INFRASTRUCTURE FINANCING : STATUS AND ISSUES[@]

The process of economic reforms initiated in India in early nineties has focused, *inter alia*, on the infrastructure sector especially on attracting private investment. A number of policy initiatives have been taken by the Government of India and Reserve Bank of India (RBI) to attract such private investment. The present paper while listing the important developments also makes an attempt to focus on some of the important issues critical to infrastructure financing. The organisation of this paper is as follows: **Section 1** deals with the general approach of RBI to infrastructure including link between infrastructure and Government finance; **Section 2** sets out the development in debt markets which is crucial for financing infrastructure; **Section 3** contains the recent developments and some current issues relating to domestic and external financing of infrastructure sector. Conclusions are at **Section IV**.

I. APPROACH OF RBI: A REVIEW

The broad approach of RBI for the development of infrastructure has been articulated in its Annual Report 1996-97 as follows :

“The financing requirements of infrastructure as a whole are, however, massive and pose serious problems in the context of the needs to raise more resources both by the public and private sectors. Currently, the private sector finds regulatory environment and legal as well as institutional framework non- transparent and complex for its entry. The problem is compounded by mix-up of the roles as between the owner and regulator in public domain. These factors in conjunction with the virtual domination of public sector in long term contractual saving in household sector, and lack of securitisation of debt seem to have contributed to inadequacies in investment in infrastructure. Injection of resources in public sector to expeditiously complete the ongoing projects on a selective basis and a more transparent as well as a definite policy on ownership, regulation and financing to attract private investor interest, both domestic and foreign, are some of the areas where initiatives are needed. At the same time, full cost recovery allowing for transparent, and explicit subsidisation where needed, would make possible adequate flow resources to this critical area”.

Infrastructure and Government Finances

Recognising the importance of infrastructure, while analysing the Government finances in the Reserve Bank of India Annual Report 1996-97, it was observed that “Public outlays on infrastructure, especially in non-tradable sectors such as power and transport not only complement or ‘crowd in’ private investment by improving the marginal productivity of capital and thereby enhancing the prospective returns on investment, but also create forward and backward linkages in the economy, leading to a multiplier effect on the capital stock”. The Report also observes that “financing a large order of infrastructure outlay while exercising prudent control on fiscal deficit would necessitate, *inter-alia* concomitant efforts to bring about adjustment in current expenditures, especially the subsidies”.

With regard to the State Government Finances the Report observes “Given the accent on infrastructure development, State Governments would need to initiate appropriate policy changes so as to attract a high order of private sector participation. The Reserve Bank of India Annual Report 1997-98 further stressed the private initiative in the financing of key infrastructure sectors.

[@] Paper presented by Dr. Y.V. Reddy, Deputy Governor, Reserve Bank of India in the Workshop on the **Role of Financial Institutions in the Development of Infrastructure** at Planning Commission, Yojana Bhavan, New Delhi on November 11, 1998.

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II. DEVELOPMENTS OF DEBT MARKET IN INDIA: REVIEW AND ISSUES

REVIEW

It is important to recognise that central to the development of infrastructure is the development in debt market in India. The debt market in India comprises basically three segments, viz., Government Securities Market, which is oldest and most dominant; PSU Bonds Market, which is basically a development since late `eighties; and Corporate Securities Market, which is growing fast after liberalisation, especially in the last two years. The major focus in the development of debt markets has been the Government Securities Market for three reasons. First, it constitutes the principal segment of our debt market. Second, as a market for sovereign paper, it has a role in setting benchmarks in the financial markets as a whole. Third, it is critical in bringing about an effective and reliable transmission channel for the use of indirect instruments of monetary control.

Early Policy Developments in Debt Market

Since the ‘sixties and until the ‘nineties, the Government Securities market remained dormant since the Government was borrowing at preannounced coupon rates from basically a captive group of investors, such as banks. Thus, there existed a passive internal debt management policy. This, coupled with automatic monetisation of budget deficit prevented a deep and vibrant Government Securities market. Internal debt management became an active instrument of policy since economic reform of the ‘nineties. Since the nineties, the Government and the RBI together brought about changes in instruments and institutional framework in both Government and non-Government debt markets.

Reform in Debt Markets since 1997-98

Since April 1997, a number of structural and institutional changes in the different segments of financial markets have been brought about, and these include debt markets, especially the Government Securities and money markets.

Introduction of Scheme of Ways and Means

Advances to Central Government

As long as automatic monetisation existed, it was difficult to assure a framework for Government securities market in terms of matching demand and supply through price mechanism. Hence, the most significant development during 1997-98 has been the elimination of the practice of automatic monetisation of the Central Government budget deficit through *ad hoc* Treasury Bills with effect from April 1, 1997 and the introduction of a new scheme of Ways and Means Advances (WMA). During 1997-98, special securities to the tune of Rs.20,000 crore were converted into marketable securities of varying maturities, in order to augment the stock of marketable securities for active open market operations. It may be pointed out that during the early part of 1997-98, the RBI had to resort to sterilised intervention in the management of capital inflows. Also, a scheme of 14-Day Intermediate Treasury Bills was introduced in the place of 91-Day Tap Treasury Bills to enable State Governments, foreign central banks and special bodies to invest their temporary cash surpluses.

Treasury Bills

14-Day Treasury Bills were introduced in June 1997 on a weekly auction basis. Thus, investors now have the option to invest in 14-Day, 91-Day and 364-Day Treasury Bills.

Uniform price auction in respect of 91-Day Treasury Bills has been introduced as an experimental measure. Uniform price auction method is expected to eliminate the problem of winner’s curse and encourage more aggressive bidding in the primary market.

To foster market clearing rates in the primary market and bringing about more transparency in auctions, the RBI is now pre-announcing notified amounts in auctions of Treasury Bills (14-Day, 91-Day and 364-Day) and dated securities.

In India, State Governments are major non-competitive bidders who have large and volatile surplus funds positions and these render the pricing pattern and allotment of bids uncertain for competitive bidders. As another measure towards a more effective market clearing price, non-competitive bids are now kept outside the notified amount.

Retailing of Government Securities

The Reserve Bank of India has been actively trying to promote retailing of Government securities. First, a system of primary dealers and satellite dealers was set up and liquidity support from the RBI has been made available to them. Secondly, the RBI announced special liquidity support for dedicated gilt funds. However, not much interest has been evinced in this channel so far. Thirdly, banks are now allowed to freely buy and sell Government Securities on an outright basis and retail Government securities to non-bank clients, without any restriction on the period between sale and purchase. Fourthly, with a view to enabling dematerialisation of securities of retail holders, institutions such as National Securities Depository Ltd. (NSDL), Stock Holding Corporation of India Limited (SHCIL) and National Securities Clearing Corporation Ltd. (NSCCL) have been allowed to open SGL Accounts with the RBI.

Strengthening Dealers System

The RBI has recently enlarged the number of PDs from 6 to 13 by announcing 'in-principle' agreement to register 7 PDs. The addition of 7 more PDs is expected to increase activities in terms of liquidity and depth both in the primary and secondary markets.

Investment in Central Government Securities by FIIs

To widen the participants in the debt market, including Government securities, foreign institutional investors have also been permitted to operate, though such participation had to be consistent with overall ceilings on external commercial borrowings.

Ready Forward Transactions

In our market, two types of repos are currently in operation – inter bank repo including PDs and the RBI repo which is used for absorption/injection of liquidity. After the irregularities in securities transactions in 1992, inter bank repos are permitted under regulated conditions with eligible participants and instruments being generally restricted and now expanded gradually.

In order to further expand the base in the inter bank repos market, the participation was extended to non-bank entities that had already access to call money market as lenders. Repos have also been permitted in PSU bonds and private corporate debt securities provided they are held in dematerialised form in a depository and the transactions are done in recognised stock exchanges. This will be operationalised after Government issues a clarification regarding applicability of stamp duties on dematerialised instruments.

In the most recent monetary and credit policy, the RBI removed the restriction of a minimum period of 3 days for inter bank repo transactions. This would further enable banks and other participants in the repo market to adjust their liquidity in a more flexible manner.

In recent months, open market operations of the RBI, both through outright sales of Government Securities and repo operations have gained considerable momentum. At present, the RBI conducts three-day and four-day repos in the market. RBI is also exploring the possibility of conducting one day repos. The primary objective of these operations is to absorb or provide liquidity from/to the market, though under certain circumstances, repos have also been used to signal changes in interest rates.

ISSUES

Since the introduction of the reform measures, the various segments of the financial market have responded favourably and become increasingly integrated. Although significant progress has been made in the debt markets also, a number of rigidities persist and major issues still need to be tackled keeping in view a consistent framework.

The actions required for this purpose may be classified into areas relating to legal, technology, regulatory and market microstructure, retailing, standardisation, risk management etc.

Legal issues

Repeal and Replacement of Public Debt Act

A new legislation titled the Government Securities Act proposes to repeal and replace the Public Debt Act, 1944. The Government Securities Bill has already been approved by the Cabinet and is awaiting Parliament clearance. However, since the Public Debt Act, 1944, is applicable for marketable loans raised by the RBI on behalf of both the Central and State Governments, the proposal requires consent of all State Governments. The State Governments have to pass a Resolution for the purpose either prior to enactment by the Centre or subsequently adopt the same by passing a Resolution. Once the new Act is enacted, the RBI will have substantive powers to design and introduce an instrument of transfer suited to computer environment. The new Act will also give flexibility to allow Government Securities to be held in Depositories while at the same time specifically excluding Government Securities from the purview of Depositories Act, 1996.

Amendments to Securities Contracts

(Regulation) Act, 1956

It is held that rescinding the 1969 Notification restricting forward trading in securities is now necessary for the development of the securities market. Simultaneously, there is a proposal to amend the Securities Contracts (Regulation) Act (SCRA) to add an enabling provision to provide jurisdiction to the RBI also in the regulation of the debt markets. With this, the respective regulatory roles of SEBI and RBI in the debt market will be formalised. The proposed changes in the SCRA will pave way for a more active repos market and introduction of new market features like, when-issued trading.

Stamp Duty Reform

Development of financial markets is being inhibited by multiple prescriptions of stamp duty which is creating friction in active secondary market trading by increasing the transaction cost and administrative hassles. This is a matter of crucial importance and exemption of debt instruments from stamp duty or alternatively rationalisation of the procedures by imposing a flat fee would go a long way in increasing secondary market activity and liquidity in debt instruments. The suggestion that the Indian Stamp Act be amended to enact a specific provision exempting transactions of all securities in Depository in dematerialised form from stamp duty also needs to be seriously considered.

Technology

Technological upgradation in Debt Market

The RBI has embarked upon the technological upgradation of debt market. This includes screen-based trade reporting system with the use of VSAT communication network complemented by a centralised Subsidiary General Ledger (SGL) accounting system. It will be integrated with the regional current account system. The operationalisation will broaden the participation in the auction system, help enlarging the investor’s base and increase the competitiveness in the auction system. The centralised SGL accounting system will improve the speed of settlement of secondary market transactions.

The operationalisation of VSAT by end of December 1998 will provide on- line linkages between offices of RBI, Central Government (Ministry of Finance), monitoring of Government finance (receipts and expenditures) and also among other participants (banks/primary dealers/satellite dealers/financial institutions). This will open new areas in technological development of payment systems.

Y2K Compliance by Primary Dealers and Satellite Dealers (System Software and Hardware) with the target date December 1998 as also being monitored.

Electronic Dealing System

The RBI is actively coordinating with the Primary Dealers Association in developing an Electronic Dealing System to facilitate dealing in call, notice and term money, Treasury Bills, Government Securities and repos. This is expected to be operationalised by March 1999.

Regulation of Private Placement

There is an increasing recourse by corporates to private placement of their debt paper. This popularity of private placement may be attributed to the low issuance cost, ease of structuring instruments, saving on time lag in issuance. Notwithstanding these benefits, healthy development of the private placement market calls for more transparency, better disclosure and protection of investors’ interest.

An Informal Group on Primary Market under the Chairmanship of Dr. Shankar

Acharya has recommended that the facility of private placement should be restricted to not more than 99 qualified institutional investors and should be tradable on OTCEI. The Group also recommended that financial institutions/banks/mutual funds which participate in private placement should mandatorily give information on a regular basis to SEBI and the RBI.

Standardisation of Practices

Standard practices in the market need to be evolved with regard to the manner of quotes, conclusion of deals, etc. Code of best practices has to be evolved for repo transactions. It is proposed to ensure that the Primary Dealers Association and FIMMDAI quickly set up a time frame for standardising the documentation and market practices and if need be the RBI will come forward and indicate a time frame. Most importantly, the code of conduct will have to be compatible with the contemplated dealing screen and the technological upgradation.

Risk Management and Development of Rupee Derivatives Market

Introduction of rupee derivatives will go a long way in providing instruments for investors to hedge their exposures. The Reserve Bank has decided ‘in principle’ to create an environment that would facilitate introduction of interest rate swaps. The RBI proposes to examine in consultation with market participants, relevant aspects such as standard documentation, benchmark rate, prudential prescriptions, etc., and then allow the product in the market.

With the amendment to SCRA, 1956 and the establishment of a strong clearing house, the introduction of T-Bills Futures can be contemplated. The RBI is already encouraging trading in Government securities through National Securities Depository Ltd. and National Securities Clearing Corporation Ltd. By allowing them to open SGL Accounts with the RBI. A committee is also looking at STRIPS in the Government Securities market.

Development of a Benchmark Rate

RBI recognises the importance of benchmark rate but is of the view that any benchmark rate needs to be developed by the market itself. In the interest of market development it is prudent that market participants themselves work out unitedly and come out with a reference rate. Recently, the NSE has evolved a benchmark rate linked to call money which has been quite popular with some debt issuers.

New Instrument Development

Recognising the need and importance of new instrument in the debt market Reserve Bank of India had constituted an internal working group to examine the *Pros and Cons* of implementing STRIPS. The Committee is expected to submit its Report within a month’s time.

Encouragement to Trade Through Mark-to Market

It has been the RBI’s endeavour to ensure that banks increasingly mark their investments to the mark. Accordingly, the ratio of investments in permanent category has been brought down to 30 per cent for March 1999. In the next three years, the intention is to mark the entire portfolio to market. New private sector banks are already required to mark to market their entire investments from end-March 1997.

Flexible approach to market borrowings of the State Government

Currently, all the market borrowings programme of all States is conducted by RBI at a common fixed coupon and tenor in two or three combined tranches. While some States feel that they could get a better deal from the market if they go to the market on their own, others are skeptical about their capacity to market without a common tranche. As a long term objective, each State should in RBI’s view, have freedom to complete the approved programme on its own market standing. As a sequel to consensus in a meeting of RBI with the State Government Finance Secretaries it has been decided in consultation with Government of India, to initially implement a flexible approach to State Government market borrowings. According to this approach, the State Governments have the option to borrow from the market on their own standing, to the extent of 5 per cent to 35 per cent of their approved borrowing programme. During the current fiscal two State Governments have opted for this; hopefully, during fiscal 1999-2000, the scheme will be implemented by more State Governments.

State Government Guarantees

An issue that has significant implication in the context of infrastructure financing is the guarantees given by the State Governments. Governments grant guarantees to promote certain economic enterprises for reducing the credit risk for investors especially in those activities or arrears where the nature of investment is characterised by long gestation period. While guarantees do not form part of debt these have in the eventuality of default, the potential of exacerbating even an apparently sound fiscal system. In view of this, Reserve Bank of India has raised its concern in its Annual Report 1997-98. RBI as a prudent central bank has been emphasising on prudential limits and transparency in regard to formal guarantees as well as letters of comfort that have the effect of guarantees. A Committee has been constituted by the Reserve Bank of India with a few of the State Finance Secretaries as members to examine various aspects of guarantees and the Committee is expected to submit its Report in a month's time.

III. FINANCING OF INFRASTRUCTURE

Institutional Developments

Infrastructure Development Finance Corporation (IDFC)

As a sequel to the recommendation of the Expert Group on Commercialisation of Infrastructure, IDFC has been set up to promote infrastructure investment with the Central Government and Reserve Bank as chief contributors of share capital. IDFC began operation in December 1997 and was fully capitalised in March 1998. The main task of IDFC is to connect projects and institutions to financial markets in a manner that has not been possible before and, by so doing, develop and nurture the creation of a long-term debt market. IDFC would not just be another term lending institution or merely a credit enhancer but its mandate is also to perceive and meet the gaps in policies, procedures, and system that enable economical and efficient infrastructure financing.

The funding structure of IDFC was deliberately designed to ensure private ownership and professional management, though largely funded by public sector. The Government of India and RBI have provided subordinated debt of Rs.650 crore and initial capital of Rs.350 crore.

Bank lending for infrastructure

In order to promote and strengthen the infrastructure financing, Reserve Bank has liberalised the term loans by banks for this purpose. Earlier, there were prudential ceilings on the overall exposure that banking system could take on a single infrastructure project. These have been removed recently. Each bank is now free to sanction term loans to all projects within the overall ceiling of the prudential exposure norms prescribed by the Reserve Bank, viz., 25 per cent of the capital funds in the case of an individual borrower and 50 per cent in the case of borrower group. The Group Exposure norm of 50 per cent is also allowed to be exceeded up to 10 per cent provided the additional exposure is for the purpose of financing infrastructure projects. Further, banks are given freedom to decide the period of term loans keeping in view the maturity profile of their liabilities.

It is necessary for RBI to be assured that, the banks ensure that given their short term liability structure, their exposure to long term asset is kept within prudential limit. As the debt market develops depth and liquidity, the asset liability mismatch that banks face on account of financing infrastructure can be managed through development of derivatives products. Further, the limitation of exposure norms can be handled through development of credit derivatives. Such credit enhancement products also help in adoption of consortium approach and ensure that special skills required for infrastructure financing which may be limited, would be used efficiently.

Informal Meeting on Infrastructure Financing

Recognising that infrastructure development is a national priority, Governor, Reserve Bank of India has been having since December 1997, periodic interaction with financing institutions, and select banks with a view to accelerating the pace of implementation of infrastructure projects in key sectors by adopting a problem solving approach. The objective of these discussions has been to set-up a mechanism to review sector specific issues on an on-going basis so that viable projects which are at an advanced stage could be brought to financial closure early. The broad topics which were covered in seven of these meetings held so far are as follows : Hedging mechanisms for foreign exchange loans; Quantum of domestic financing for infrastructure projects (past and future); Mechanisms that will help to catalyse financing; and Domestic financing for infrastructure.

Domestic Financing of Infrastructure

In the context of the domestic financing of infrastructure project, it is important to recognise the quantum of domestic debt for financing these projects and the mechanisms that would help to catalyse infrastructure financing. According to available information the amount sanctioned for infrastructure projects during 1997-98 amounted to Rs.22,255 crore. However, the amount disbursed has been Rs.6,505 crore. As per the estimate worked out by IDFC, the total funds required for infrastructure projects for the next four years would be Rs.1,63,900 crore of which domestic debt requirement would be Rs.56,734 crore. Of the total domestic fund requirement indicated above IDFC expects that commercial banks support would be around Rs.16,000 crore over the next four years.

It is Reserve Bank's endeavour to facilitate flow of resources of the magnitudes indicated by IDFC. Reserve Bank of India has to reckon the fact that banks are the principal repositories of household savings and consequently recognise the liquidity and interest rate risk faced by them in using short term liabilities for long term financing. Ultimately the development of a deep and liquid debt market with diversification of investor base will help in evolving products that can help banks manage such risk and unbundle the credit risk from the liquidity and interest rate risk. All efforts are being made by Government of India and the RBI to facilitate the development of debt markets. RBI wishes to encourage banks and institutions to securitise the receivables, repackage and offer to investors at various stages of the infrastructure project. The immediate hurdle, however, appears to be the current applicability of stamp duty.

One of the specific proposals made for hedging liquidity risk and interest rate risk is a take out facility and market making in project debentures, say after a pre-determined period of five years to give comfort to commercial banks which are willing to deploy their funds in infrastructure. While RBI encourages the take out facility which could be replicated in several projects, RBI will have to monitor the extent of such facilities in relation to the balance sheets of the parties. In any case, the provision of a "liquidity back stop" by RBI for supporting market making at the end of the pre-determined period has implications for monetary management.

External financing of infrastructure

The current policy of Government on External Commercial Borrowings is to allow substantial flexibility in case of power and other infrastructure projects. It has been held, however, that the use of external financing for infrastructure is being inhibited by the inability to hedge long term exchange risk under current regulation of RBI. While RBI has been taking several measures to deepen the forward market in foreign exchange, there is limited forward supply beyond one year. Long term currency swaps have been used though in a limited way and the market participants have also been encouraged by RBI to run a swap book subject to prudential limits. In cases where there is a natural hedge such as export oriented units or where there are foreign exchange receivables the exchange risk issue does not inhibit external financing. Indian commercial banks with overseas branches have also been entering into long term reciprocal arrangements with institutions like HDFC and HUDCO which have availed of external assistance by using the foreign currency funds at their overseas branches and providing rupee finance in India. True, banks are encouraged to run swap books as long as the prudential norms are complied with and a few of them have intermediated such swaps. Financial institutions are encouraged to do such swaps as long as the counter parties are their clients.

Two specific proposals have been made to get around inadequate hedging opportunities for long term exchange risk. These are analysed :

Long term exchange swaps : This envisages raising of long term funds and overseas placement of these funds at Indian banks' overseas branches and avail rupee finance there against from the bank in India.

In this case the borrower has to bear the cost of the difference between the rate at which the funds are raised and that earned on the funds deployed with the overseas branch. It is expected that the interest on the rupee funds would cover such differential and still be sufficiently competitive. The structure is possible only to the extent the overseas branch is able to absorb such foreign currency funds. While such swaps have been put in place even earlier, the broader prudential issues relating to bloating of balance sheets, capital adequacy and exposure norms have to be sorted out before advocating large scale recourse to this method.

Over borrowing to meet redemption : The proposal is that the project will raise an amount higher than required and the excess borrowing will be held as a deposit overseas for the duration of loan which is expected to be 30 years. The reinvestment of the interest would result in redemption value becoming equal to the principal of the loan. The exchange risk on the principal is thus automatically hedged. The interest rate risk and exchange risk on the interest payments would need to be borne/managed by the project. Further, the proposal assumes the overseas bank would be willing to accept the deposit/liability for a period as long as 30 years; secondly, if the borrower is not able to raise funds for longer period than 10 years and is not able to roll over at the end of 10 years at reasonable credit spreads, RBI should provide foreign exchange to enable continuation of the deposit up to 30 years.

It is necessary to recognise that in this proposal, there is an element of addition to the total external debt of India beyond what is repatriated to India. Once the external borrowing is approved by the Government of India for 10/30 years period, given India's policy and procedures as well as track record, there is no question of non availability of foreign exchange at the time of redemption. The real issue is, perhaps, raising rupee resources for the remaining period of 20 years. When there is inability to rollover external loan after ten years, if rupee resources are raised to meet such a contingency, foreign exchange can certainly be acquired from the market.

IV. CONCLUSION

In conclusion we recognise that investment in infrastructure is critical. Financing requirements are large and of long term nature. While seeking arrangements for enhancement of financing flows, measures should be consistent with the state of financial market and prudential requirement.

As explained, we in RBI have been making best efforts in this regard, and we are open to your suggestions.

I solicit your co-operation and advice.