Role of Primary Dealers

Many countries have established a system of licensed Primary Dealers (PDs) in Government Securities as important intermediaries to promote activity in Government Securities

market. Typically, PDs are assigned specific responsibilities like minimum bidding requirements, giving two-way quotes, providing market information to the central bank, etc. In some cases, PDs have been given exclusive right to primary auctions, or some special facilities in money market operations, open market operations, underwriting commission, etc. PDs can play a vital role in the development of the secondary market. By being in the market, their prices discount all available information, they take up trading positions, and also render valuable assistance to the central bank by providing it with latest market information, designing new instruments, etc. Since PDs are generally highly leveraged, regulatory oversight over PDs appears to be warranted and a common feature among central banks has been to periodically review the performance of PDs and make the continuation of their operations performance-based. An interesting feature that merits notice is a rating of PDs as established in Poland.

The institution of PDs has been adopted in India in 1996 for developing both primary and secondary markets in Government Securities. The main objectives of promoting the institutional mechanism of PDs are to strengthen institutional infrastructure in the Government Securities market in order to make it vibrant, liquid and broad based and to ensure development of underwriting and market making capabilities for Government Securities outside the RBI so that the latter could gradually shed these functions. In other words, the marketisation of Government borrowings and vacation of RBI from primary market in an environment of large borrowing programme were facilitated by a conscious development of the institution of PDs. PDs obligations include giving annual bidding commitment, underwriting the primary issuance and offering two-way quotes. In return, the PDs are extended liquidity support by the RBI and access to call money market as borrowers and lenders.

Incidentally, RBI experimented with a system of Satellite Dealers (SDs) from 1996 to serve as a second tier to PDs in the Government Securities market with the particular objective of promoting retail segment. However, on a review it was found to be not as useful as was expected and is being given up.

Gilt Mutual Funds

Mutual funds dedicated almost exclusively to investments in Government Securities called Gilt Mutual Funds were established in India in April 1996. Currently, there are 13 such mutual funds in the country. Mutual funds are regulated by the Securities and Exchange Board of India (SEBI). In tune with the developments that have taken place in the debt markets since 1996, the scheme of Gilt Funds is currently being reviewed by the RBI. Given the small size of the repo market during that period and the consequent uncertainty regarding availability of liquidity from the market, Gilt Funds were given limited liquidity support by the RBI. Considering that the liquidity support was introduced as an extraordinary measure and the fact that the repo market has developed and is expected to become more liquid with the operationalisation of the CCIL, there is a case for reviewing the liquidity support to Gilt Funds from RBI.

<u>Significance of Secondary Markets</u>

A diversified investor base with varied demand, maturity profile and risk preference is admittedly important for ensuring high liquidity and stable demand in the market. Apart from banks, PDs and mutual funds, retail investors and foreign investors can also play a role in

widening the investor base. Catering to the needs of retail investors is often an essential part of the overall strategy to develop a more diversified investor base. Retail investment can also contribute to stable demand for Government Securities and can provide a cushion for the impact on volatility.

Development of repo markets, short selling, the role of benchmarks and marked to market valuation, etc., do contribute to boosting of secondary market liquidity. The practice of short selling securities facilitated by securities lending and borrowing has been prohibited in some emerging markets and it is necessary to recognise the rationale for this. No doubt, the ability to sell short has a positive effect by increasing the market liquidity and price efficiency since it enables participants with differing views on the market to trade actively, but short sales, have the potential to increase market volatility and risks especially if the market assumes larger position than what it is capable of handling.

As regards benchmarks, many countries have been taking efforts towards consolidation and creation of benchmarks and the procedures depend on the composition and stock of existing debt and how much debt is proposed to be raised. Another issue relates to whether a move to marked-to-market for investments raises any risks in terms of stop-loss sale, etc. While marked-to-market serves to encourage secondary market trading, it is necessary to have a liquid market to correctly price securities.

The RBI has taken a number of measures to enhance the secondary market liquidity in the Government Securities market. These include permitting a diversified participant base, improved fungibility of bonds through reopenings, stabilizing money market through Liquidity Adjustment Facility (LAF), developing the repo market, encouraging the operationalisation of the Clearing Corporation of India Ltd., initiating a negotiated dealing system for trading, enforcing marked-to-market requirement for valuation of investments, ensuring a Delivery Vs Payment system for settlement of Government Securities in scripless form, and disseminating detailed information to the public on a daily basis in respect of all Government Securities traded in the market.

In India, initially the RBI was announcing the yield curve to the market for year-end valuation. Currently, FIMMDA, a self-regulatory organisation, announces the yield curve, the methodology of which was approved by the RBI. Incidentally, although the statutory liquidity ratio (SLR) for the banking system is 25 per cent, banks are voluntarily holding 37 per cent of their liabilities in Government Securities. Recognising the risks involved in such large exposures, the Reserve Bank of India (RBI) has created a path for banks to reach a targeted investment fluctuation reserve over a period.

Policy Conflicts in Debt and Monetary Management

Irrespective of whether the debt management function is vested with the central bank or not, coordination is important to avoid conflicts between cash and debt management of the Government and central bank operations. The timing and amounts of Government Securities issuance may not always coincide with the compulsions of the central bank's monetary policy. The Government may wish to issue securities at a time when the market is illiquid and the central bank needs to consider whether or not and to what extent it will provide additional

liquidity. Liquidity can be provided through the secondary market or where the central bank is both the debt and monetary manager, it has the option to operate through the primary market.

Currently, almost all central banks are harmoniously co-ordinating with the fisc, both at the policy and operational levels with regard to debt management. There is general agreement that being the fiscal agent creates problems for central bank and separation of debt management function from the central bank would remove the friction. In a situation of high fiscal deficit and lack of fiscal assurances on its responsibility, separation of the two functions could increase the risk of macro instability. Controlling the fisc, developing financial markets and setting in place institutional and technological infrastructure ideally should precede such separation.

The monetary policy statement of the RBI of October 2001 had clearly indicated the intentions in this regard and the conditions that would need to be fulfilled to make this separation possible. The RBI acknowledged that although it is desirable in principle, separation of debt and monetary management functions is a medium-term process that is dependent on the fulfillment of three conditions, viz., development of financial markets, reasonable control over the fiscal deficit and necessary legislative changes. Of course, institutional arrangements for establishing a separate Debt Office need to be thought through. The Federal nature of the country adds another dimension to the issue namely should each State and Central Governments have a public debt office while replacing RBI. One method could be to set up an independent corporate entity structure to manage the debt of both Centre and the States.

Dilemmas in Intervention in Markets

On the proposition that since markets are maturing there is a case for central bank intervention to even out price volatility, there is a general consensus against intervention in the normal course. There are many central banks that never intervene in the bond markets to smoothen volatility. In fact, lowering volatility impedes secondary market development by preventing hedging instruments from developing, which in turn are necessary to deal with volatility.

There are however, situations justifying an interventionist approach by central banks. For instance, the September 11, 2001 incident required the Federal Reserve to be involved intimately in the market. India has had many such situations like the border conflicts and US sanctions, etc. where the RBI had shown its willingness to be present in the market without creating expectations of being a market maker. Thus, there is a need to differentiate between normal market conditions and exogenous shocks in taking a view on intervention. While in the case of exogenous shocks, intervention or expression of intention to do may be necessary, during normal market conditions the option should always be available but, actual exercise is to be convincingly dictated by evolving circumstances with a directional preference to strengthen market forces.

On the intervention policy of RBI, three areas need to be highlighted. First, in the money market, the RBI is concerned mainly with liquidity management through the Liquidity Adjustment Facility and effectively operates an interest rate corridor between the repo and reverse repo rates. Second, in the context of market borrowing programme, the RBI intervention is through private placement under extraordinary circumstances since the RBI has the

responsibility to raise Government debt. In other words, if in the RBI's assessment the market would not be in a position to absorb the debt without disruption, it resorts to private placement. Third, when the bids in auction are unacceptable, the RBI takes on a devolvement, which in actual practice has been negligible during the last two years. Primary Dealers underwrite issues of Government paper for which they are paid underwriting commission. Thus, the twin combination of high fiscal deficit and a narrow and not so liquid market necessitates RBI intervention in the interest of financial stability. There are, however, no rules regarding sale of securities taken on private placement in terms of maximum period of holding etc. It is at the RBI's discretion to offload securities taken on private placement when conditions are conducive.

When capital flows occur and the capacity to monetise Government debt is circumscribed by sterilisation, the maneuverability to conduct market borrowing is constrained. In the current financial year, for instance, the RBI has added $ 8 billion to its foreign currency reserves. To meet externally induced shocks in forex markets, the RBI had in the past conducted extraordinary operations and in the process considered it essential to create a firewall to prevent its transmission to the bond market. A by-product of erecting firewalls was that, whenever the central bank has resorted to monetary actions on exchange market considerations, or even when bond yields have moved sharply on sentiments, it has tended to create expectations of liquidity action in the bond markets. These are complexities that all concerned learn to live with.

5. Development of Corporate Bond Market

To develop corporate bond market, the authorities have to actively consider increasing the supply of high quality paper, creating adequate institutional investor base, ensuring a variety of instruments of differing maturities and mounting supporting infrastructure, etc. Emphasis also needs to be placed on efficient legal systems as important infrastructure for deep and liquid bond markets. Among legal reforms, bankruptcy laws or capacity to seize collaterals are particularly important. Experience also indicates that in many emerging countries, since the risk is transferred to the creditor in bond markets as compared to banks, there is a preponderant bias towards bank deposits among household savers in many countries. In other words, development of domestic corporate debt market is bound to be a long drawn process and banks will have to continue to be special and dominant in the financial systems of most emerging economies.

In Mexico, while the experience is that larger companies issue bonds abroad, the smaller companies prefer to borrow from banks. In Chile, there is some substitutability between bank and bond financing as a few companies raise bonds to prepay bank debt. Pre-crisis, Korea had a large corporate bond market and the biggest lesson from the episode was that too much Government intervention (either in exchange rate or implicit or explicit guarantees) resulted in serious distortion of markets.

In many emerging economies, the corporate bond markets are fragmented. Poland for example has a fragmented and illiquid corporate bond market characterised by private placement and cross holdings. Peru is experiencing a situation where good credit was going to banks while bad credit was going to bond markets; hence there is a justified reluctance to invest in bonds. On the other hand, this raises the contrary view-point that if bond markets are developed, bad credit could go to banks. There is, however, no evidence of this so far and moreover *ex ante* there are only well-priced and badly-priced loans.

There is a recognition of the need to develop securitization market as a related issue. Securitization as an instrument acts as a risk transfer mechanism that could work to the advantage of both banks and investors. In Korea, non-performing loans spurred this market; Hongkong has established a Mortgage Corporation. In many countries, this market is in nascent stage, either because it needs complicated legal changes or the credit environment does not enable securitization. For instance, Hungary has no non-performing loans nor mortgage in household; hence no mortgage exists to warrant securitisation to be involved in the development of this market.

The Reserve Bank of India's role in development of corporate bond market is indirect and governed by its interest in monetary policy transmission, Government Securities, and stability as well as efficiency in financial sector as a whole. As mentioned, the major preoccupation has been with Government Securities market for all the reasons explained. The corporate bond market commenced in a significant way with Public Sector Undertakings being encouraged to take recourse to them in late eighties, but the private corporate sector's debt requirements were met largely by development financial institutions and banks. With developments in capital market and establishment of rating agencies, corporates and development financial institutions themselves started taking recourse to debt, since the reform commenced. More recently, special purpose vehicles to fund infrastructure promoted by some State Governments have come to the fore especially since they are backed by State Government guarantees.

Corporate debt market in the sense of private corporate sector raising debt through public issuance in capital markets is only an insignificant part of Indian debt market. When we talk of debt markets in India, we are really referring to the Government Securities market, which accounts for 75 per cent of the outstanding stock and nearly 95 per cent of the volumes traded in the secondary market. About 90 per cent of the corporate debt market is privately placed. In the privately placed market, 58 per cent of the issuances are by financial institutions and banks, both in the public and private sector and about 26 per cent represents issues of public sector undertakings and central/state government guaranteed bonds. Two-thirds of the total issues are accounted for by the public sector. 20 per cent of the total corporate debt issuance is by the private non-financial sector.

Most issuers in the corporate debt market are AAA or AA rated borrowers and about 10 per cent may be unrated. The investors are mostly institutions with very few retail investors. Hence, at the first stage of development of the bond markets, while securitisation takes place, the disintermediation process is only partial. Transparency is limited both in the primary and the secondary markets, liquidity is poor and many bonds are held till redemption. The legal recourse in case of non-payment of interest and principal is complicated and bankruptcy laws afford little comfort. The legal and regulatory requirements, accounting and auditing standards for issuers and the infrastructure for trading, clearing and settlement need to be developed much more in case the market has to become deep and liquid.

As the non-transparent practices in this market is a matter of concern, RBI had issued guidelines in June 2001 regarding the due diligence to be undertaken, the disclosures to be obtained and the credit risk analysis to be made in regard to privately placed investments especially for unrated instruments. Banks have been advised to adopt an internal system of

rating for issues of non-borrowers, whether rated or otherwise, and adopt prudential limits to mitigate adverse impact of concentration and illiquidity. Banks have been also advised to put in place proper risk management systems for capturing and analysing the risks so as to take timely remedial measures. A further review of non-SLR investments in the light of recent developments reveals that the ease of mobilising funds through privately placed debt issues could lead to the use of such funds for risky purposes other than what is disclosed in the offer document.

In order to contain the risks arising out of non-SLR investment portfolio of banks and FIs, in particular through the private placement route, it was proposed by the RBI to issue further prudential guidelines to be observed by banks. The draft guidelines were circulated to the banks and FIs in October 2001. These guidelines primarily focus on the need for strengthening of internal rating systems, fixing of prudential limits and sub-limits, review of rating changes in respect of issuers and non-performing investments; and most important, disclosures in 'Notes on Accounts' regarding issuer composition and non-performing investments.

As announced in Mid-Term Monetary and Credit Policy for the year 2001 – 2002, the RBI constituted a Working Group under the chairmanship of Mr.S.R.Iyer, Chairman Credit Information Bureau of India Ltd., to evolve a framework for collecting and sharing of banks/ FIs of information on private placement of debt and prescribing minimum requirements for issuers to meet before banks/FIs consider investment in such debt. The Report is due very soon.
The major pre-occupation of the RBI in regard to corporate debt is to ensure that banks and financial institutions are protected from the risks in the current state of markets as also aid the process of qualitative changes in the corporate debt markets.

6. Institutional Issues

There are several institutional issues related to debt markets and each of them is critical but they are not necessarily interrelated. These are many, but this section focusses on some of them, namely, institutional investors in debt markets, self-regulatory organisations, banks, credit rating agencies and the tax regime.

Role of Institutional Investors

There is wide consensus regarding the need for institutional building for development of debt markets, though countries have approached it differently. The notion of pension reforms as an important instrument in the process is generally upheld although there is a case for regulatory limits on their investments in riskier assets in the interest of financial stability.

There are several approaches to improving institutional investors' interest in domestic debt markets. For example, Indonesia is currently embarking on substantial regulatory reforms to encourage institutional investors. Hungary is emphasizing development of mutual funds. Some countries like Philippines are concentrating on market for securitisation. Hong Kong prefers a portfolio approach, a greater role for credit rating agencies, to build Collective Investment Vehicles and to explore other options like credit enhancements, rather than increase the supply of Government or quasi-Government paper to whet the appetite of pension funds (PFs). In general, PFs are encouraged to invest in Government Securities as in the case of Chile,

Indonesia and Singapore although some countries like Hungary and Philippines are permitting some portfolio diversification by allowing investment within limits, in non-Government paper. It is also observed that many pension or provident funds voluntarily invest in Government Securities above the minimum requirements.

In the case of India, investments by Provident Funds are governed by Government Regulation, which indicates that 40 per cent of their incremental accretions each year are invested in Central and State Government Securities. This is followed by 40 per cent in bonds/securities of public financial institutions and Certificate of Deposits issued by public sector banks of which a maximum of 10 per cent is permitted in rated private corporate debentures. Investment in this category is usually mopped up by development financial institutions, which are themselves financial intermediaries. Moreover, the pension funds themselves being conservative, prefer to invest in Government Securities. Thus, the resources of the PFs are preempted by the Government and DFIs, making the linkage between PFs and corporate debt market tenuous.

Role of Self-Regulatory Organisations

Self-regulation is fast emerging as a viable co-operative framework for both the regulator and market participants to come together towards the fulfilment of common goals and objectives. By creating a unique combination of private interests and official oversight, SROs have emerged as an effective and efficient form of regulation for the complex and dynamic financial services industry. International experience with self-regulation suggests that the power of self-regulatory organisations vary significantly. In its most complete form, self-regulation encompasses the authority to create, amend, implement and enforce rules of conduct with respect to the entities subject to the SRO's jurisdiction and to resolve disputes through arbitration or other means. Typically, this authority is derived from a statutory delegation of power to a non-governmental entity. In some countries, SROs do not have formal regulatory status but nevertheless provide codes of good conduct and master agreements and perform important roles in the standardisation of common practices without any formal regulatory status. It is necessary to recognise that exercise of authority in any form by SRO does raise some fundamental issues such as their accountability and monopoly status. There is merit in constantly reviewing both the representative nature of SROs and responsiveness to overall public interest considerations.

In the context of Indian debt market, self-regulatory bodies like the Fixed Income Money Market and Derivatives Association of India (FIMMDA) and the Primary Dealers Association of India (PDAI) have been encouraged in the recent past, as part of reform process to give an impetus to the development of the bond and money markets in India. These bodies have served as crucial layers between the regulator and market and have contributed to developing new benchmarks and products besides providing training and development support to participants. They have formulated guidelines for dispute resolution mechanisms and are also involved in the process of developing standard practices and codes of conduct. Both PDAI and FIMMDA are represented in the Technical Advisory Committee (TAC) of the Reserve Bank of India on Government Securities and Money Markets. FIMMDA is involved in the task of valuation of all Central Government Securities. The daily yield curve based on benchmark Central Government bonds is fast emerging as an accepted benchmark to price securities. In addition to this, FIMMDA has also been contributing to developing guidelines for documentation of repo,

securitised debt and several other debt market instruments. The activities of both SROs are closely co-ordinated with policies of RBI while their functioning is also carefully and constantly observed by RBI.

Banks and Bond Markets

The relationship between banks and bond markets is complex especially in emerging countries where the dominance of banks in financial intermediation is set to gradually decline but banks do have a critical role in development of debt markets. Banks operate as issuers, investors, underwriters and guarantors. Banks may also securitise loans and thus participate in long-term debt markets. In the process, the regulator of banks has a responsibility to ensure that banks' participation in debt markets, both as issuers and investors is consistent with their risk management. The vagaries of debt markets do impact the balance sheets of banks, while banks' confidence and participation in debt markets influence the growth and liquidity in the markets. In some countries, banks have been active participants in equity markets but their small presence in debt markets may be partly explained by the less developed nature of debt markets, particularly in Asia.

In India, the banking system which incidentally has been dominated by the public sector, played a pioneering role in initiating growth of mutual funds, merchant banking and other financial services. Structurally, banks have been permitted to operate through subsidiaries as asset management companies, PDs, merchant banks and mutual funds. The Development Financial Institutions also played a role but they dominated in promoting credit rating agencies, sponsoring national stock exchanges, depositories, etc. In regard to Government Securities segment of the market, which accounts for about 75 per cent of the stock, about 60 per cent of the stock is held by the banking system. As regards the corporate debt segment, both private placement and public issue, over half of the issuance is by banks and financial institutions. The corporates, especially the large corporate segment move in and out of bank advances and debt markets just as banks also participate in both.

In this background, the RBI continuously reviews the nature and extent of linkages and adopts a wide range of mechanisms to enhance efficiency and impart stability. Phased deregulation of limits for banks' investments in non-Government debt instruments was accompanied by exposure norms, other prudential guidelines, valuation norms for debt instruments and asset liability management guidelines. The maturity profile and issue of innovative instruments in Government Securities market were also attuned to meet varying portfolio needs. In addition to risk weights for interest rate risks, a target has been indicated for establishing investment fluctuation reserve. Legal changes have also been announced in the budget to create a market for securitisation. Development Financial Institutions have also been permitted greater flexibility to operate on their liabilities and asset sides in debt instruments.

Role of Credit Rating Agencies

Banks do possess intimate and specialised knowledge of the borrowers and are thus in a unique position to assess the risks in advances, while in the case of large number of investors in debt markets, such knowledge and skill are usually lacking. Credit Rating Agencies (CRAs) help mitigate this problem of asymmetric information and the dissemination of information by the CRA incidentally makes the regulator's task less onerous. CRAs have also faced a number of

criticisms in recent years, especially after the Asian crisis. The independence of ratings has been questioned, especially when ratings are paid for their services. Questions are also raised about the accountability of CRAs, the potential for herding by investors and frequent changes in ratings causing volatility. Excessive reliance on CRAs is, under these circumstances to be eschewed and in any case the quality of ratings by CRAs continuously assessed. Some regulators prescribe that pension funds invest in debt instruments of investment grade only. Credit rating has also been prescribed by regulators as the basis for exemption from registration norms for issuers of asset backed securities. Some regulators insist on a minimum rating for corporates to become eligible for issuance of Commercial Paper. Furthermore, specific credit rating limits have been made on the eligibility criteria for issuance of bonds in some countries.

In India, there are four CRAs and each of them has collaboration with internationally renowned CRAs to supplement the local knowledge and skills. The RBI prescribes a number of regulatory uses of ratings. Of those related to the money and debt markets, a corporate must get an issue of Commercial Paper rated and may issue such paper subject to a minimum rating. SEBI, which incidentally is the regulator of CRAs has stipulated that ratings are compulsory on all public issues of debentures with maturity exceeding 18 months. Pension funds can only invest in debt securities that have high ratings, as per the stipulations of Government.

A trend over the last few years in India is the preference for CRAs to extensively rate private placement resulting in financial institutions' distinct preference for investment in rated paper often through private placement and sometime over normal credit. Such a trend of abdicating the responsibility for assessment of risk is not desirable from the point of view of banks. RBI has been issuing detailed guidelines to banks and financial institutions in regard to exercising their judgement and risk assessment while taking into account the CRAs ratings. The latest guidelines emphasise the importance of such internal assessments even when the rated paper happens to be backed by guarantees of Government. Thus, while CRAs are necessary, their presence is not a sufficient condition for development of sound debt markets.

Tax Regime and Debt Markets

An efficient tax regime should ensure that it does not create an impediment to the development of secondary debt market. Distortions may be created if, without clear justification, some participants are exempted from tax as compared to another, certain instruments are taxed while others are exempted and procedures for calculating tax or deducting tax at source distorts prices. Similarly, lack of clarity in provisions could also hamper trading in certain segments of the debt market. While the process of reform would have to be initiated in a given tax regime, with the evolution of reform, and as the market, institutions and instruments develop, the tax regime would need to be modified to suit the changing circumstances.

The removal of tax deduction at source (TDS) on Government Securities market in a way heralded the beginning of the taxation reforms in debt markets. The result was the end to the practice of voucher trading in the Government Securities market thus removing pricing distortions in the market. The incidence of stamp duty had been for a long time a major impediment to the development of debt markets. The amendments to the Indian Stamp Act, 1899 have exempted debt instruments dealt in demat form from the applicability of stamp duty

(Government Securities as such are exempted from the stamp duty). This encouraged demat holding/transactions in debt instruments, as also trading in debt instruments.

In the latest Budget, some more rationalisation measures in the tax regime were announced. First, the earlier exemption to equity mutual fund from the dividend tax placed the debt mutual funds at a disadvantage. The recent Finance Bill, has however, proposed the abolition of the distribution tax of 10 per cent on companies and mutual funds on the dividends or income distributed by them. Such income will henceforth be taxed in the hands of the recipients at the rates applicable to them and subject to TDS. The dividend tax exemption available to the equity-oriented mutual funds, however, is withdrawn and the dividends will be taxable in the hands of the recipients at 10 per cent. This move has to some extent reduced the disadvantages faced by the debt-oriented funds.

Second, the recent amendments to Section 47 of the IT Act, facilitating securities lending and borrowing operations will ensure safe and smooth settlement through the recently established CCIL.

Third, the prevailing tax treatment for zero coupon bonds resulted in distorting trading practices in these instruments. The recent notification issued by Central Board of Direct Taxes (CBDT) in bringing about rationalisation in the tax treatment for the deep discount bonds, apart from removing the distortions will keep the market in readiness for the development of STRIPS in Government Securities and facilitate a zero coupon yield curve.

For the financial system as a whole, the Expert Committee to Review the System of Administered Interest Rates and other Related Committees (2002) has made certain recommendations on the tax regime, which if implemented would remove some distortions and ensure a level playing field among participants and instruments in the financial markets. These measures coupled with the decision to align the administered interest rates with market rates of interest should pave the way for significant improvement in the environment for debt markets.

7. Road Ahead for Indian Debt Markets

There have been several occasions when measures contemplated in India for development of debt markets especially Government Securities markets have been articulated by RBI. In this concluding part of my address, I will list the milestones to be reached within one- or two-year time span.

On the legal side, several measures are under way. First, as the Finance Minister, in his Union Budget 2002-03, has announced, a new Government Securities Bill, which has since received the concurrence of all the State legislators, replacing the existing Public Debt Act of 1944, would be introduced in the current session of the Parliament. The new Act will facilitate wider participation in Government Securities markets as it will provide necessary protection to the beneficial owners through Constituent Subsidiary General Ledger (SGL) accounts, enable lien marking and pledge of securities for raising loans against Government securities, recognition of electronic form of record maintenance, enlargement of dematerialization facility through Bond Ledger Accounts, liberalisation of norms relating to nomination and legal representation, facilitate easier transfer and allow for stripping of securities.

Second, the Fiscal Responsibility and Budget Management Bill which has already been considered by the Parliamentary Standing Committee on Finance is also expected to be introduced in the Parliament in this session. The Bill seeks to limit the fiscal deficit, place limits on public debt and eliminate RBI's participation in the primary market issue of dated Government Securities, thereby paving the way for separation of debt management from monetary management. The amendments to the RBI Act, which are under consideration of the Government, would take away the mandatory responsibility of RBI to act as debt manager to Government of India and thereby facilitate such separation, which is one of our major medium-term objectives.

Third, in pursuance with the recommendations of the Expert Committees set up by RBI and Government of India. a new Bill is also proposed to be introduced in the Parliament to strengthen creditors' right to foreclosure and enforcement of securities by banks and financial institutions. This Bill will also enable securitisation of money locked up in long-term loans, thereby further strengthening the legal basis for transactions in such new debt securities.

For development of the market and to encourage retail participation, particularly by mid-segment investors like urban co-operative banks, NBFCs, trusts, etc., non-competitive bidding scheme allowing 5 per cent of the amount issued under select auctions by Government was introduced in January 2002. The amount could be revised to 10 per cent keeping in view, the response. Floating Rate Bonds (FRBs) were reintroduced recently in two launches in November and December 2001. Certain percentage of total Government borrowings could be earmarked for such FRBs to provide good hedging instruments to banks/other investors to minimise their interest rate risk. With clarifications issued by Government of India recently in the tax treatment of zero coupon bonds, decks have been cleared to introduce STRIPS which would satisfy the segmental needs of the market. Necessary preparatory work for software development is being taken up. To provide transparency and stability in the market, as announced by the Finance Minister in the recent Union Budget, a calendar of primary issues for the first half of the next fiscal will be announced soon.

On the institutional development side, the Clearing Corporation of India Limited (CCIL), which was set up in April 2001, has commenced its operations since February 15, 2002. CCIL, acts as the central counter party in Government Securities for trades accepted for clearing and settlement through Negotiated Dealing System (NDS) with automated connectivity with the Delivery versus Payment (DvP) settlement system. It provides guaranteed settlement of transactions in Government Securities now. The reduction in number of transactions for settlement with RBI will bring down the associated risk, cost and time in completion of settlement. The establishment of CCIL is expected to pave way for entry of non-SGL participants for repos market and repos in corporate debt instruments thereby improving liquidity in debt market. We hope this will become possible within the next one year. The CCIL will also act as a central counter party for settlement of forex transactions. This is expected to be put in place within the next six months.

On the technology side, as part of NDS-PDO computerisation project, Negotiated Dealing System which provides for screen based electronic dealing system for trading in

Government Securities and money market instruments including repos and electronic bidding in the primary auction of Central and State Government Securities/Treasury Bills has also commenced its operations since February 15, 2002. At this stage, it has been possible to invite bids for primary auctions on the NDS for daily repos under Liquidity Adjustment Facility (LAF) and for reporting secondary market trades on near real time basis. The submission of manual SGL form has been done away with and direct links established between reporting of transactions, their confirmation and settlement in a DVP 2 system. By end of 2002, we can expect a centralised PDO with connectivity to all 15 centres of RBI, complete automation of all services for investors and completion of primary market operations with seamless linkages to settlement system. Very soon, we also intend to place on real time basis, information available on NDS in the public domain. This will facilitate transparency and also enable banks/PDs to service their clients better at various parts of the country.

To facilitate faster funds transfer for debt market settlements, Electronic Fund Transfer (EFT) facility, which is now available at 13 centres covering more than 8,000 branches, will be available at 40 centres in the next 6 months after integration with SBI managed clearing houses covering almost 75 per cent of the transactions. Contract for a state of the art Real Time Gross Settlement System (RTGS) has been awarded in October 2001 and it is expected to be operationalised in the first quarter of 2003, thereby facilitating funds settlement at real time gross basis, which will ensure finality of settlement. By next year, securities trading and settlement will link to the RTGS.

7. Conclusion

The road ahead for the next year is thus fairly clear but on the way forward, there are several issues which need to be addressed. Let me at this stage flag a few of these issues for the benefit of your deliberations.

First, heterogeneity of market participants in terms of transaction needs, risk assessments and investment horizons needs to be encouraged to lend greater stability to the market. With the liberalisation and activation of insurance sector, long-term saving through debt instruments is bound to increase and the debt market will have an important role to play in this regard. Mr.Rangachary, Chairman of the Insurance Regulatory Development Authority (IRDA) had raised the issue of lengthening of maturities of Government Securities and the RBI had assured fulfillment of this requirement of the insurance sector. Also, pension reforms have made a start in the recent Union Budget. This is bound to result in an increased demand for long-term debt securities. In addition, the SLR requirements of cooperative banks and NBFCs are increasing. It would be necessary to ensure easy availability of Government Securities to meet this demand.

Second, in the above context of greater thrust on market players with different perceptions, retailing of Government Securities assumes great importance. A three-pronged strategy would seem ideal viz., a greater role by PDs in providing liquidity so that exit route is available always for the retail investor; banks and major custodians to facilitate investment and ease of transactions for retail demand; and establishing order-driven trading system in stock exchanges with adequate safeguards.

Third, in view of the in-principle decision taken to discontinue the system of Satellite Dealers, time is appropriate for a review of the system of PDs in terms of their number in the system, obligations, activities and regulation. In this regard, a decision in the RBI has already been taken to bring the PDs under the supervision of Board for Financial Supervision of the RBI.

Fourth, as regards non-Government debt markets, the major issue of private placements will have to be squarely addressed sooner than later. In this context, ensuring greater transparency, adequate disclosures, enhanced efficiency, and proper accounting standards would be in the larger interest of development of debt markets.

Let me conclude by submitting that we in RBI are keen to understand theory and practice of debt market but eschew ideological extremes. We want to gain from the experience of others but chart our own course of action. We are aware of the complexities and the difficult road ahead. We approach the tasks with caution, humility and flexibility, but with determination to reach international best practices as suited to India's evolving needs.

Let me wish the deliberations all success and we look forward to learning from the expertise and experience of the distinguished participants.

Thank you.

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