Financing for Infrastructure: Current Issues & Emerging Challenges[1]

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2. I understand that the present conclave seeks to elicit views and ideas from policy makers, regulators/sector experts, bankers and industry leaders on various issues connected to financing and related aspects of infrastructure, including stressed assets management. These issues are quite topical as our country, after a brief slowdown in the wake of global financial crisis, is once again poised to grow at a fast pace and, according to the IMF, is likely to be the world's fastest growing major economy overtaking China as early as this year. In order to sustain and achieve higher growth, we, however, have to create an enabling atmosphere that fosters competition and improves ease of doing business. In pursuit of the same, the policy makers in India have been striving to fix the fault lines that emerged during the crisis and thereafter, so as to improve confidence among international and domestic investors. In this context, it has been the endeavour of the Reserve Bank of India to provide a low and steady inflationary environment that is consistent with macroeconomic stability and long-term sustainable economic growth.

Economic Scenario

3. Let me, briefly discuss the current economic scenario, both global and local. The IMF, in its latest (July 2015) update on World Economic Outlook, has projected global growth at 3.3 percent in 2015, slightly lower than in 2014. The growth in 2016 is, however, expected to be higher at 3.6 percent. There has been a downward revision in projection, of 0.2 percent, relative to its World Economic Outlook in April 2015. The revisions reflected, to a large extent, unexpected fall in output in the United States and neighbouring Canada and Mexico. In the US, however, the economy is now rebounding on stronger consumption growth and improving employment conditions. More importantly, the recent update points to slower growth in emerging and developing market economies (EMDEs) from 4.6 percent in 2014 to 4.2 percent in 2015 on account of factors, such as, the impact of lower commodity prices on Latin America and oil exporters, deceleration in China's growth in particular and weak external demand of EMDEs in general, structural bottlenecks and uncertain financial market conditions. The silver lining, especially from our perspective, is that there has been no revision in outlook for the Indian economy, which is expected to grow at 7.5 percent. According to Christine Lagarde[2], MD, IMF, just as many countries around the world are grappling with low growth, India has been marching in the opposite direction and it is the fastest growing large economy in the

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[1] Detailed text of the keynote address delivered by Shri Harun R Khan, Deputy Governor at the Infrastructure Group Conclave of the SBICAP at Aamby Valley on August 8, 2015. The speaker acknowledges the contributions of Shri. Y Jayakumar, Shri Ayyappan Nair & Shri Ajay Chowdhury of the Reserve Bank of India.

[2] Christine Lagarde, Seizing India's moment- lecture at Lady Shri Ram College, New Delhi on March 16, 2015

world. Quoting Ms. Lagarde, '*By 2019, the economy will have more than doubled in size compared to 2009. And when adjusting for differences in purchase prices between economies, India's GDP will exceed that of Japan and Germany combined*.' There is also a view that India could become a US$ 20 trillion economy in less than 20 years and India's share in the world economy growing to around nine percent from less than three percent now.

4. There are, however, roadblocks in our pursuit for higher growth that we should be mindful of. These are in the nature of slow progress on structural reforms in respect of supply bottlenecks, weak investment demand, vulnerabilities arising out of erratic monsoon, stalled projects which need to be put back on track, etc. On the external front, we are, ofcourse, much better placed as compared to 2013 when we witnessed significant volatility on account of spillovers from global markets, especially, the taper tantrums. For example, foreign exchange reserves cover for imports has gone up from 7.8 months as at end March 2014 to 8.9 months as at end March 2015; similarly, ratio of short term debt to the reserves has gone down from 30.1 percent to 24.8 percent and the share of reserves to CAD has gone up from 3.3 times to 12 times during the same period. This was also evident from the relative calm in the Indian markets even during the recent Greece crisis as well as when there was wide speculation on impending rate hike by the Fed Reserve. The measures taken by the Reserve Bank to address structural issues, such as, persistent high inflation and mounting current account deficit, have helped to boost business confidence among both international and domestic investors and had a salutary effect on growth in general and market volatility in particular.

5. As the world, as Larry Summers has said, entered a phase of "*secular stagnation*", South Asia led by India, Bangladesh, Sri Lanka and Pakistan as commented by the well-known analyst and the celebrated author of "*Breakout Nations*" Ruchir Sharma, is exhibiting strong growth momentum[3]. In the backdrop of positioning India as the growth engine of the world, today in my talk, I would like to touch upon some of the issues which are critical to realising this potential. As most of you belong to the infrastructure group, which needless to say, is one of the most critical sectors of the economy, I propose to flag some of the important issues relating to infrastructure that is vital in our quest for higher growth. These range from role of infrastructure in kick-starting growth, issues in bridging the financing gap and the significance of infrastructure development for gaining urbanisation needs.

Infrastructure: The Growth Driver

6. Importance of infrastructure in economic growth cannot be overemphasized. Infrastructure is the lifeline of an economy and the fate of the economy is intricately linked to the development or otherwise of its infrastructure. As highlighted in the 12th Five Year Plan document, infrastructure provides the basic support system for the other sectors of the economy in expanding capabilities everywhere. A well-developed physical connectivity in the form of rail network or road network, for example, can help the producers and consumers (by facilitating quicker movement of agriculture produce), facilitate education (by enabling student to access educational opportunities that are not otherwise easily accessible), ensure well-being of the citizens (by expeditiously reaching the needy to the health care centres), ensure nation's safety (by enabling movement of armed forces), and create greater employment opportunities. Empirical work on role of infrastructure done in late 80s & early 90s had found the output elasticity to be in the

[3] Bucking stagnation elsewhere, the quiet rise of South Asia (The Times of India, July 28, 2015)

range of 0.38 to 0.56. Subsequent studies have corroborated the findings though with lower elasticity. For India, a 2009 study[4] has found it to be upto 0.5. The studies have also emphasised the role of public investment in terms of crowding in private investments in different sectors and enhancing the overall output.

7. Financial inclusion and infrastructure development are mutually reinforcing and can provide impetus to economic growth. Progress in basic infrastructure like transportation, communication, sewage water and electric systems coupled with access to finance through a well-developed financial infrastructure will go a long way in facilitating financial inclusion which needs to be seen as a subset of overall economic inclusion. Infrastructure not only acts as a catalyst for faster growth through both flow and stock impacts but also as an important tool in enabling inclusive growth. It has a multiplier effect on growth and development and hence rightly demands greater attention of the policy makers.

8. The global infrastructure needs are huge. Private sector estimates[5] peg the requirements at US$ 57 trillion during 2013-2030, simply to keep up with the projected global growth. It is also estimated that by following best practices in enhancing efficiency in investments, the countries could save as much as US$ 1 trillion per year in infrastructure development costs. While the advanced economies invest in maintaining aging transport, power, water and telecom networks, the developing economies have a greater challenge in putting the basic infrastructure in place.

9. The infrastructure gap that exists in India is undeniable. India is ranked 87th out of 148 countries for its infrastructure in the World Economic Forum's Global Competitiveness Report 2014-15. Roughly two-thirds of the freight and about 85 percent of passengers in India are still transported by the road network. To meet the growing requirements of the economy, the investments that need to go into infrastructure are humungous. The total investment in infrastructure, which was 5.02 percent and 7.21 percent of the GDP during the 10th and the 11th Five Year Plans respectively, is projected to go up to 8.18 percent in the 12th Plan (2012-17) at US$ 1 trillion. The McKinsey report estimates that an increase in infrastructure investment equivalent to one percent of GDP would translate into an additional 3.4 million direct and indirect jobs in India. Therefore, the development of infrastructure not only poses a significant, but not insurmountable, challenge but also provides a great opportunity in accelerating growth.

Financing Infrastructure: Bridging the Gap

10. Infrastructure development involves long gestation periods, and encounters many legal and procedural issues besides planning and execution issues. The problems related to infrastructure development range from those relating to land acquisition for the infrastructure project to environmental clearances. The added uncertainty due to these factors affects the risk appetite of investors as well as lenders to extend funds for the development of infrastructure. The issues impinging on infrastructure development comprise both financial and non-financial factors and these need to be seen in totality. While financing remains a major factor, the non-financial issues also should receive appropriate attention.

11. Traditionally, the infrastructure financing in India was almost completely met by the public sector. Given the huge and growing investment requirements coupled with the

[4] Transport Infrastructure in India: Development, Challenges and Lessons from Japan (2011) – Pravakar Sahoo

[5] Infrastructure Productivity: How to save $ 1 trillion a year by McKinsey Global Institute (2013)

fiscal imperatives, public sector's capacity in financing infrastructure is understandably constrained necessitating the private sector to play a greater role. The private sector has lived its part and over the years, emerged as a significant player and now constitutes about 40 percent of the infrastructure investment. The 12th Plan projects an even greater role for the private sector {including the Public Private Partnerships (PPP)} with projected investments at 48 percent of GDP. There are, however, multiple challenges in channelizing private sector investment into infrastructure.

12. Here, let me briefly mention the international support in this regard. During 2011-15, the World Bank Group (including IFC) has, on an annual average basis, financed projects to the tune of US$ 25 billion and the pattern is expected to continue. The World Bank has been supporting the India Infrastructure Finance Company Limited (IIFCL) through financing PPP in infrastructure so as to increase the availability of long-term financing for infrastructure PPP projects in India. There are proposals to manage the World Bank's exposures on India beyond the country limit. IFC contribution, however, has been small. Since 1956, IFC has invested in about 346 companies in India, providing over US$ 10.3 billion in financing for its own account and US$ 2.9 billion in mobilization from external resources. From the Asian Development Bank (ADB), India has received cumulative lending grant and technical assistance in infrastructure space of about US$ 27 billion. The New Development Bank (NDB) or the so-called BRICS Bank is expected to serve as a powerful instrument for financing infrastructure investment and sustainable development projects in the BRICS and other developing countries. The NDB will eventually have capital of US$ 100 billion including US$ 50 billion as callable. However, lending policies will have to be decided by the NDB and bankable projects will be supported, as per the initial discussions. The Asian Infrastructure Investment Bank (AIIB) is in the process of getting ready. It is also conceived to be a US$ 50-100 billion bank with 57 countries as its members. India has agreed to provide about 8.5 percent of its total capital. Given the enormity of our requirements, these efforts, though welcome, are not enough. Hence, we have to look for other sources.

Bank Financing of Infrastructure

13. While banks, so far, have played a pivotal role in providing finance to infrastructure and supporting economic growth, bank financing of infrastructure is likely to be constrained going forward due to the growing trend in stressed assets from this sector in their balance sheets. Let me substantiate my argument with some data. The outstanding bank credit to the infrastructure sector, which stood at ₹ 95 billion in March 2001, has increased gradually to ₹.10,074 billion in March 2015, a compound annual growth rate (CAGR) of 39.5 percent over the last 14 years. On the flip side, the gross NPAs and restructured standard advances, together as a percentage of total advances to the sector, has increased considerably from ₹.193 billion (5.1 percent of gross advances to the sector) as at the end of March 2010 to ₹. 2,222 billion (22.8 percent of gross advances to the sector) as at the end of March 2015. Therefore, concomitant with rising NPAs from other sectors, this is going to put pressure on the banks to be the major source of financing for infrastructure even as the requirement for financing increases manifold.

Impact of the new regulatory framework

14. The new regulatory framework has been put in place in the aftermath of global financial crisis with a view to building a more stable and resilient banking system. The Basel III requirements have increased the capital requirements of banks in a phased

manner over five years period starting from April, 2013. There is a view that this would adversely affect the banks' contribution to economic growth. A study conducted by Macro-Economic Assessment Group (MAG) of the Financial Stability Board (FSB) had, however, concluded that if increased capital requirements were phased in over an extended period of five years, the impact on the overall economy would be quite less. In terms of growth rates, annual growth would be 0.03 percentage points (or 3 basis points) below its baseline level during the implementation phase. A well-capitalised banking system reduces the risk and cost of financial crises and macroeconomic volatility, which in turn increases the confidence of borrowers and lenders in the stability of the banking system. Due to these reasons, the implementation of Basel III in India may be net positive for banking system and overall economy, in the long run. Moreover, a bank having higher amount of common equity capital will be perceived by the market as safer and thus can access market for funds at a cheaper rate, thus reducing the impact of higher capital requirements. Implementation of Basel III, therefore, will help Indian banks in maintaining credit supply to the economy at a sustainable manner and continue meeting the credit needs of the economy including the infrastructure sector. While the long run impact of the new capital regulations is envisaged to be net positive for the economy, their short term impact, in terms of constraining the lending ability of the banks, needs to be carefully considered.

15. The new liquidity requirement, namely Net Stable Funding Ratio (NSFR), seeks to match long term funding requirements with long term sources. However, under NSFR requirements, expected to be implemented from 2018, all assets having maturity one year or more will receive the similar treatment. As infrastructure lending is typically of maturity much higher than one year, there may not be any impact on such lending due to future implementation of NSFR requirements. Therefore, the NSFR requirements will thus be neutral to all loans having residual maturity of one year or more. Incidentally, RBI has also issued guidelines to banks on 5:25 scheme which will help banks' lending to long gestation infrastructure loans to manage their asset liability maturity mismatch issues.

16. Further, notwithstanding the magnitude of numbers put out by various studies highlighting the impact of regulations on the cost of infrastructure finance, what is clear is that Basel III regulations do not impact lending to any specific sector including that of infrastructure financing by banks in a negative manner. There would, however, be issue of exposure norms under the Basel framework. As you may be aware, the discussion paper put out by the Reserve Bank in this regard suggests that all exposures, individual as well as group, may be capped at 25 percent of the Tier I capital of the bank as against the current liberal norm of five percent additional exposure (over the 15 percent) for individual exposure and 10 percent additional exposure for groups (over the 40 percent). Besides, the 'group' definition may also become stringent to cover economic relationships. Ofcourse, these will be implemented from 2019 onwards only and banks will thus have enough time to adjust their exposures as per the proposed new exposure norms. Moreover, the proposed norms are not likely to be more stringent than the existing exposure norms on infrastructure for single party exposure, by looking at the existing composition of the capital in the Indian banking system. Overall, right now it is the ALM challenges and the asset quality concerns, especially on infrastructure assets, that may have some adverse impact on credit supply to this sector.

ALM challenges for banks

17. The age old argument against bank financing of infrastructure has been the issue of asset-liability mismatches (ALM). Typical funding sources for banks being deposits which are short term, financing long term assets such as infrastructure leads to ALM mismatches. Notwithstanding such ALM issues, this has not been a major constraining factor for banks as they have been financing long-term projects for a considerable period. Due to ALM restrictions, banks, usually lend at floating rates, which is linked to the base rate. As you are aware, the present base rate methodology using the average-cost of funds is not ideal and there is a need to shift to a methodology based on marginal cost of funds. There is also a felt need to benchmark the base rate to prevailing market rates. The challenge is to arrive at a rate that is consistent with verifiable market parameters adjusted for bank specific asset-liability mix. The Reserve Bank is currently working on revising the base rate methodology in consultation with the market participants. The emerging view is that till we move to a full scale market benchmark linked based rate, it could be based on marginal costs of funds where each source of fund (other than equity) is weighted by its respective contribution to the source of liability and then adjusted for regulatory cost (e.g. cost of CRR) and reasonable spread.

Securitisation

18. Securitisation, which involves pooling various types of contractual debt (or other non-debt assets which generate receivables) and selling their related cash flows to third party investors as securities, is an important tool to improve infrastructure financing. Securitisation diversifies credit markets as it breaks the process of lending and funding into several discrete steps, leading to specialisation and economies of scale. Banks can particularly take advantage of securitization route for freeing up capital, rebalancing risks and more efficiently manage their ALM. The recent experience relating to stress and non-performance in infrastructure and project finance have raised questions about the capacity of banks, other than the larger ones, to perform independent credit appraisal of such large credits as also to withstand the stress from these loans. Securitisation route provides these banks an alternative to participate in large infrastructure and project credits through this route after the project has taken off rather than participating through consortium or multiple banking arrangement before the cash flows have emanated.

19. Despite the apparent benefits of the plain vanilla securitisation products, the Indian securitisation market continues to be at a nascent stage, as it is merely driven by the need for meeting Priority Sector Lending (PSL) targets by banks. Public Sector Banks are mostly absent in this space. Asset Backed Securitisation (ABS) is the largest securitisation class in India, driven by retail loan portfolio of banks. Though the market had begun to mature since the year 2000, the global financial crisis (GFC) obviously has its repercussions in Indian market as well.

20. The catastrophic repercussions from the GFC and the perceived role of securitisation in the crisis, deeply dented the investor confidence. While the regulatory framework and the securitisation market itself in India have been working in a prudent manner, the appetite has been on the lower side, which is used largely to meet the PSL targets by a few banks as investors with smaller band of NBFCs being the originators. There are many factors involved, including legal, taxation and stamp duty related issues, which are inhibiting the development of securitisation market in India. Some of these factors are as follows:

- Lack of transparency due to inadequate disclosures;
- Low demand for long tenor receivables;
- Non-participation of long-term investors like Pension Funds in securitisation;
- Lack of investor base as banks invest only for meeting PSL targets;
- Foreign investors disallowed in the Indian securitised instruments (recently such investments in Securitisation Receipts of the Asset Reconstruction Companies have, however, been allowed);
- Absence of a secondary market;
- Taxation (SPVs still not being treated as pass through vehicles), stamp duty and legal issues; and
- Lack of effective foreclosure laws.

Refinancing of Project Loans: Takeout financing

21. Takeout financing offers an avenue to the banks to free their balance sheet from exposure to infrastructure loans, lend to new projects and also enable better asset liability management. In other words, takeout financing enables financing longer-term projects with medium-term funds. Despite the obvious advantages the mechanism has not really emerged as a game-changer. One plausible reason is that the model does not envisage equitable distribution of risks and benefits. One of the oft repeated arguments is that banks assume credit and liquidity risk since the inception of the project but once the project is economically viable, taking out of the loan results in loss of opportunity of earning returns on seasoned loans. Further, if the original lenders/bankers are required to part with their security interest fully, their residual exposure would be sub-ordinated to the interest of the take-out financier besides other legal including stamp duty related issues.

22. Given the significant role the takeout finance plays in infrastructure, and in order to provide flexibility to banks in refinancing their loans to projects which have commenced commercial operations, banks were allowed to refinance project loans by way of full or partial take-out financing, even without a pre-determined agreement with other banks/FIs, and fix a longer repayment period. Such refinancing is not considered as restructuring in the books of the existing as well as taking over lenders if new lenders take a significant share in the project debt and the transaction also fulfils certain other conditions.

Infrastructure Debt Funds/Infrastructure Investment Trusts

23. Two major innovations which can alleviate the ALM related concerns of lender banks and provide an additional source of funds, domestic & foreign, are being tried out in the infrastructure financing space. They are the Infrastructure Debt Funds (IDFs) the guidelines for which were originally issued in September 2011. IDFs are investment vehicles, which can be set up as trusts or as NBFCs, and are used for investments in infrastructure projects. Foreign and domestic institutional investors, typically long term investors, are permitted to invest in IDFs through units or bonds issued by them. The IDFs in turn invest in infrastructure projects. Although a few institutions have floated IDFs in the NBFC format, not much activity is seen in this space. The recent regulatory changes to allow IDF-NBFCs to invest in non-PPP projects and in sectors where there is no Authority, may lead to more volumes. The other proposal which is under consideration of the Government and the regulators is the Infrastructure Investment Trusts (InvITs) which are collective investment schemes, like mutual funds, that enables pooling of

money from multitude of individual investors for directly investing in infrastructure. Foreign investments in InvITs are also being enabled.

Long Term Structured Project Loans (5/25 scheme)

24. Responding to the requests made by banks in ensuring long term viability of infrastructure/core industries sector projects by smoothening the cash flow stress in the initial yeas and in addressing the maturity mismatches in financing such projects, certain measures were announced in July 2004 which are referred to as 5/25 scheme. In terms of this scheme, banks were allowed to fix longer amortisation period for loans to projects in infrastructure or core industries sector for, say, 25 years, based on the economic life or concession period of the project with periodic refinancing, say every 5 years. This would mean that banks, while assessing the viability of the project, would be allowed to accept the project as a viable venture where the average Debt Service Coverage Ratio (DSCR) and other financial and non-financial parameters are acceptable over a longer amortisation period of, say, 25 years (amortisation schedule) but provide funding (Initial Debt Facility) for only, say, 5 years with refinancing of balance debt being allowed by existing or new banks (Refinancing Debt Facility) or even through bonds. The above framework was subsequently extended in December 2014 to the existing loans subject to certain conditions.

25. Subsequent to issuance of the guidelines, banks have taken up flexible structuring of a few projects. There have, however, been some reports that banks have incorporated long moratorium periods in their revised loan amortisation schedules and also they are not clear on the methodology to compute the net present value of these loans. Further, the Fresh Loan Amortisation Schedule is also heavily back-ended with repayment obligations pushed to later part of project life. While debt repayment should be aligned to project cash flows, pushing a large part of debt obligations in to later part of project life may lead to undue risk to lenders. Moreover, a long principal moratorium or an interest moratorium for a project which has commenced commercial operations could be a sign of credit weakness and, hence, needs to be recognised appropriately.

26. What I would like to emphasise here is that while the regulator provides certain flexibility given the critical role infrastructure plays in the overall economic growth, such flexibility should be judiciously used by the participants and certainly not as a tool for hiding the stress in the assets or for mere postponement of the inevitable.

Stressed Assets Management

27. Growing level of stressed assets in infrastructure sector is a serious concern impinging upon the lenders' ability to purvey more credit to the sector. As per the June 2015 Financial Stability Report (FSR) of the Reserve Bank of India, infrastructure, which constituted 15 percent of total advances of the scheduled commercial banks, had a much larger share of around 30 percent in the total stressed advances. Within banking sector the distribution of stressed infrastructure loans are fairly distributed among the public and private sector banks in proportion to their share in total advances. For example, while the public sector banks' share to infrastructure advances as a percentage of total advances is about 18 percent, their share in stressed advances is about 31 percent. In comparison, while the private sector banks accounted for about 8 percent share in infrastructure advances, the stressed advances is about 18 percent. The FSR has also stated that the

stress tests on sectoral credit suggest that the shocks to infrastructure sector, mainly the power and transport sub-sectors, could significantly impact the system. If one were to juxtapose the FSR data with the Corporate Debt Restructuring (CDR) numbers, the extent of the problem becomes clearer. Industry-wise classification of live cases revealed that infrastructure forms nearly 20 percent of the ₹ 2.86 trillion aggregate restructured loans. Needless to say, the stress in the infrastructure sector is a cause for major concern[6]. While the primary drivers of stress in the banks' books are global and domestic economic slow-down, contribution of other factors like delay in obtaining statutory and other approvals in respect of projects under implementation as well as weak credit appraisal/monitoring by banks during the high growth years is also significant. Hence, it should be of utmost priority for all the stakeholders to resolve this issue at the earliest both in terms of kick-starting viable stalled projects and finding alternate funding sources as expecting banks to shoulder the mammoth task of financing this sector has the potential to pose significant financial stability risks.

28. As you are aware, the Reserve Bank released a 'Framework for Revitalising Distressed Assets in the Economy' effective from April 1, 2014, outlining an action plan that will incentivize early identification of distressed accounts, timely restructuring of viable accounts, and prompt recovery or sale of unviable accounts[7] rather than delay the problem by "extending and pretending". Some of the key proposals include, setting up of Central Repository of Information on Large Credits (CRILC), formation of Joint Lenders' Forum (JLF), determining the best possible Corrective Action Plan viz., Rectification, Restructuring and Recovery, incentivizing lenders to agree collectively and quickly to a corrective action plan, and permitting banks to sell even assets reported as SMA-2 to Asset Reconstruction Companies. Reserve Bank has also put in a place a framework for Strategic Debt Restructuring in consultation with the SEBI so that banks can convert loans to equity when project gets stressed again, giving the banks the benefit of upside and the control to redeploy the assets. The key message from these guidelines is that the Reserve Bank is very serious in its efforts to find a resolution to the issue of rising trend in NPAs. I hope the deliberations in the specific session on this issue in the conclave will closely look at these issues and suggest workable solutions that would prove beneficial to the economy in general and the infrastructure sector in particular.

Financing Infrastructure: Role of financial markets

29. A well-diversified financial system, where bank and bond financing complement each other, reduces financial fragility and enhances the efficiency of capital allocation. The benefits of a well-developed bond market[8] in the context of infrastructure financing are - lengthening of the tenor of debt, limiting the maturity mismatches on the balance sheets of both banks as well as corporates, widening the funding base, providing risk management tools, strengthening corporate governance and enhancing discipline by limiting the influence of borrowers on lenders. Further, with bank financing to infrastructure already at high levels (about 15 percent as on March 2015 as mentioned earlier), and the impending exposure norms that would restrict banks' capacity to lend, there is an urgent need to reallocate the financing activities to the bond markets in the overall interest of the financial system.

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[6] RBI Financial Stability Report: An infra-bomb is ticking in state-run banks' books, Dinesh Unnikrishnan, firstpost.com, June 26, 2015

[7] Early Recognition of Financial Distress, Prompt Steps for Resolution and Fair Recovery for Lenders: Framework for Revitalising Distressed Assets in the Economy, RBI, January 30, 2014

[8] Why doesn't Asia have bigger bond markets? (2004), NBER Working Paper 10576

30. In India, despite a lot of regulatory initiatives already put in place to activate the bond market to provide the corporates a funding avenue complementing bank financing, the development of corporate bond market remained a work in progress. There are many theories that are put forward rationalizing the underdevelopment of bond markets in different jurisdictions. It is argued that jurisdictions with a well-developed and strong banking systems do not create necessary environment for development of bond markets, since they provide an easier alternative in terms of bank financing. Underdevelopment of bond markets is also explained away linking to the evolution of financial systems. In jurisdictions where imperfections in the information and contracting environment gave a strong competitive advantage to bank intermediation in the early stages, the participants adapt themselves to the dominance of bank intermediation and remain so even when the circumstances change. Banks retain their first mover advantage and the bond markets find it difficult to acquire market share from banks.

31. Let me briefly highlight the regulatory efforts and the progress made in the area of developing corporate bond markets in India, flagging some of the issues for you to deliberate further.

32. Given the importance of corporate bond markets in overall development of the economy and more importantly in infrastructure financing, various committees have made recommendations for a comprehensive reform of corporate bond markets in India. Many measures have already been taken to address both the supply as well as demand side constraints in the development of the corporate bond market. Banks have been allowed to issue long term bonds with a minimum maturity of seven years to raise resources for long term lending and such bonds have been exempted from the regulatory requirements of CRR/SLR. Reserve Bank has since allowed cross holdings by banks upto 20 percent of the primary issue size so as to promote the issuance of such bonds in this critical phase. The issuance process for corporate bonds has been simplified in terms of listing requirements and market conventions have been standardised. Reissuances of corporate bonds have been permitted to enhance secondary market liquidity. With a view to enhancing investor base, measures were taken such as enhancing investment limits for Foreign Portfolio Investors (FPIs), rationalising criteria for allocation of such limits and reducing the withholding tax considerably from 20 percent to 5 percent. International financial institutions have also been permitted to float rupee-linked bonds overseas to deepen the off-shore rupee bond market and to augment the financing sources. As regards secondary market, reporting platforms have been set up to enhance the market transparency, delivery-versus-payment (DvP) settlement of OTC transactions has been put in place to eliminate settlement risk. Repo has been permitted in corporate bonds to provide for funding and also to enhance the investor interest. With a view to provide risk management tools, Credit Default Swaps (CDS) have been permitted on corporate bonds.

33. The concerted efforts by the regulators and the Government coupled with participation from the market players have indeed resulted in considerable increase in the issuance as well as secondary market trading of corporate bonds. While the bond issuance has increased by around 236 percent from ₹ 1,747.81 billion in 2008-09 to ₹ 4,138.79 billion in 2014-15, the number of issuances has increased by almost 153 percent (which was nearly 45 percent higher than the previous year) during the same period. Similarly, for example, in the last four months (April 2015 to July 2015), corporate debt issuances have grown to ₹ 1.69 trillion which is two times more than the issuance of

the corresponding period of the last year. The secondary market activity has also shown significant growth with the daily trading volumes increasing to ₹ 40 billion in 2014 from ₹ 6.30 billion in 2009.

34. Notwithstanding the progress made so far, the journey is far from over. A closer analysis depicts that there are many issues yet to be resolved. The bond issuance is still dominated by private placements accounting for about 95 percent of the total issuances in 2014-15 and a majority of the issuances are concentrated in 2-5 year tenor. The trading activity, despite showing gradual improvement, is much lower compared to the sovereign bonds. The market for CDS, put in place to activate the interest in corporate bond market by facilitating risk transfer, is yet to show any significant activity.

35. Assessing the developments made so far and the challenges that lie ahead, the regulators are in constant dialogue with the market participants to chart the road ahead for developing a vibrant corporate bond market. Some of the issues that are under consideration include: nudging corporates to rely more on market financing for meeting their short term and long term needs by fine-tuning the large exposure framework of banks, augmenting long-term investor demand by reviewing the investment guidelines of regulated entities, such as, insurance and pension funds, fine-tuning the CDS guidelines to encourage greater participation, strengthening bankruptcy laws, developing municipal bond market, etc. Recently, in order to facilitate greater level of participation in AAA rated corporate bonds by Stand Alone PDs, their exposure ceiling in respect of single borrower / counterparty was increased from 25 percent to 50 percent and in respect of group borrower from 40 percent to 65 percent of their latest audited NOF.

36. Let me touch upon another much debated aspect of corporate debt market, i.e., credit enhancement of the bonds by banks. Credit enhancement of corporate bonds which is under consideration could be one very important step in the direction of development of bond markets. Credit enhancement, by way of subscription to the subordinated debt of the issuer, enhances the credit rating of the issuance and bring in investors who are otherwise constrained by their investment regulations. Europe's Project Bond Initiative wherein the European Investment Bank finances the subordinate debt, enhancing the rating of the other component of the debt to 'senior debt' rating, thereby fulfilling the rating requirements of the institutional bond buyers, is an interesting case in point. There are, however, other examples which highlight the risks involved in promoting corporate bond market through credit enhancement by banks as the risk remains concentrated in the banking system.

37. Taking a balanced view, the Reserve Bank, in its Second Quarter Review of Monetary Policy 2013-14, had announced on October 29, 2013 to allow banks to offer partial credit enhancements to corporate bonds issued for funding infrastructure projects by companies/Special Purpose Vehicles (SPVs). Draft guidelines in this regard were issued on May 20, 2014. As per the draft guidelines, banks should have a Board approved policy on partial credit enhancements covering issues such as permissible types of credit enhancements, assessment of risk, setting limits, etc. Banks should also have an overall exposure limit to the infrastructure sector. Prudential limits on the amount of credit enhancement that can be provided and operational guidelines have been stipulated in the draft guidelines. The feedback/comments received are being analysed and considered before issue of the final guidelines. Issues relating to category of bonds that could be enhanced, capital relief to the banks taking the underlying loan exposure and the partially credit enhanced portion for bond issuance, default recognition norms in

case of non-payment of contingent credit facility are likely to be addressed when the final guidelines are issued.

Offshore Rupee bonds

38. Issuance of Rupee-denominated bonds in offshore capital markets for mobilising resources for financing infrastructure projects in India is another alternative which may gain traction in the near future. This not only provides an avenue for the Indian borrowers to tap global markets, but also provides much needed fillip to the infrastructure development in the country. In 2013, the IFC launched the first ever Rupee Linked Offshore Bond (RLOB) programme. The programme created a Rupee yield curve in the offshore market through issuances of various maturities viz., 3, 5 and 7 year. In terms of the investor profile, the largest amount has been subscribed by the US investors followed by the European & Asian investors. An important lesson learnt was that the Indian Rupee bond could substitute demand for other local currency bonds, such as, Indonesian Rupiah bonds. Subsequently, IFC was permitted to expand the issuance program and it issued a 10-year, 10 billion Indian Rupee bond (equivalent to US$ 163 million) in 2014. These bonds described as "Masala bonds" marked the first rupee bonds listed on the London Stock Exchange. These are the longest-dated bonds in the offshore rupee markets, building on earlier offshore rupee issuances by IFC at three, five, and seven year maturities. These proceeds are to be invested in an infrastructure bond issuance by a commercial bank in India. The IFC has also issued onshore Rupee bonds and the funds thus raised would be used for lending to the infrastructure sector. The Reserve Bank is now finalizing guidelines on offshore Rupee bonds to be floated by the Indian corporates based on the comments received on the draft earlier put out in the public domain.

Infrastructure financing: external sources

39. Considering the huge financing requirements in infrastructure about half of which are proposed to be met by the private sector, there will be a role of the external sources in funding the gap. Stable sources of external financing would not only relieve the pressure on domestic financial system but would also bring in much needed technical expertise, which is critical in enhancing the viability and competitiveness of infrastructure projects. This has, however, to be balanced with the risks estimated with foreign currency denominated external commercial borrowings (ECBs), particularly in respect of sectors like infrastructure where there is a currency mismatch between their foreign currency borrowings and the Rupee cash flows, besides the systemic stability issues of high level of external debt and unhedged foreign exchange exposure. Nevertheless, to encourage external commercial borrowings for infrastructure projects, the Government of India and the Reserve Bank of India have been modulating the regulatory regime keeping in view the debt profile of the country and also the requirement of foreign funds, particularly in the infrastructure sector. A Committee to review the framework of access to domestic and overseas capital markets (Chairman: Shri M S Sahoo) has come out with certain major recommendations for overhaul of the ECB framework. Reserve Bank of India is now working with the Government of India to streamline the ECB regime that would facilitate more Rupee linked offshore borrowings and long-term borrowings in excess of, say, 10 years so that the risks associated with unhedged foreign exchange exposure of the Indian borrowers and stability issues arising out of shorter duration ECBs could be addressed.

Urbanisation and Infrastructure

40. Let me focus now an important aspect emerging needs India is rapidly urbanising, which is putting a tremendous pressure on urban infrastructure. Census data 2011 reveals that about 31 percent (377 million) of Indian population lives in urban areas and contributes 63 percent of the GDP. Going forward, the intensity of India's urbanization will only be increasing. With the strides in the urbanisation that is being witnessed, it is projected that by 2030 urban areas will house 40 percent of the Indian population and contribute 75 percent of India's GDP. The number of large cities which were only 5 in 1951 grew to 53 in 2011 and is expected to go to 68 in 2030. At least 2 of the Indian cities (Mumbai and Delhi) are expected to be among the five largest cities in the world by 2030.

41. The document '*Smart Cities: Mission Statement & Guidelines*' put out in June 2015 by the Ministry of Urban Development emphasises the need for a comprehensive development of physical, institutional, social and economic infrastructure for improving the quality of life and attracting people and investments to the City, setting in motion a virtuous cycle of growth and development. Smart Cities are envisaged to be a step in that direction. The mission announced by the Government envisaged a coverage of 100 cities during 2015-2019. Given the enormity of the vision, stakeholders, especially the Urban Local Bodies (ULBs), have a significant task on hand. Financing through municipal bonds is an alternative that the ULBs can focus on. The Municipal Bond market in India, albeit more than three decades old, is still not developed. Municipal bonds have so far played a limited role as a source of finance for funding urban infrastructure projects. In India, just 1 percent of the total ULB contribution is funded by municipal bonds as against about 10 percent in the United States. The size of the municipal bond market today is rather limited and is distributed over a few strong municipalities of Ahmedabad, Nasik, Nagpur, etc. It is worth noting that in spite of weak finances, none of the municipal bond issues have defaulted in repayment to date. This indicates that although bond financing is feasible for ULBs there are constraints affecting both the supply as well as demand for capital.

42. Several steps can be taken to strengthen the municipal bond markets in India. First, the regulatory and legal conditions that currently hinder the municipal borrowing in India, needs to be altered to encourage appropriate expansion of the scope of bond financing. Second, it is important to introduce flexibility in setting interest rate cap for issuance of municipal bonds by linking it to a benchmark market rate. Issuers also need to have the option to offer long tenor bonds for implementing urban infrastructure projects with a repayment period ranging about 15 – 20 years and could include variants, such as, guaranteed, non-guaranteed bonds, taxable and tax free bonds, pooled financing, etc. Treating tax free municipal bonds in the same way as other tax free instruments is necessary. Third, very often the ULBs are still considered to be riskier than the corporates with similar rating largely because the risk perception is significantly linked to financial position of their States as they depend significantly upon the devolution of resources and grant from the State Government. Therefore, the outlook for ULBs would depend upon the outlook on the financial position of the State concerned. Fourth, ring-fencing the municipal bond funds is very essential by clearly earmarking the same for a defined project and is thus, insulated from interventions. Fifth, to gain investor confidence, municipalities need to obtain credit rating for raising funds from the market. Sixth, introduction of a bankruptcy law applicable to municipal bodies could improve investor confidence and boost demand for municipal bonds. As a backstop arrangement in the eventuality of default, there needs to be partial or full guarantee by Central/ State

government. Seventh, there is need for improving transparency in accounting and budgeting and disclosure of all the material facts regarding the management, administration, financials, operations, projects, revenue generation, risk factors, etc. Timely audit, putting in place a framework for legal remedy against defaulting ULBs and assurance against diversion of fund will have to be addressed. Eight, Pooled Finance Mechanism was initiated for small and medium sized ULBs to hedge risk for the investors and thereby avoid huge transaction costs. Finally, in order to widen the investor base, insurance companies, National Pension System, and provident funds may be allowed to invest in the rated securities of ULBs or Municipal Bodies as also Foreign Portfolio Investors and Mutual Funds. SEBI has since put out a framework for issue and listing of debt securities by municipalities. There are demands for further fine-tuning of these regulations. Besides, concerted efforts are needed by the Central, State and the municipal bodies to address the above concerns for developing a more reliable and additional source of financing for certain infrastructure through municipal bonds. Investment bankers like SBICAP can play a very proactive role in bringing together the stakeholders.

Conclusion

43. The fact that infrastructure is the life line of the economy needs no reiteration as it brings in benefits to all stakeholders in the economy, be it producers, consumers, rural households, industries and disadvantaged sections of the population through both the flow and stock impacts. Like finance, infrastructure is also a critical catalyst in accelerating growth. In order to reach the envisaged growth rates, we need to invest in robust infrastructure. There are many hurdles in financing infrastructure given its special characteristics, such as, long gestation, huge capital outlays and exposure to policy and procedural uncertainties. Policy makers are alive to these challenges and have taken many measures, such as, facilitating bank financing to infrastructure, activating bond markets with a view to providing alternative source of funding and, opening up newer and innovative channels of financing. Financing of urban infrastructure, through municipal bonds, given our current thrust on urbanization, needs special focus. To further strengthen this process, support from the industry is extremely critical. Industry needs to make judicious use of the new products or processes and also provide unbiased feedback to the policy makers for fine-tuning the policies. The role of investment bankers like SBICAP, which acts as bridge between the Government and the private sector in their infrastructure development efforts and provide innovative financing options through equity, debt and other hybrid instruments, is very crucial.

44. In its quest for much higher and sustainable level of economic growth, India today has to focus on INDIA: **I**nfrastructure (development of both physical and social infrastructure), **N**atural resources (in terms of transparent and predictable policies for leveraging the resources including the human resources), **D**ecision making process (which is both effective and efficient), **I**nnovation (both frugal and big-bang) & **A**ccess (of the widest segment of the populace to markets, finance and governance process). I am sanguine that the conclave would critically deliberate on various issues relating to the Infrastructure part of INDIA, particularly the financing aspects and come out with some important yet implementable suggestions.

45. I wish the conclave all success both in terms of pleasant business and serious fun. Thank you all.