DVARA RESEARCH

Improving the Competitiveness of Indian Debt Capital Markets

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Abstract

This note highlights the need for active and deep debt capital markets, both fixed income and derivative markets in India. A review of the current state of Indian debt capital markets reveals a number of limitations such as its small size relative to GDP, its narrow focus on AAA-rated bonds, the predominance of short term issuances, and limited risk transfer owing to limited trading activity. A root cause analysis of these limitations reveals a regulation-induced buy and hold culture within banks, deep distortions introduced by taxation, limited product diversity in the debt markets, inhibited access to debt markets for NBFCs induced by regulation, and a low appetite for higher risk debt instruments due to historical reasons such as a weak bankruptcy resolution regime.

In the view of these limitations, and their underlying root causes, this note recommends a number of ideas for change. In the near-term, it suggests the removal of loan-bond arbitrage on the books of banks, bank level stress test reporting and segment level RAROC reporting, modification of SLR requirements reducing requirements to hold government bonds and removing hold to maturity protection for SLR eligible government bonds, reinstating and clarifying the tax pass through status of securitisation vehicles, developing standardising bond documentation to make the process of bond issuance easier and cheaper, product development such as corporate bond indices to attract debt investments from retail savings, changing regulation to allow issuance of bonds at all points in the capital structure, and increasing the supply of AAA structured paper in the market. In the longer term, it recommends a uniform stamp duty structure, strengthening of the bankruptcy resolution process, introduction of credit default swaps on standardised syndicated loans to enable risk hedging, and the creation of benchmark issues through consolidation and reissuance enabling the development of credit curves.

1. Need for Debt Capital Markets in India

A bond is a type of a loan in which, through a greater degree of standardisation, a much higher degree of tradability between different participants can be ensured. While loans are the preferred instruments for providing credit between participants that know each other intimately and who generally intend to hold on to the facility until its final maturity, such as banks and their clients, or two closely related parties, the tradability of the bond admits of the possibility that a much wider group of investors can participate in the credit facility. This factor of standardisation and the resultant tradability make bonds a useful tool for several purposes:

- 1.1 Even for traditional lenders such as banks, while bonds can be held to maturity just as other forms of loans can, the use of bonds as the lending instrument allows them the flexibility of rebalancing their portfolio, at the cost of requiring that standard clauses and documents be used in place of the entirely customised format that other forms of loans allow².
- 1.2 Given the special status that banks enjoy, any asset creation through the bank channel needs a significant amount of capital to be deployed on the bank's balance sheet. Indeed, RBI's own estimates project an additional capital requirement of Rs. 5 lakh crore on account of the imminent introduction of Basel III in the Indian banking sector³, making this channel even more expensive than before. For very high quality assets it may be more efficient to let investors, including retail investors, insurance companies, pension funds, and mutual funds, to hold these assets directly without using the bank channel so that scarce bank capital can be preserved and bank financing not be monopolised by the largest companies in the system⁴. The bond route makes this very feasible and allows the issuance of even extremely long maturity bonds such as 50 year or 100 year bonds⁵ which, given the deposit centric liability profile of banks makes them poorly suited to offer such long-maturity loans but makes insurance companies and pension funds ideally positioned for it.
- 1.3 Between the two end points of extremely low risk loans and very high risk equity instruments there is a whole continuum of clients who have varying degrees of credit risks. While in general the credit needs of such clients are best met by financial institutions (such as banks and NBFCs) that have the expertise and local presence to get to know the client intimately, just as the supply of equity capital has moved beyond friends and relatives to private placements to public offerings, there is the possibility of even such "High Yield" debt instruments being made available, under stringent conditions, to a class of well-informed investors often referred to as Accredited Investors, or as Qualified Institutional Buyers⁶ (QIBs) if they are formal institutions. Such investors whose goal is to build well diversified portfolios, benefit greatly if they are able to invest in a range of financial instruments offering different levels of risk-reward trade-offs.

All real sector and financial sector firms engage in some form of financial transformation activity or the other. Real sector firms could acquire wholesale liabilities with a fixed tenor and interest rate while on the assets side the match may be provided in the form of inflation or exchange rate dependent revenue streams that arise from the fixed-asset investments that are made by the firm. While financial institutions have financial assets, they may rely on retail investors to provide them with funds with the assurance of low to zero credit risk, but take on significant amounts of credit and market risks on the assets side of their balance sheet.

- Instruments such as interest rate and currency swaps and futures allow markets risks to be transferred between participants without the need to trade the underlying assets and liabilities which, given the non-tradable character of assets and liabilities such as loans and deposits, while not always impossible, can be particularly challenging.
- Owing to developments in the origination process or those in the larger economy, financial institutions may find that they have built up unacceptably high exposures in their loan books, across multiple loans, to risk factors such as single entity exposure. Credit Derivatives allow market participants to transfer significant components of these risks from their portfolio without the need to sell the underlying credits for which there may or may not be a market.
- Securitisation and structured finance as a tool allows participants to trade aggregated bundles of credit instruments. This is particularly useful if loans made to individuals or small businesses need to be transferred in a wholesale manner between financial institutions⁷. It also allows the possibility that pre-determined levels of credit enhancements may be associated with these pooled portfolios so that there is a better match between the credit risk associated with the pool and the specific credit-risk-appetite of a particular investor.

2. Current State of Indian Debt Capital Markets

In general, an efficient financial system needs to have sufficient capacity for diversification and mechanisms for risk-transfer, so that risks originated in the real economy can be evaluated, priced, held or sold, and generally managed well. When there are flaws in the risk transfer function, this translates into distorted behaviour by financial market participants and potential mispricing of risk in both directions. The debt capital markets in any economy are therefore necessary both to generate liquidity as well as, to transfer risks in the financial system. Measured against this ideal, the Indian Debt Capital Markets suffer from a number of limitations:

2.1 Small Size: As a proportion of GDP, at 66%, the Debt Capital markets in India remain small, with central and state government bonds accounting for more than 76% of its size and Corporate Bonds for only 14%. The total size of Income Funds at the end of June 2013 was only Rs.4.41 lakh crore (including money market instruments)⁹ against total deposits in the banking system of Rs.69.67 lakh crore ¹⁰. The financial depth of Indian debt markets is also low when compared to that of developed economies, for instance, total debt markets as a proportion of GDP is 224% in the US, 233% in UK and 244% in Japan ¹¹.

As a consequence the choices available to retail investors are limited to placing money at negative real interest rates with banks; in government bonds; or in highly risky equity markets. The "excess" demand for these limited fixed instruments has further driven yields down on them. This is potentially one of the reasons that there has been a flight of household investors away from savings towards physical assets and increased consumption, and away from financial assets¹² while large "natural" bond investors such as life insurance companies and bond and pension funds have shown very poor portfolio returns on their schemes resulting in small sizes of these schemes¹³, further exacerbating the flight of capital away from financial assets and contributing to the build-up of large asset bubbles in housing and gold. Simultaneously very large issuers have had no choice but to rely

almost exclusively on banks for their rupee borrowings thus entirely choking up bank lines, enhancing the systemic risk exposures of banks, and crowding out "more natural" bank borrowers such as Small and Medium Enterprises. And, banks on account of the loan-bond regulatory arbitrage (discussed later) have chosen to use loans instead of bonds to offer these facilities and are thus unable to trade out of them. It is not surprising therefore that, despite the substantial Charter Premium¹⁴ that banks enjoy, they have shown very low returns on equity and remain relatively small in size relative to the overall economy.

- 2.2 Narrowly Focussed on AAA Bonds: Most of the large issuers are quasi-government, including banks, public sector oil companies, or government sponsored financial institutions. Of the rest, a few known names dominate. There is very little high yield issuance, and spreads between sovereign debt and AAA debt, and high yield debt are high in comparison to other markets. The distribution of corporate bonds issued, by rating, reveals that the number of sub-investment grade issues is minimal and the proportion below AA was only 15.25% in 2013¹⁵, indicative of investor appetite and high levels of risk aversion in the Indian bond markets¹⁶. As a consequence the yields on highly rated bonds have been driven down to almost match those of government bonds while even investment grade bonds below the AA category have had to pay a significant premium for issuance and have seen very little liquidity and very little issuance activity. In addition, areas such as project finance, structured finance, and securitisation have seen very little activity as well.
- 2.3 Short Maturity: The corporate bond market is dominated by relatively short term issuances, during FY 2012-13 out of total number of issuances, 50% of the issuances were up to 3 years of maturity. Bonds with maturity more than 10 years accounted for only about 6.5% of the total issuances. Almost 70% of all Corporate Bonds issues are of 5 year maturity or less and the average maturity of all corporate bond issuances is 4.97 years ¹⁷. Given that total investment in infrastructure sectors in the Twelfth Plan is estimated to be Rs.55.7 lakh crore, 18 this bias towards very short maturities combined with the very small size of the bond market clearly represents a significant problem and has contributed directly to the inability of the country to meet its infrastructure needs. Projects such as Hydroelectric Power Plants, Bridges and Toll Roads, Airports, and Water Utilities require the ability to offer levallised tariff over 25 years and need fixed income instruments that have comparable maturities. While insurance companies and individual investors have a need to invest in such long maturities, both the supply and demand for such securities appears limited. This has forced such issuers to obtain floating rate financing from banks and for banks to take on significant asset-liability mismatches. In periods of high interest rate volatility these are highly unwelcome developments for both sets of participants.
- 2.4 <u>Limited Risk Transfer:</u> At only Rs.7.38 lakh crore¹⁹ there is very limited trading activity in the corporate bond markets. Within the banking system, as on May 31, 2013, against a total asset base of Rs.80.06 lakh crore, Rs.53.79 lakh crore was accounted for by illiquid loans and only 0.02 lakh crore was in the form of tradable bonds (not including investments in government securities)²⁰. Securitisation volumes have remained modest despite a strong demand for high quality assets even by banks, and credit derivative markets in India have barely seen any activity at all. The absence of these risk transfer mechanisms make it impossible for financial institutions to rebalance their portfolios using any mechanism other than changes in origination strategy, forcing them to respond only very slowly to changes in their balance sheet credit risk profiles and concentration risks. This was perhaps one of the most important reasons for the collapse of the entire DFI sector in India²¹ and for the accumulation of large concentrated NPAs in the books

of banks, in sectors such as power. Today, there is considerable homogeneity in the management, governance and resultantly, asset allocation strategies among public sector banks. The absence of valuation metrics for loan books, lack of secondary markets together with the presence of highly covariant business strategies has grave implications for systemic risk²². Risk transfer capability, therefore becomes even more critical, given covariant business strategies and the likely emergence of NPA-aligned balance sheets²³ within the public sector bank group.

3. Root Cause Analysis

In this section, we attempt to trace some of the root causes behind the limitations discussed above.

3.1 Regulation Induced Buy and Hold Culture within Banks:

a. Loan-bond arbitrage in valuation as well as loss recognition: Banks themselves are remarkably opaque, despite their importance to the financial system and the economy. The vast majority of bank assets are illiquid loans that are not marked to market (or to model) and performance is therefore difficult to evaluate. The reporting requirements are only at highly-aggregated levels and it is difficult, from publicly available sources of information, to ascertain why a particular bank is performing better or worse than its peers. Within India, regulation and practice, in a variety of direct and indirect ways, has propelled banks towards building large illiquid loan books and tiny bond books. The most important being the regulations that ensure that loans can be carried on the books of banks perpetually at acquisition costs with impairment being recognised only on a realised loss basis and that too with a considerable lag. Bonds on the other hand have to be marked to market or carried at Fair Value and therefore respond much more quickly to changes in expectations of credit losses or movement in interest rates. Quite independently of the need to develop the bond market, this represents a severe distortion in the manner of which banks are assessed. The need to move the measurement of risks and bank asset quality to a forward looking basis has been recognised by the June 2012 report of the RBI's "High Level Steering Committee for Review of Supervisory Processes for Commercial Banks". This is also a central issue in the movement of Indian banks towards full compliance with IFRS 9.

Within priority sector assets in particular, there is considerable opacity. For instance, the outstanding amount under Kisan Credit Cards (KCC) is estimated at Rs. 3 lakh crore, about 4% of banking sector assets. The extant provisioning norms do not apply to KCC and the "true" asset quality is largely unknown. The actual picture of asset quality could therefore, be much worse if this is taken into consideration.

b. No Stress Test Reporting at a Bank level: While the RBI conducts stress tests for the banking sector as a whole, the results of which are published in the bi-annual Financial Stability Report (FSR), individual banks do not have to report stress tests on an on-going basis. This is particularly important for the larger privately owned banks and all the government-owned banks given their systemic risk character. There is no incentive for risk management or risk transfer in the absence of a rigorous stress testing and reporting framework for banks and this lack of incentive further impedes the development of the underlying debt capital markets.

c. <u>High SLR requirements:</u> Banks are required to maintain a large share of assets in cash and government securities. The top five public sector banks held between 17-21% of their assets in government securities. Government securities are also the only debt securities that are eligible to be held in the "held to maturity" book at acquisition cost, this also inhibits the development of an active secondary market by obviating the need to manage interest rate risk on government bond portfolios.

3.2 Distortions Introduced by Taxation:

- a. The securitisation markets had been growing steadily over the past seven years, owing to a strong and conducive regulatory environment. Recently, securitised debt instruments were listed for the first time, thus improving standards of transparency and reporting and widening the potential investor base. However, post facto claims by income tax authorities in October 2011, stating that the gross income of such SPVs was liable to tax, have effectively hampered the growth of the market²⁴. The matter is presently sub judice at the Bombay High Court. The Finance Bill, 2013, has sought to clarify the tax position by stating that a securitisation SPV is not liable to pay income tax. However, the Bill also states that trustees of such SPVs must pay tax on distributed income. The key pillars underlying the design of a financial system that is both stable and efficient are, one, a number of high quality local originators, two, orderly risk transfer, and three, the holding of risk by well capitalised national level institutions. The current tax laws imply that originators must finance themselves exclusively via on-balance sheet loans from the banking sector by hampering the growth of this new and very important market.
- b. The other important issue related to taxation is that of stamp duty. The stamp duty varies across the location and different securities, which increases the cost of securities. The highest stamp duty on debentures is 0.375% ad valorem (as a percentage of issue size). The differences in stamp duty between states are quite significant. For instance, the stamp duty on certain instruments in Maharashtra is almost ten times lower than in Delhi. Currently, if the bond is being sold in one (state) jurisdiction, but the asset has to be securitised in another, then the stamp duty as applicable in the latter is levied. Although the states had agreed to reduce the stamp duty to make it uniform across the country, no decision has yet been taken on this front.
- 3.3 <u>High Public Issuance Expenses:</u> Issuing a bond even via the private placement route is relatively expensive with minimum costs in the range of USD 20,000²⁵. Public issuance rules require onerous documentation along with significant marketing costs; therefore the public issue market for bonds has really never taken off at all.
- 3.4 <u>Limited Product Diversity:</u> Savings as a proportion to GDP has fallen from 36.8% in 2007-08 to 30.8% in 2011-12. This has largely been driven by a fall in financial savings of households which has declined from 11.6% to 8%, over this period. While seeking to explain this fall RBI's June 2013 Financial Stability Report argues that:
 - Of late, the shift from financial assets to real estate and gold has become stark. Inflation, low penetration of banking services across the country, credibility of the financial institutions in the wake of mis-selling of products and financial frauds, low post tax return on bank deposits, negative / low real interest rates, etc. could be some of the issues that need to addressed to redirect non-financial savings [and increased spending²⁶] towards financial savings.

This problem is compounded by the fact that there are few products available in the market for retail investors which allow them to invest for long-maturity and obtain reasonable returns.

- 3.5 <u>Difficulties faced by NBFCs in accessing Debt Markets:</u> Debt capital markets access for NBFCs is severely inhibited by the regulatory structure governing this access and the negative investor sentiment this creates. Principal examples are:
 - a. All debentures issued by NBFCs, either through private placement or through public issue, must be fully secured (This applies to short term NCDs too). If at the time of issue, security cover is insufficient or is not created, the issue proceeds are to be placed under escrow until creation of security, which should be within one month from the date of issue²⁷. However the subsequent circular by RBI removes the need for security cover for subordinated debt²⁸ (as by definition, subordinated debt is unsecured), implying that NBFCs will not be permitted to issue senior unsecured debt.
 - b. The benefits of the SARFAESI Act are not applicable to NBFCs which makes debt instruments issued by NBFCs less attractive.
- 3.6 Low Appetite for Higher Risk Instruments: This may well be a substantial problem and not merely a matter of risk-perception. On account of challenges created by the slow bankruptcy resolution process, investors value liquidity very highly and prefer to create portfolios comprising extremely low risk debt instruments and very high risk equity instruments, both of which have the common characteristic that they are highly liquid. Investors are also able to construct a risk-return portfolio of their choice using different combinations of these instruments.

4. Ideas for Change

- 4.1 Remove Loan-Bond Arbitrage: In light of the root causes, some useful near-term measures would be to:
 - a. Allow banks to classify (and reclassify) bond and loan assets into a held-to-maturity (HTM) or available-for-sale (AFS) bucket based on their declared intention rather than automatically based on legal documentation.
 - b. Standardised Debenture Trust Deed (DTD) templates could be developed that may be used by banks for loans as well. This will improve the tradability of loans (and their fungibility with bonds) but if discretion is permitted (as mentioned above) on HTM/ AFS classification it would serve to improve the liquidity and risk characteristics of overall bank balance sheets while removing the bias in favour of one form of documentation (loan) merely to avoid marking the asset to market. This would allow the banks also to emerge as key market-makers in the bond markets thus ensuring that the price arbitrages between loans and bonds are also eliminated while contributing to the liquidity of the market.
 - c. Create "credit event infrastructure" on all multiple holder debt obligations, whether in the form of bonds or loans. For debt capital markets to develop, it is necessary to know at any point of time with a reasonable degree of certainty whether a fundamental credit event²⁹ such as a bankruptcy, failure to pay or restructuring has

occurred or not. One way of achieving this³⁰ could be to recommend that independent trustees are required for all bond as well as syndicated loan issuances, any credit event could then necessarily be reported to an institution such as FIMMDA or credit bureaus such as CIBIL, which could then disseminate this information amongst market participants in a systematic way. Today, this lack of transparency even on critical information due to the largely bilateral nature of debt markets hampers the growth of both bond as well as associated credit derivative markets.

- 4.2 Require Stress Test Reporting at a Bank level: It would be important to ensure that individual banks, particularly large private sector, and all government owned banks are required to periodically carry out and disclose the results of their stress tests. This would create strong incentives for them to manage their risk profiles actively and in the process give an impetus to debt capital markets as well.
- 4.3 Modify SLR requirements: For a variety of good reasons there is a strong case to gradually bring the SLR requirements down for the entire banking system so that more credit (even if it is not in the form of bonds) can be made available to the private sector. There is also a case then to remove the automatic Held-to-Maturity protection available to these bonds. Both these steps are likely to improve the participation of banks in the bond markets.
- 4.4 Allow Pass-Through Vehicles to Remain Tax Free: Clarifying the tax pass-through status of securitisation SPVs, as originally intended by the regulators will help to revive the securitisation market, and create both liquidity as well as risk management capability for originators.
- 4.5 Make it easier and cheaper to issue debt in the capital markets: Private placements of bonds are expensive; costs include trustee fees, listing, rating, legal documentation etc. To drive costs down, Industry Associations such as FIMMDA could develop standardised bond documentation (debenture trust deeds) with standardised events of default, grace period, covenants, representations and warranties. This would not only make documentation more efficient but also enhance liquidity in the underlying bond and derivative markets.
- 4.6 Attract debt investments from retail savings either directly or via mutual funds, insurance companies and pension funds: There may be several opportunities to launch several corporate bond linked debt investment products which could go some way towards attracting debt investments from retails savings either directly or indirectly:
 - a. Corporate bond index products could be launched by the exchanges. These indices can be housed in either mutual funds or special purpose vehicles or alternative investment funds that have a tax pass-through status. The indices, for instance, can comprise the top thirty most liquid investment grade corporate bonds in the sector. Rating band based corporate bond indices could also be launched. Such debt investment products will give investors an opportunity to take exposure to the overall liquid corporate debt market. In the medium term, this will also contribute to the creation of a credit spread curve for the Indian debt capital markets.
 - b. Launch Ultra-Long Maturity Fixed Maturity Bonds to see if they can become tools to bring ultra-long maturity fixed income instruments into the market—such as 25 year Deep-Discount-Bonds—that have proved to be popular in the past³¹. It was encouraging to see that the recent Mahindra & Mahindra 50 year bond issue met with a favourable response despite its low coupon³². Target maturity products and life

- cycle funds can be built by focusing on financial planning needs to retail investors. For such products, corporate bonds are a suitable investment option.
- c. Open Up the Pension/Life Insurance market: Long term corporate bond portfolios fit into an insurance or pension fund's requirements very well, given the long term and predictable nature of commitments of a pension fund or life insurer. Such portfolios together with long term interest rate swaps can help for instance, the pension fund to achieve a much more accurate match to its pension payments. In this way, the fund is free to buy the 'best' bonds, unconstrained by liability payment dates, efficiently matching its assets to its liabilities. In the UK insurance and pension markets, this "immunisation" strategy has been used very efficiently by the underlying institutions³³.
- d. There is a need to channel large long-term savings managed by retirement fund organisations such as the Employees' Provident Fund Organisation (EPFO) into corporate and infrastructure bond markets. Out of EPFO's total corpus of about Rs.4.1³⁴ trillion as on March 31, 2012, less than 32% was invested in corporate bonds (45% of incremental receipts each year are invested in bonds). The rest was invested in lower-earning fixed-income assets such as government securities, state development loans, and special deposit schemes. Higher allocation to corporate bonds could help boost yields on retirement funds of a large number of the employed workforce. Also, less than 40% of the total debt assets (about Rs.11.09³⁵ trillion as on March 31, 2012) of insurance firms were invested in corporate bonds and the rest was in low-yielding sovereign instruments. Recently, the Insurance Regulatory and Development Authority has permitted insurance companies to invest up to 5% and 8% of their corpus of life and general insurance, respectively, in debt securities rated 'A' and below. There is, however, a need to permit higher allocation to corporate bonds as an asset class, which is presently restricted to 50% of total investment.
- 4.7 Complete the capital structure in bond markets: Today, the only instrument by which senior unsecured financing can be raised is commercial paper (less than one year). RBI recently disallowed senior unsecured bond issuance by NBFCs in June 2013³⁶. Our recommendation is to allow issuance at all points in the capital structure including senior unsecured bond issuances as long as the underlying investors are either Accredited Investors or Qualified Institutional Buyers, so that these fall well outside the realm of public deposits and the need for growth of debt capital from the underlying real economy can be fulfilled.
- 4.8 Increase the supply of AAA structured paper: One way to bridge information asymmetry that is halting risk transfer to investors is to encourage specialised players such as guarantee companies. These guarantee companies will focus on developing deep expertise in particular sectors, develop underwriting standards by which originators will be evaluated, publish them in the public domain to encourage the formation of market standards, and provide guarantees to structurally create higher rated securities that are more marketable to the underlying investor base. More broadly speaking, there is an insufficient variety of debt instruments available to the retail investors that are liquid, transparent, easy to understand, and meet the long term objectives of the retail investor. The corporate bond market is primarily a AAA demand oriented market primarily due to investor nervousness driven by information asymmetry. While some regulatory forbearance has indeed been granted to insurance companies and pension funds to invest in lower rated bonds, it is going to take time for them to build their comfort with lower rated bonds. An alternative idea may be to increase the supply of AAA rated bonds by means of the provision of

partial guarantees to lower rated bonds. Instead of mechanically providing refinance to housing finance companies and cooperative banks, the NHB, NABARD, and SIDBI could be asked instead to use their capital to guarantee bond issuances by these entities or invest in junior tranches of securitisations of assets originated by these entities. This would also have the effect of introducing much needed transparency in the underlying quality of these institutions as well as multiplying the impact of these institutions by four or five times. The existence of such monoline guarantee companies has been at the core of the success of municipal bond market in the United States.

4.9 A Few Longer Term Ideas

- a. Non-Uniform Stamp duty structure: The stamp duty varies across the location and different securities, which increases the cost of securities. The highest stamp duty on debentures is 0.375% ad valorem (as a percentage of issue size). The differences in stamp duty between states are quite significant. For instance, the stamp duty on certain instruments in Maharashtra is almost ten times lower than in Delhi. Currently, if the bond is being sold in one (state) jurisdiction, but the asset has to be securitised in another, then the stamp duty as applicable in the latter is levied. Although the states had agreed to reduce the stamp duty to make it uniform across the country, but no decision has yet been taken on this front.
- b. Bankruptcy resolution process: The Indian corporate bond market is characterised by "name lending"; i.e. investor confidence comes from the perceived dependability of the issuer. The reason for this is that bond holders do not have quick and effective recourse to a bankruptcy process in case of defaults. In order for the issuer base to be widened, it is important to significantly strengthen the bankruptcy process.
- c. Absence of risk management "derivative markets": Credit derivatives are an important tool for risk management. Given that bank balance sheets are almost entirely comprised of loans, to kick-start these markets and incentivise standardisation, credit default swaps could also be allowed on standardised syndicated loans on which public information is available. This will also drive the loan market towards higher transparency and liquidity.
- d. Benchmark issues have to be created through consolidation and reissuance: Market participants will need to work together³⁷ and commit to increasing the size of individual issues through consolidation and re-issuance where relevant in order to create larger pools of bonds available for trading. Issuers will need the financing and risk management tools required for dealing with the additional risks that can be created when the size of individual issues goes up.

5. Conclusion

For a number of reasons it is clear that India needs active and deep debt capital markets both fixed income and derivative markets. However, despite many long years of effort, while there has been some progress, the results have fallen far short of expectations and on a number of critical dimensions the Indian debt capital markets have underperformed. These principally include their very small overall size; narrow focus on AAA bonds; short maturity profile; and very limited ability to transfer risk and liquidity across markets. There are a number of underlying reasons (or root causes) why we feel that this state of affairs obtains. Within banks, there is a strong, regulation induced, buy-and-hold culture. This is principally because unlike bonds, loans are allowed to be carried at acquisition cost for their duration and only credit impairment is required to be marked down against them and that too only very gradually. There are also limited incentives for banks to actively manage the risks in their balance sheets since neither is detailed segment level profitability (RAROC) required to be reported nor are the results of any stress tests. In addition, the high and continuing requirements to hold a large amount of government bonds which are not required to be marked-to-market, not only crowds out credit to the private sector but also creates no incentives to manage the market risk inherent in the portfolio. Outside of banks, there are a number of tax induced distortions, most notably in the securitisation markets and in lack of uniformity of stamp duty from state to state; it is hard and expensive to issue bonds in public debt or private placement markets, most particularly so for NBFCs; there is very little product diversity in the bond markets leaving investors with very few choices; and very importantly, large bond market investors have a limited appetite for lower rated paper.

To bring about change, in our view, a number of near-term steps can be taken and efforts can be made to address some of the longer-term challenges as well. Within banks, clearly one immediate opportunity is to remove the loan-bond arbitrage on the books of the banks. There is very little purpose to be served by allowing this to continue and there is strong potential for actual harm because it reduces the incentives for banks to actively manage the various risks on their balance sheets. Also, requiring stress test reporting at the bank level as well as detailed segment level RAROC reporting will make it possible to get an in-depth understanding of the true state-of-affairs as well as increase incentives to manage risks and result in more sound banks while at the same time improving bond market activity. Modifying SLR requirements so that the bonds can be marked-to-market regularly, and over-time reducing the quantum of SLR that is required to be held by the banks will increase the supply of credit to the private sector and also help improve the status of the bond markets.

Outside of banks, it would help a great deal if Pass-Through Securitisation Vehicles were allowed to once again become entirely tax free so that retail assets originated by NBFCs and MFIs can be aggregated and sold to a wide variety of investors. This will also increase the flow of credit to priority sectors without further loading the balance sheets of banks with low quality assets. This would also increase the supply of AAA structured paper for investment by conservative institutional investors and perhaps even organisations such as the National Housing Bank and NABARD could be encouraged to switch from using refinancing as a tool to using partial credit guarantees so that these securities can be sold down to a wider variety of investors. In other ideas we feel that making it easier and cheaper to issue debt in the capital markets; introducing a wider range of fixed income products aimed at the retail investor so that she can participate in these markets and secure her future; giving more freedom to NBFCs to issue public and

privately placed debt; and pursuing some longer-term ideas such as streamlining the stampduty structure across the country and working to improve the bankruptcy resolution process, particularly for bond holders, would be very helpful.

Annexure

TABLE 1: Composition of debt capital markets in India

Security type	Outstanding on March	% of GDP
	2013 (Rs. lakh Crore /	
	Trillion)	
Corporate Bonds	12.90	13.6%
Government Securities	32.45	34.3%
SDLs	8.89	9.4%
Debt Market	54.24	57.3%
T-Bills	3.00	3.2%
CDs	3.90	4.1%
CPs	1.09	1.2%
Money market	7.99	8.4%
Total Debt	62.22	65.8%
GDP	94.61	

Source: RBI, SEBI, CCIL, CRISIL Research

TABLE 2: Country wise Debt/GDP ratio

Dec 2012, in USD Billion				For 2012, in USD Billion	Rati	to to GDP	
	All issuers Total	Financial Inst	Non- financial corpora- tions	General Govern- ment	$ \mathrm{GDP}^{38} $	Total debt/GDP	$\begin{array}{c} \textbf{Non-} \\ \textbf{Government} \\ \textbf{debt/GDP} \end{array}$
Australia	2,014.90	1,233.30	212.4	569.3	1,520.61	132.51%	95.07%
Germany	4,355.20	2,027.30	150.4	2,177.50	3,399.59	128.11%	64.06%
China*	3,376.80	1,533.90	675.7	1,167.10	8,227.10	41.04%	26.86%
$\mathbf{U}\mathbf{K}$	5,682.70	2,653.70	800.3	2,224.10	2,435.17	233.36%	141.84%
Japan	14,592.40	3,126.20	910.3	10,556.00	5,959.72	244.85%	67.73%
USA	35,155.00	14,436.80	6,434.80	14,042.40	15,684.80	224.13%	133.07%

Source: Bank for International Settlements (BIS)

^{*} As of Sept 2012

TABLE 3: Maturity wise distribution of the corporate bond market

Maturities	FY13	% to total issuances
Upto 3 (0-3)	1203	49.24%
(03-05)	505	20.67%
(05-10)	577	23.62%
>10	158	6.47%
Total	2443	100.00%

Source: Prime Database

TABLE 4: Contraction of the securitisation market

FY	Amount rated (Rs. Cr.)	Growth
2008-09	52017	
2009-10	46152	-11%
2010-11	23108	-50%
2011-12	47033	104%
2012-13	29869	-36%

Source: CRISIL Ratings

Notes

¹The author is Vice Chairperson, IFMR Trust. Note was prepared for Dvara Research (Formerly IFMR Finance Foundation).

²It is possible to tailor make documentation for a bond as well; however, excessively non-standard documentation may negatively impact liquidity. However, if for instance, a particular sector or a type of institution needs a separate set of "standard" terms and conditions, the legal format of a bond does provide this flexibility. Even in a loan agreement since often several lenders participate a degree of standardisation does become inevitable and to accommodate individual bank preferences borrowers often then sign side-letters with banks that are binding only as long as the bank holds the credit facility.

³http://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/BSI04092012F.pdf; As per Mckinsey's analysis, (http://bit.ly/iczSOP), the impact of Basel-III on capital requirement is almost 60 percent of all European and US Tier 1 capital outstanding, and the liquidity gap equivalent to roughly 50 percent of all outstanding short-term liquidity.

⁴As an illustration, an analysis of the balance sheet of the largest bank in the Indian financial system, SBI, reveals a very concentrated loan book. The top twenty borrowers amount to a total of Rs. 1.11 lakh crore as against a capital base of Rs.0.68 lakh crore; this clearly shows how this concentration can make the balance sheet of even a large financial institution like SBI very fragile and prone to systemic risk. In the international context as well, there is a move to control and measure large exposures better. BIS has issued for comment a consultative document (http://www.bis.org/publ/bcbs246.pdf) laying out a supervisory framework for measuring and controlling large exposures. "The Committee proposes that the threshold defining a large exposure should be set at 5% of a bank's eligible capital base. The Committee also proposes that banks should report to their supervisor all their large exposures or, if the number of large exposures is less than 20, their largest 20 exposures irrespective of their size relative to the bank's capital base."

⁵Mahindra's 50 year issue was placed successfully despite its low coupon: http://www.thehindu.com/business/Industry/50year-bond-issue-fetches-mm-rs-500-cr/article4873976.

⁶In the US context, an "Accredited investor" is defined here http://www.sec.gov/answers/accred.htm. "Under the Securities Act of 1933, a company that offers or sells its securities must register the securities with the SEC or find an exemption from the registration requirements. The Act provides companies with a number of exemptions. For some of the exemptions, such as rules 505 and 506 of Regulation D, a company may sell its securities to what are known as "accredited investors." The federal securities laws define the term accredited investor in Rule 501 of Regulation D as:

- 1. a bank, insurance company, registered investment company, business development company, or small business investment company;
- 2. an employee benefit plan, within the meaning of the Employee Retirement Income Security Act, if a bank, insurance company, or registered investment adviser makes the investment decisions, or if the plan has total assets in excess of \$5 million;
- 3. a charitable organisation, corporation, or partnership with assets exceeding \$5 million;
- 4. a director, executive officer, or general partner of the company selling the securities;
- 5. a business in which all the equity owners are accredited investors;
- 6. a natural person who has individual net worth, or joint net worth with the person's spouse, that exceeds \$1 million at the time of the purchase, excluding the value of the primary residence of such person;
- 7. a natural person with income exceeding \$200,000 in each of the two most recent years or joint income with a spouse exceeding \$300,000 for those years and a reasonable expectation of the same income level in the current year; or
- 8. a trust with assets in excess of \$5 million, not formed to acquire the securities offered, whose purchases a sophisticated person makes.

A Qualified Institutional Buyer (QIB) is one that owns and invests, on a discretionary basis, at least \$100 million in securities; for a broker-dealer the threshold is \$10 million. QIBs encompass a wide range of entities, including banks, savings and loans associations, insurance companies, investment companies, employee benefit plans or entities owned entirely by accredited investors. Banks and S&L associations must also have a net worth

of at least \$25 million to satisfy the QIB criteria (http://en.wikipedia.org/wiki/Qualified_institutional_buyer)

⁷This is particularly useful for banks to meet their priority sector obligations in India

⁸Source: RBI, SEBI, CCIL, CRISIL Research

9AMFI / http://www.amfiindia.com/spages/amjun2013repo.pdf (table 4)

¹⁰RBI Weekly Statistical Supplement of June 14, 2013: http://rbidocs.rbi.org.in/rdocs/Wss/PDFs/WSS14062013_F.pdf

¹¹Source: Bank for International Settlement (BIS) September 2012; World Bank - http://data.worldbank.org/data-catalog/GDP-ranking-table. The detailed comparison of country-wise debt/GDP ratio is set out in Annexure: Table 2

¹²RBI June 2013 Financial Stability Report, http://rbi.org.in/scripts/PublicationReportDetails.aspx? UrlPage=&ID=712

 13 As per the IRDA 2011-12 Annual Report, the size of the life insurance industry was about Rs. 287,000 crore in 2011-12 and the size of the general insurance industry Rs. 52,000 crore in 2011-12.

 14 Charter Premium refers to "risk free" returns that a bank can earn on account of cheap funding available via current and saving accounts. The 10-year government security yield has ranged between 7.2-8.4%, well above the cost of funds for most public sector banks. One could argue that banks could attain a 'risk-free' ROA of 1-2% by only investing in government securities

15 http://www.sebi.gov.in/cms/sebi_data/attachdocs/1375247200656.pdf, Page 131

¹⁶Given the fact that the total market capitalisation of the Indian stock markets as on May 31, 2013 was Rs.66.78 lakh crore (BSE Data) this risk aversion seems limited only to bond markets: http://www.bseindia.com/markets/keystatics/Keystat_maktcap.aspx?expandable=0

 17 Source: Prime Database; detailed distribution set out in Annexure: Table 3

¹⁸Source: Twelfth Five Year Plan Report http://planningcommission.gov.in/plans/planrel/12thplan/pdf/vol_1.pdf (page 18)

¹⁹Source: SEBI http://www.sebi.gov.in/cms/sebi_data/statistics/corporate_bonds/corpbondsarchivesnew.html

²⁰http://rbidocs.rbi.org.in/rdocs/Wss/PDFs/WSS31052013_F.pdf

²¹See Mor, Chandrashekhar, and Wahi (2006): http://www.imf.org/External/Pubs/FT/seminar/2006/ChiInd/Eng/chiind1.pdf

²²Ananth, Bindu and Vineet Sukumar. "Improving the Competitiveness of the Indian Banking System". IFMR Finance Foundation Notes on the Indian Financial System No. 3 (2013).

 $^{23}\mathrm{Ananth},$ Bindu and Vineet Sukumar. "Improving the Competitiveness of the Indian Banking System". IFMR Finance Foundation Notes on the Indian Financial System No. 3 (2013). Figure 8 - The NPA behaviour of public sector banks as a group is similar and quite distinct from that of private sector banks.

²⁴Source: Crisil Ratings. Contraction of securitisation market set out in Annexure: Table 4

²⁵Costs include trustee fees, listing, rating, legal documentation etc.

²⁶Square bracket author addition

²⁷http://www.rbi.org.in/scripts/BS_NBFCNotificationView.aspx?Id=8074

²⁸http://www.rbi.org.in/scripts/BS_NBFCNotificationView.aspx?Id=8206

²⁹2009 ISDA Credit Derivative Definitions

 30 Market standards in European markets are to have a trustee in any syndicated bond or loan issuance

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^{31} \texttt{http://www.bankbazaar.com/guide/deep-discount-bond-a-retail-investment-option/14607/}
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 $^{^{32}} Mahindra's~50~year~issue:~ http://www.thehindu.com/business/Industry/50year-bond-issue-fetchesmm-rs-500-cr/article4873976.ece$

 $^{^{33}\,\}mathrm{``Swaps}$ made simple", National Association of Pension Funds, 2005

³⁴http://www.epfindia.gov.in/Annual_Reports/AR_2011-12.pdf

³⁵http://www.lifeinscouncil.org/obdyrly-2012

 $^{^{36} \}mathtt{http://rbidocs.rbi.org.in/rdocs/notification/PDFs/CC330270613F.pdf}$

 $^{^{37}}$ FIMMDA as the representative industry association could play a leadership role in these initiatives leading to a complete credit curve across the maturity and credit rating spectrum.

 $^{^{38}} Source: \ World \ Bank - \ http://data.worldbank.org/data-catalog/GDP-ranking-table$