A Vision and Action Plan for **Financial Sector Development and Reforms in India**

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Summary

To sustain India's high growth rate and spread its benefits more evenly, the financial sector has a crucial role to play in mobilising resources and channelling them to productive uses. While India has well-functioning and deep equity markets, the banking sector is beset with governance issues and rising non-performing assets (NPAs). Corporate bond markets and secondary markets for managing risk remain underdeveloped. This report takes stock of these and other components of India's financial system, identifies areas of improvement, outlines long-term objectives for financial sector development and reforms, and provides policy recommendations to achieve the long-term objectives.

Key Recommendations

1) **Expedite broad-ranging banking reforms:** The recapitalisation of Public Sector Banks (PSBs) is essential, but should be done in tandem with governance reforms that make PSBs more accountable and change their incentive structures to promote efficient allocation of credit to the most productive uses. More competition through entry of new banks and greater private ownership of PSBs would increase the overall dynamism of the banking sector.

2) **Develop the corporate bond market:** Quantitative restrictions on investment in corporate bonds by institutional investors, such as insurance companies and pension funds, should be relaxed to broaden the investor base. Other steps could include development of secondary markets to hedge investor risk, facilitation of trading in the corporate repo market, rationalisation of stamp duty, and easing of investment limits for foreign institutional investors.

3) **Enhance liquidity and participation in the government bond market:** The government should consider new instruments, such as inflation-indexed and floating-rate bonds, along with higher limits on foreign investor participation. A clear medium-term path for bringing down the Statutory Liquidity Ratio (SLR), a process the RBI has already initiated, would increase depth and liquidity in both corporate and government bond markets, and reduce financial system distortions resulting from bank financing of fiscal deficits.

4) **Promote secondary markets for managing risk:** Technical, institutional, and regulatory constraints that have held back the development of secondary markets for hedging and managing risk should be addressed. Priorities include more hedging instruments for a broader range of commodities, measures allowing broader investor participation in commodity futures markets to improve liquidity, and development of the interest rate futures market.

5) **Strengthen institutional framework:** This requires effective implementation of the Insolvency and Bankruptcy Code (IBC), creation of a resolution mechanism for failing financial institutions, and consolidation of regulation across closely-connected financial markets. In addition to sustaining momentum on increasing financial inclusion, greater financial literacy and consumer protection are needed.

Overview & Main Objectives

India is one of the fastest-growing major economies in the world. To sustain the high growth rate and spread its benefits more evenly, the financial sector has a crucial role to play in mobilising resources and channelling them to productive uses.

Every financial system can be seen as a confluence of market players, financial instruments, and a regulatory framework enforcing financial contracts among market players. Hence, the path to financial market development involves providing appropriate incentives to attract market participants, providing an enabling environment for the development of new financial instruments, and making the regulatory and legal infrastructure conducive to smooth functioning of the markets. To achieve the broad objectives outlined above requires a strategy that encompasses these three key ingredients and takes account of the connections among them.

A well-developed financial system should effectively harness domestic savings, facilitate the efficient allocation of domestic and foreign savings to productive investments, allow households and firms to share risk, and support consumption and expenditure smoothing. To meet these goals, the financial system should be characterised by a strong banking system as well as deep equity and bond markets, supported by liquid secondary markets and a robust regulatory and legal infrastructure.

The long-term objectives of financial sector reforms include the following:

1) Making the banking system more robust and well capitalised, expanding its capacity to extend credit, and improving incentives to lend to the most productive sectors of the economy;

2) Increasing the reach of banking services with the aim of achieving universal coverage in the long term;

3) Developing a liquid and deep corporate bond market to enable firms to raise debt at a low cost, with a view to gradually increasing the share of corporate bond markets in the financing of firms and providing an alternative to bank financing;

4) Enhancing liquidity in the government debt market and making it more attractive to institutional and retail investors;

5) Developing missing (or nascent) markets like fixed income derivatives to hedge the credit and interest rate risk of fixed income securities;

6) Integrating financial markets, streamlining regulation, and eliminating regulatory arbitrage;

7) Creating a robust legal framework and effective judicial apparatus that supports the functioning of financial markets;

8) Developing a sophisticated IT infrastructure for trading exchanges with the capability to support trading of innovative financial products;

9) Making the financial sector more open to international investment to enable India to become a global financial centre in the long term; and

10) Providing greater autonomy for the Reserve Bank of India (RBI) to make monetary policy and the inflation targetting regime more credible (and sustainable).

Background

The development of India's financial sector has progressed considerably since the first wave of reforms in the 1990s. However, progress has been uneven, with the thrust of development concentrated in equity markets. While India boasts of world-class equity markets, the banking sector continues to grapple with rising NPAs and corporate bond markets remain underdeveloped. The government securities market is relatively more mature than the corporate bond market but is stifled by illiquidity in the secondary market for securities at the short end of the yield curve as well as by limited participation from institutional and retail investors. The banking sector is characterised by the dominance of PSBs, limited competition, a high SLR, and high and rising ratios of NPAs (expressed as a ratio to total bank assets) that are limiting the ability of banks to provide credit. The weak legal infrastructure further hampers the ability of the banking sector to recover bad assets. Public debt is still managed by the RBI, which creates potential conflicts with the institution's objective of keeping inflation low and stable. Large parts of the country are under-banked or unbanked and a large pool of household savings remains outside the formal banking system.

These issues might seem disparate but are in fact interconnected. For instance, illiquidity in the secondary market for government bonds with short maturity hinders the creation of a benchmark yield curve; the absence of a benchmark yield curve then makes the pricing of corporate bonds difficult. This, in turn, contributes to illiquidity of the secondary market in corporate debt. Thin corporate bond markets leave corporates with few avenues to raise debt and they end up turning to the banking sector for finance, thereby exposing the banking sector to concentration and credit risk. In the absence of a robust bankruptcy framework, banks have to bear the burden of losses emanating from failed projects, largely reflected in higher NPA ratios, further inhibiting their capacity to lend. Hence, what is needed is an integrated approach to financial sector reforms that takes into account the nexus between different sectors rather than thinking about reforms in each sector separately.

The Banking System

In the long term, India should strive to have a more robust and well-capitalised banking system, with enhanced capacity to extend credit and an incentive structure suitable for the productive allocation of resources. To build a robust banking system, recapitalisation will have to be complemented by a host of other measures including corporate governance reforms, lower entry barriers, improved financial supervision, and more efficient debt recovery mechanisms.

Where Things Stand

1) Dominance of PSBs and lack of dynamism in the market: The Indian banking sector is dominated by PSBs, with a market share of 69 per cent of total banking assets. It is also highly concentrated. As of March 2017, the top 10 banks (ranked by assets) owned 59 per cent of the total assets in the banking system. There has been little dynamism in the banking sector. Since 1991, only 15 licences have been issued to universal banks, while in the United States over 130 new banks were chartered annually on average between 1976 and 2009.[1] In 2013, the RBI issued guidelines for the licensing of differentiated banks—Small Finance Banks (SFBs) and Payments Banks (PBs). It subsequently issued banking licences for 10 SFBs and seven PBs. The entry of these banks should exert competitive pressure on regional rural banks and niche banks in the short term, and in the medium to long term, should foster competition in the universal banking space as they upgrade to universal banking licences.

[1] *See Adams and Gramlich (2016).*

Foreign bank entry in India has been limited. As of March 2017, the share of foreign banks in total banking system assets was just six per cent. According to the Financial System Stability Assessment Report for India by the International Monetary Fund (IMF), cross-border borrowing and lending by Indian banks was about 10 per cent and 16 per cent of Gross Domestic Product (GDP), respectively, in 2016, which reflects limited interconnectedness of Indian banks across borders.

2) NPAs remain high and PSBs are the biggest contributors: One of the most pressing issues facing the Indian financial sector is the continued deterioration of the health of the banking system, which is an important source of credit for Indian firms as well as for households. As of March 2017, the gross NPAs of all scheduled commercial banks amounted to over ₹7 lakh crore, which is equivalent to 9.6 per cent of the gross advances of the banking system. Between March and September 2017, the NPA ratio of scheduled commercial banks increased further, from 9.6 per cent to 10.2 per cent. The ratio of stressed assets (sum of gross NPAs and restructured assets) to gross advances is even higher, at 12.2 per cent, as of September 2017.[2] PSBs (nationalised banks and state banks) are the biggest contributors to the large and rising stock of NPAs, with a share of nearly 90 per cent of the stock.

3) Profitability ratios turn negative for the first time in a decade: Rising NPAs have put a strain on the health of the PSBs, reflected in their declining Return on Assets (ROA) and Return on Equity (ROE) ratios, which turned negative in 2016 for the first time in a decade. Profitability ratios of PSBs remained negative in 2017.

4) Slowdown in growth of industrial credit: Given the high reliance of the industrial sector on banks for credit, it would be challenging to insulate the real sector from the stresses building up in the banking sector. Credit to the industrial sector contracted by 0.4 per cent in September 2017, compared to an increase of 0.9 per cent in September 2016.[3] While industrial credit to micro and small enterprises increased marginally in September 2017, it contracted by eight per cent for medium enterprises and by 0.4 per cent for large enterprises. The year-on-year

[2] *Source: Financial Stability Report 2017, RBI.*
[3] *The growth rate numbers are calculated on a year-on-year basis. Even though the credit growth has become less negative in September 2017 as compared to January 2017, credit to the industrial sector continues to decline.*

growth of credit to major industrial sectors, including textiles, mining, and chemicals, remains negative. The weak investment growth is partly a reflection of the slowdown in growth of bank credit to the industrial sector.

5) Ability to meet Basel III capital requirement: High NPAs of PSBs are also likely to impede their ability to meet higher capital requirements under Basel III, which will come into force in January 2019.[4] Under Basel III, the minimum total capital requirement (including capital conservation buffer) would be 10.5 per cent of risk-weighted assets (RWA) as of March 2019. However, according to the guidelines issued by the RBI, for Indian banks the capital requirement will be 11.5 per cent of RWA (nine per cent minimum total capital requirement plus 2.5 per cent capital conservation buffer), which is higher than the capital requirement under the Basel III framework.[5] As of March 31, 2017, the capital ratio for 15 scheduled commercial banks was lower than 11.5 per cent. If NPAs continue to increase, these banks may not be able to meet the capital requirements by March 2019.

6) Many schemes have been introduced to resolve NPAs but have failed to produce the desired effect: Several schemes have been initiated to tackle the problem of rising NPAs: Strategic Debt Restructuring (SDR), which allows creditors to convert part of the stressed debt into equity and sell it to a new promoter; the Scheme for Sustainable Structuring of Stressed Assets (S4A), which allows banks to bifurcate the stressed debt from large borrowers (more than ₹500 crore) into a sustainable part that would be treated like a standard asset and an unsustainable part that can be converted into equity; and the setting up of a Public Sector Asset Rehabilitation Agency (PARA). More recently, a Deputy Governor of the RBI suggested setting up a Private Asset Management Company (PAMC) and National Asset Management Company (NAMC), but these suggestions have not been implemented.[6] SDR and S4A have not been able to produce the desired effect on NPA resolution.

[4] *According to the 2016-17 RBI report on Trend and Progress of Banking in India, Basel III capital regulations will be fully phased in for Indian banks by March 31, 2019, two months after the internationally agreed date of January 1, 2019.*

[5] *India is not the only country to impose tighter capital regulations than those prescribed under the Basel III framework. Other countries such as Singapore, South Africa, and Russia, also have tighter capital requirements than Basel III. According to a speech by RBI Deputy Governor N.S. Vishwanathan, higher capital requirements in India may be justified since India is a bank dominant economy and there is a large pool of borrowers with little or no credit history. (Source: http://bit.ly/2yaEptD)*

[6] *See the speech by RBI Deputy Governor Viral Acharya, "Some Ways to Decisively Resolve Bank Stressed Assets". (Source: http://bit.ly/2lgJeME)*

The problem with the SDR scheme is that bankers have to find a buyer within a short period for the part of the debt that is converted to equity. If they are unable to do so, the stressed assets are again classified as NPAs. Hence, this scheme often just delays the documentation of NPAs rather than eliminating them. The effectiveness of the S4A scheme could be limited for the following reason: to be eligible for this scheme, more than half of the loan amount should be sustainable, which may not be the case for a majority of the projects. Another condition is that the project should have commenced operations and should be generating cash flows. This condition prevents many firms from participating in the scheme since liquidity/cash-flow problems caused them to stop making payments on their debt in the first place.

7) Some positive developments following the Banking Regulation (Amendment) Ordinance but the overall outlook remains bleak: The government issued the Banking Regulation (Amendment) Bill in July 2017, which empowered the RBI to issue directions to banks to initiate the insolvency resolution process in the case of a default, under the provisions of the IBC, 2016. This bill was preceded by the Banking Regulation (Amendment) Ordinance, which was passed in May 2017. Following the ordinance, the RBI identified 12 defaulters who account for about a quarter of NPAs and resolution proceedings have been initiated for these 12 cases under IBC. According to a 2017 report by Credit Suisse, there has been timely progress on the first list of NPAs, with most cases in their post expression of interest (EOI) stage and bids for 11 cases due soon. While these developments seem positive, statistics on the PSBs' operating performance paint a grim picture. According to the report, losses of PSBs have widened and credit costs have risen due to increased provisioning under IBC. Weak profitability of PSBs has led to increased capital consumption and around 40 per cent of these banks have Common Equity Tier 1 (CET1) ratios below 7.5 per cent. As IBC proceedings continue, credit costs of PSBs may increase further on account of higher provisioning needs. Hence, the government will have to expedite the recapitalisation process to ensure that the increase in credit costs is contained.

8) Proposal on issuing bank recapitalisation bonds announced but details on the proposal not clear: Finance Minister Arun Jaitley recently announced a proposal to inject capital into PSBs to ensure they meet the Basel III regulatory capital requirements by March 2019. Under the proposal, a sum of ₹2.11 lakh crore will be provided to the ailing PSBs using a hybrid of cash, equity, and recapitalisation bonds. A bulk of this capital (₹1.35 lakh crore) will be raised through recapitalisation bonds issued by the government and the remainder (₹76,000 crore) will be from market and budgetary support. In order to assess the proposal, a number of important details need to be clarified, including how this sum will be distributed across banks, whether these bonds will be marketable, whether the government will set up a special agency to issue these bonds, and whether these bonds will be eligible for meeting SLR requirements if banks buy them.[7]

Main Recommendations

1) Recapitalisation of PSBs to kick-start lending in the short term: Bank credit is an important source of finance for households and the industrial sector in India. It is essential to recapitalise the PSBs expeditiously to prevent further deterioration in the value of stressed assets and to ensure an undisrupted flow of credit to the real sector. At the same time, it is important to ensure that measures such as recapitalisation do not create moral hazard issues. Hence, recapitalisation and transfer of stressed assets must be contingent on adoption of governance reforms by the ailing PSBs.

The recent proposal on issuing bank recapitalisation bonds to infuse capital into PSBs appears to be a step in the right direction; however, in the absence of details, it is difficult to generate a full assessment of the proposal's impact on the banking sector and the fiscal deficit. The government needs to act quickly since credit costs for banks may increase further as they take haircuts in the NPA resolution process under the IBC. The recapitalisation process under the "Indradhanush" plan commenced in 2015, but the banking system has not fully recovered even after two years since that programme was initiated. Part of the reason could be that the government underestimated the capital needed by public sector banks to offset losses emanating from rising NPAs. If the PSBs have to comply with Basel III capital requirements by March 2019, the government needs to act promptly and ensure that the capital infusion will be enough to offset any losses arising from haircuts on stressed assets.

[7] *At a press conference following the Monetary Policy Committee (MPC) meeting on December 6, 2017, RBI Governor Urjit Patel announced that his institution was working with the Finance Ministry to develop a reform and recapitalisation package. He suggested that capital injection would be based not just on the capital shortfall of PSBs but would also take into account the reforms initiated by these banks. He said that "recapitalisation bonds will be front-loaded for banks that have managed their balance sheet's strength more prudently, and can use injected capital to lend besides providing for legacy asset losses".*

Recapitalisation should be seen as only one of the key components to revitalising the banking system. To build a robust banking system, recapitalisation will have to be complemented by a host of other reforms including (i) corporate governance reforms to make the incentive structure of the banks consistent with productive allocation of credit; (ii) improved financial supervision so that the signs of stress on banks' books can be identified early on; (iii) development of a vibrant corporate debt market to avoid concentration of credit risk in the banking system; and (iv) improved debt recovery mechanisms to ensure efficient and speedy recovery of assets.

2) Greater competition in the banking sector: India should move towards a more dynamic banking sector that fosters innovation and checks the inefficiencies created by a lack of entry. There can be enormous gains from productive reallocation of capital in the banking sector as inefficient banks are driven out of the system (or merged with other banks) and new banks enter the market.[8]

The policy of 'on-tap' licensing of banks is a promising step in the direction of increasing competition in the banking sector. However, some of the requirements of this policy, such as the initial capital requirement of ₹500 crore and priority sector lending targets equal to 40 per cent of Adjusted Net Bank Credit (ANBC), seem stringent and may fail to attract individual promoters.[9] High initial capital requirements may be justified from a regulatory perspective—in their initial years of operation, these banks may resort to aggressive risk-taking and be vulnerable to unforeseen risks. The RBI could consider revising these requirements in later years to send a signal to the market about the RBI's willingness to promote new entrants, which could attract more applicants. Similarly, the requirements for priority sector lending could be relaxed in the initial years, especially since the RBI has recently issued licences to 10 small finance banks, which are required to lend 75 per cent of their ANBC to sectors eligible for priority sector lending.

Promoting entry of foreign banks, with a subsidiary structure to limit spillovers of external financial shocks, can also help improve competition.

[8] *For instance, in 2013, the United Kingdom lowered entry barriers for new banks to promote greater competition in the banking system. This move had positive spillovers as the threat of entry induced incumbent banks to offer better features to their existing customer base, reflected in higher interest rates on deposit accounts. The Small and Medium Enterprises (SME) sector also benefitted as the incumbent banks increased their lending to this sector to increase their market share. See Barty and Ricketts (2014).*

[9] *According to a June 30, 2017 press release from the RBI, only one application (from UAE Exchange and Financial Services) has been received for on-tap banking licence. http://bit.ly/2BWWlLg*

One of the conditions in the 'on-tap' licensing regime is that the applicant should be an Indian resident. This condition may be relaxed to allow foreign residents to apply for a licence.[10]

3) Make PSBs more accountable: Reforms are needed to make PSBs more accountable and change their incentive structures such that their lending practices are in line with the productive allocation of credit. This can be achieved by adopting better governance practices and providing more autonomy to PSBs. The government and the RBI have recently suggested consolidation of PSBs to help deal with the issue of rising NPAs. Consolidation may enable banks to take advantage of economies of scale, a diversified customer base, and reduced costs, but it is unlikely to change their incentive structure or lending practices. Creation of an independent Bank Board Bureau, as suggested in the "Indradhanush" plan to oversee employment of bank officials, can bring about required changes in the corporate governance of banks but the challenge will be to ensure that the Bureau is truly independent of government control.

4) Greater private ownership of PSBs: There should be a gradual push towards greater private ownership of ailing PSBs.[11] The argument in favour of PSBs is that they can penetrate unbanked areas where private sector banks do not find it profitable to operate. However, with the introduction of the Pradhan Mantri Jan-Dhan Yojana (PMJDY) and the increasing role of mobile banking technology, basic banking services can reach even remote areas without the physical presence of a branch. Hence, it is time to re-evaluate the benefits of having a banking system dominated by public sector banks and the benefits that greater private ownership can bring about.[12]

5) Increase resilience of the banking system to losses: It is impossible to eliminate risk completely from any banking system. A sound banking system should be able to minimise risk by adopting pre-emptive measures and cushion losses ex-post by developing better loss management techniques. Pre-emptive measures include having better surveillance and risk monitoring technology. Lending standards should be strengthened for lending to sensitive sectors and bigger projects. In addition, there should be enough provisions for expected losses. Wilful defaulters should

[10] *Even though the RBI has granted authorisations to foreign banks at levels that exceed the World Trade Organization (WTO) commitments, the share of foreign banks in total assets of scheduled commercial banks remains below 10 per cent as of March 2016.*
[11] *The need for greater private ownership in the banking system is well-recognised but there has been little tangible action on this front. This issue was discussed in the Narasimhan Committee Report (1998), the Rajan Committee Report (2008), and the P.J. Nayak Committee Report (2014), among others. Yet, the idea has received little traction politically – there is no concrete agenda/roadmap on reducing the government's control over PSBs.*
[12] *This sentiment is also echoed in a recent speech by Acharya. (Source: http://bit.ly/2suZ0ug)*

be identified and denied access to credit for a given amount of time.[13]

Banks need to have better mechanisms to evaluate the viability of projects when making lending decisions. To deal with ex-post losses, there should be a vibrant market for stressed assets so that banks are able to sell their NPAs at a fair price. This can be achieved by increasing participation in the market for stressed assets.[14] Greater competition in this market will lead to a competitive bidding process and help in better price discovery, potentially reducing the losses suffered by banks owing to haircuts on sales of stressed assets. According to the recent guidelines issued by the RBI, the minimum Net Owned Fund (NOF) requirement for Asset Reconstruction Companies (ARCs) has been fixed at ₹100 crore on an ongoing basis. This may act as a deterrent to the entry of private players and may also make it difficult for banks and ARCs to converge on a price of the stressed asset.

Higher capital requirements would increase the cost of acquiring assets from banks and ARCs would demand a higher price. This implies that banks should be willing to take a bigger haircut on the sale of the asset. The difficulty of settling on a price that is attractive to both the ARCs and PSBs partly explains the inability of the banks to dispose of their bad loans. Relaxing the requirements on NOF may attract more investors into this market.[15]

A recent amendment to the foreign investment limits in ARCs has allowed up to 100 per cent foreign direct investment under the automatic route. This is a welcome step towards increasing participation in the market for stressed assets. It will also bring in resources needed to fund working capital needs of stressed assets, which is necessary for the recovery of these assets. However, the total shareholding of an individual foreign institutional investor is still limited to 10 per cent and can be relaxed further.

Promoting inter-bank buying and selling of stressed assets can also foster competition in the market. Banks with capital buffers could buy stressed assets from banks with a capital shortfall and the inter-bank market can

[13] *In advanced countries like the United States, people who file for bankruptcy have to wait for eight years to file for bankruptcy again and the bankruptcy flag on their credit profile makes access to unsecured credit difficult.*
[14] *In December 2017, SEBI approved a framework for listing of security receipts issued by asset reconstruction companies on stock exchanges. This should induce more inflows into the markets for stressed assets.*
[15] *A 2014 amendment to the regulatory framework for ARCs increased the initial capital requirement from five per cent to 15 per cent of the assets purchased. The total amount of assets purchased by ARCs has gone down since 2014. This amendment was motivated by the low recovery rate of assets purchased by ARCs—having a high initial capital requirement would increase ARCs' skin in the game and induce higher recovery rates.*

provide an alternative to ARCs for getting rid of bad assets.

6) Make the banking system more transparent by promoting use of digital transactions: One way to achieve this goal is by promoting the use of digital transactions and reducing reliance on cash. A big challenge in moving towards a 'less-cash' economy is the reluctance of people to use these services, in addition to poor infrastructure in terms of weak internet connectivity in remote areas. Technological infrastructure needs to be stepped up before India can transition to a 'less-cash' economy. Also, cyber security needs to be strengthened to make the banking system less prone to cyber-attacks.

Behavioural change can be induced by making digital transactions simpler and less expensive to use than cash. Discounts should be provided on digital transactions in services that consumers use on a daily basis, such as buying a bus/train ticket, getting fuel at petrol pumps, cell phone top-ups, etc. At the same time, the extra cost of using the digital payments should not be borne by the retailers/merchants who are providing these services as they would be unwilling to provide digital services if the extra cost erodes their profits. The government should bear all or part of the extra cost, at least in the initial phase of the transition.

Anecdotal evidence suggests that, in many instances, digital transactions fail and people have to wait for a long time to get a refund in their bank account. This discourages use of digital payments. In instances of failed transactions, merchants could offer a coupon to customers that can be redeemed for services until the failed payment is credited to the customer's bank account.

Bond Markets

The long-term objectives of financial sector reforms should encompass the development of a deep and liquid corporate bond market to enable firms to raise debt at a low cost, with a view to gradually increasing the share of corporate bond markets in the financing of firms and providing an alternative to bank financing.

In addition, there should be a vibrant and transparent government debt market that supports the corporate bond market by providing a benchmark yield curve and allows the fiscal authority to raise debt at a low cost without imposing distortions on the banking system.

Corporate Bond Markets

Where Things Stand

1) Corporate bond issuance has grown rapidly but total market capitalisation remains low: The total number of corporate bond issuances rose from 744 in 2007-08 to 2676 in 2016-17, equivalent to a more than 300 per cent increase.[16] The total amount raised through public issues and private placement has increased modestly as a ratio to GDP, from 2.3 per cent in 2007-08 to 3.3 per cent in 2016-17.

According to the Global Financial Development database, the total volume of newly issued corporate bonds by private entities in industries other than finance, as a ratio to GDP, was similar for China and India in 2007. However, by 2015, this number for Chinese bond markets (5.54 per cent) exceeded even that for the United States (5.11 per cent) while it remained at 0.62 per cent for India.

2) Illiquid secondary market: While trading volume in the secondary market has increased over the years, it still remains miniscule. One of the reasons for low liquidity in the secondary market is that corporates prefer to issue bonds under a new International Securities Identification Number (ISIN) rather than reissuing under the existing ISIN (if they have one), which prevents the existing floating stock from growing. Corporates prefer to issue bonds under new ISIN to prevent bunching of repayment liabilities on the same date—the maturity of bonds issued under the same ISIN falls on the same date and can create liquidity problems for the issuers. According to a consultation paper released by the Securities and Exchange Board of India (SEBI), reissuance is not legally recognised and is considered a fresh issue of securities.[17] Therefore, reissuance attracts stamp duty and may deter corporates from reissuing bonds under the same ISIN.

3) Issuances are dominated by bonds with short tenor: In 2016, close to

[16] *These numbers include public issues as well as private placements. Private placement data is through December 2016.*
[17] *See the consultation paper "Consolidation and re-issuance of debt securities issued under the SEBI (Issue and Listing of Debt Securities) Regulations, 2008" (Source: http://bit.ly/2jA1H8b)*

90 per cent of the issuances were concentrated in the short tenor of up to five years.[18]

4) Private placements remain the most preferred way of issuing bonds: More than 90 per cent of the corporate bond issuances are privately placed and trades happen over the counter. Although the number of issuances has increased significantly since 2010, the number of issuers has increased only marginally. According to a report by SEBI, issuers prefer private placements because they require minimum disclosure, and are faster and less expensive than public issues. However, private placements hamper the liquidity of the market since they are not available to a large pool of investors and also because they are less transparent on account of fewer disclosure requirements.

5) Lack of diversity among investors and issuers: The market also suffers from a lack of diversity in the investor base as well as among issuers. The issuers are mostly big financial firms and public sector enterprises and around 40-60 per cent of the total issuance comes from the top 10 issuers. Similarly, there is limited market participation by institutional investors.

6) Lack of liquidity in the Credit Default Swap (CDS) market on corporate bonds makes retail investors wary of investing in those bonds: The market for credit default swaps on corporate bonds is very thin. The absence of a vibrant market on CDS makes investment in corporate bonds highly risky. Currently, only banks and primary dealers are allowed to buy and sell CDS contracts in the CDS market while mutual funds, insurance companies, pension funds, and foreign institutional investors (FIIs) can only buy CDS. A major deterrent in the development of the CDS market is the restriction on netting positions. Banks have to set aside capital for writing a credit default swap contract on the basis of their *gross* exposure to a counterparty as opposed to the *net* exposure, making investment in CDS very expensive.

7) Illiquid repo market in corporate bonds: A comparison across money markets shows that corporate repo markets are also illiquid. As of December 22, 2017, the average daily turnover in the corporate repo market was only ₹352 crore compared to ₹26,446.2 crore in the call money market,₹580.48 crore in the notice/term money market, ₹97,238.8 crore in the Collateralized Borrowing and Lending Obligation (CBLO) market,

[18] *The short maturity of corporate bonds could reflect aversion of investors to lock their funds in long-term risky assets in the absence of a well-defined bankruptcy framework. The IBC, 2016, should help lengthen the maturity of corporate bonds.*

and ₹194,023.8 crore in the repo market. One of the reasons is the lack of guaranteed settlement in the corporate bond repo market. Repo in the Government Securities (G-Sec) market is much more developed because G-Sec exposure is considered risk free. Another reason is the absence of an electronic dealing platform similar to the Negotiated Dealing Systems – Order Matching (NDS-OM) in place for the G-Sec market.

8) **There is no benchmark bond index** unlike the benchmark indices in equity markets, such as the Sensex and the Nifty.

9) **Foreign Portfolio Investment (FPI) in corporate bonds:** The current limit on FPI in corporate debt is ₹244,323 crore.[19] As of December 30, 2017, 88 per cent of this limit had been utilised.[20] This FPI limit corresponds to nine per cent of the total value of outstanding corporate bonds in September 2017.

Main Recommendations

1) **Increase the participation of institutional investors in the corporate bond market by relaxing norms on investment guidelines:** There are restrictions on institutional investors that inhibit their demand for corporate bonds. Currently, insurance companies and pension funds can hold a maximum of 25 per cent of their portfolio in bonds that are rated lower than AA and mutual funds can invest around 10 per cent of their funds in investment grade corporate bonds. Relaxing these limits can help increase investor participation.

2) **Reduce the SLR:** Currently, banks are required to hold 19.5 per cent of their Net Demand and Time Liabilities (NDTL) in relatively liquid assets in the form of government securities. This leaves little room in their portfolio to invest in other assets such as corporate bonds. Reducing the SLR will allow banks to increase their holding of corporate bonds and boost demand for those bonds. The RBI has already initiated the process of reducing the SLR, but a clear medium-term path for bringing down the SLR significantly would help banks prepare better, increase depth and liquidity in bond markets, and reduce financial system distortions resulting from bank financing of fiscal deficits.

3) **Develop the CDS market for corporate bonds to help investors hedge risk:** Investment in corporate bonds is risky and, hence, investors

[19] The overall limit of Rs 244,323 crore can be broken down into Rs 225,323 crore for corporate bonds (all categories) and Rs 19,000 crore for corporate bonds (long term FPI).
[20] Source: http://bit.ly/2rUFhCX

will be more willing to invest in the bond market if they can use the CDS market to hedge their risk. A major deterrent to the development of the CDS market is the restriction on netting positions. Banks have to set aside capital for writing a credit default swap contract on the basis of their *gross* exposure to a counterparty as opposed to the *net* exposure, making investment in CDS very expensive. The RBI should allow netting of exposures to make trading in CDS less expensive, while retaining regulatory safeguards to prevent excessive gross exposures.

Also, restrictions on institutional investors to sell CDS should be removed and foreign investors could be allowed to sell CDS contracts, given their relatively higher risk appetite. Some of these changes will require rating agencies to play a more important role in eliminating the information asymmetries regarding the quality of the underlying bonds and helping to price the credit default swaps efficiently.

The RBI had introduced the scheme of Partial Credit Enhancement (PCE) in 2015 to reduce the risk associated with investing in bonds. Under this scheme, corporates can approach banks and receive credit support to meet their interest payment obligations on bond issuances if they are experiencing a cash-flow shortfall. Currently, the PCE exposure of the banking system is capped at 50 per cent of the bond issue size, with a ceiling of 20 per cent on the exposure of any individual bank. There may be some merit to increasing the aggregate exposure of the banking system while retaining the individual exposure limits, at least until the CDS market is fairly developed.[21]

4) Facilitate trading in corporate repo by providing necessary infrastructure: Trading infrastructure has to be improved to facilitate trading in the corporate repo market, which is extremely thin. Unlike the G-Sec repo market, where trades are executed on an electronic platform and are cleared by a central counterparty, the corporate repo market does not have centralised clearing and trades are executed on a bilateral basis and contract terms, like haircuts, have to be mutually agreed upon. This system makes trading more difficult as compared to the G-Sec repo market. Creation of an electronic dealing platform with a centralised counterparty may help improve liquidity in the corporate repo market.[22]

5)Rationalise stamp duty: Issuing debt via bonds should be made more attractive for corporates. Stamp duty paid on debentures is an important

[21] SEBI had also suggested setting up of a dedicated fund by the Life Insurance Corporation of India (LIC) to provide credit enhancement to infrastructure projects. The fund will help in raising the credit rating of bonds floated by infrastructure companies and facilitate investment from long-term investors.

[22] The Union Budget 2016-17 indicated that the RBI would provide a framework for the development of an electronic platform and RBI is the process of issuing guidelines on this subject. It is important to expedite action on this front to build a liquid repo market for corporate bonds.

component of the cost of issuing a bond and also differs across states. Rationalisation of stamp duty can make bond issuance more attractive but action on this suggestion, which was first proposed in the R.H. Patil Committee Report (2005), has been slow. The government should take prompt action on this reform.

6) Cash-management services: One reason corporates prefer bank financing to bond issuance is related to the associated cash-management services provided by the bank. One way to boost bond issuance is to allow banks to provide cash-management services to a firm whose bonds they purchase (assuming the cost of these services is same irrespective of the method of financing). Also, there should be an upper limit on bank financing to corporates for big projects or bank financing should be made more expensive beyond a threshold, so that big firms consider raising debt from the bond market.[23]

7) Discourage fresh issuances by issuers with an existing ISIN: Reissuance will increase liquidity in the secondary market by increasing the floating stock of existing bonds. To encourage reissuance under the existing ISIN, a cap of 17 ISINs maturing per financial year has been recently approved by SEBI.[24] However, the cap itself may not increase reissuances since reissuances are not legally recognised and attract stamp duty. SEBI should consider removing stamp duty on reissuances.[25]

8) Increase limit on FPI: The current limit on foreign investment in corporate bonds accounts for less than 10 per cent of the total value of outstanding corporate bonds. The RBI should consider increasing this limit since the external demand for Indian corporate bonds appears robust, as reflected in the high utilisation rate of the FPI limit.[26] Higher

[23] *The Large Exposure Framework (LEF) introduced by the RBI in 2016, which places limits on the exposure of banks to a single large counterparty, can potentially induce corporates to turn to the bond market to raise debt as restrictions on lending may translate into expensive borrowing for large projects. The LEF takes effect on April 1, 2019.*

[24] *To obviate concerns about the issue of bunching of liabilities, SEBI has suggested that "the issuer can, as a one-time exercise, make a choice of having bullet maturity payment or the issuer can make staggered payment of the maturity proceeds within that financial year." (Source: http://bit.ly/2s4OpTZ)*

[25] *A consultation paper released by SEBI on consolidation and reissuances of corporate bonds suggests that this matter is still under deliberation.*

[26] *The utilisation rate of foreign portfolio investment (FPI) limit in corporate bonds has been more than 90 per cent in recent months. In November 2017, the utilisation rate of FPI limit reached 99 per cent.*

foreign investment will not only bolster the liquidity of the market but will improve market discipline.[27]

Further, arbitrary market interventions, such as the recent suspension of foreign participation in rupee-denominated bonds as foreign investment approached the stipulated limit, should be avoided. It not only erodes market confidence but also sends mixed signals to foreign investors about India's willingness to promote foreign inward investment.

9) Creation of a benchmark yield curve: Government securities are concentrated in the long end of the yield curve and, hence, there is no reliable benchmark yield for the short end of the yield curve. This makes pricing of corporate bonds difficult. Expanding the G-Sec market to bonds with short maturities will help develop a benchmark yield curve for corporate bonds, which are clustered in the short-medium tenor (up to five years).

10) Follow through on reforms already proposed: A number of reforms have been proposed to develop the corporate bond market but progress on the implementation of these reforms has been very slow. For instance, the R.H. Patil Committee in 2005 had recommended setting up of market making schemes by encouraging banks or primary dealers to act as intermediaries to provide counterparty positions for buy and sell orders. However, guidelines on this subject were issued a decade later. It is important that the reforms proposed by various committees in the past be implemented fully and expeditiously for them to have the desired effect.

[27] According to a circular issued by the RBI on September 22, 2017, Masala Bonds (rupee-denominated bonds issued internationally) are no longer counted as part of the limit for FPI investment in corporate bonds. Exclusion of Masala Bonds has provided additional room for foreign investment in corporate bonds. However, even after exclusion of Masala Bonds, the current FPI limit accounts for less than 10 per cent of the total outstanding value of corporate bonds.

Government Bond Markets

Where Things Stand

1) The G-Sec market in India is better developed than the corporate bond market: The government bond market is relatively more mature than the corporate bond market but is not as developed as the equity market. Using market capitalisation to GDP as a metric, the government bond market is five times as big as the corporate bond market. The total value of outstanding government securities (maturity more than one year) was ₹50.55 lakh crore as of December 2017, which is equal to 33 per cent of GDP.[28] The total value of outstanding T-bills (including cash management bills) was ₹6.3 lakh crore as of September 2017 (3.6 per cent of GDP), up from ₹1.41 lakh crore in 2006 (3.2 per cent of GDP).

2) The secondary market for government securities is also reasonably liquid: Trading in the secondary market has picked up gradually. The average daily number of trades increased from 1726 in December 2013 to 4938 in December 2016. The turnover ratio in outright transactions has increased from 1.08 per cent in December 2013 to 1.77 per cent in December 2016. In the repo market, the turnover ratio increased from 1.03 per cent in December 2013 to 3.83 per cent in December 2016.

3) The average maturity of outstanding government securities is 10.5 years: At the end of March 2016, only 26.9 per cent of the outstanding stock of dated government securities had a residual maturity of less than five years. On the one hand, this implies low rollover risk. On the other hand, this means that the market for short maturities is not very liquid, which prevents the creation of a benchmark yield curve, especially because the majority of the issuances in the corporate bond market are in the short-medium maturity range (up to five years).

4) Ownership pattern: One of the major problems in the government securities market is the lack of diversity in the investor base. The combined share of scheduled commercial banks and the RBI in total investment in government securities is more than 50 per cent. For T-bills, their share is higher than 70 per cent.

5) Public Debt Management: A Public Debt Management Agency (PDMA)

[28] *Source: http://bit.ly/21MoJqk*

was supposed to be set up in 2015 but it was put on hold. In October 2016, the Finance Ministry announced the setting up of a Public Debt Management Cell (PDMC), which would be converted into PDMA over a period of two years. The PDMC will take care of government borrowings, monitor cash balances, and foster a liquid and efficient market for government securities. It will also develop an Integrated Debt Database System (IDDS) as a centralised database for government liabilities.

6) FPI limit: After the most recent revision to FPI limits in government securities in December 2017, foreign investors can now invest up to ₹191,300 crore in government debt (all categories),₹65,100 crore in long-term government debt, up to ₹31,500 crore in State Development Loans, and up to ₹13,600 in long-term State Development Loans. The total limit is ₹301,500 crore, which corresponds to four per cent of the total value of outstanding government securities. As of December 2017, 80 per cent of this limit had been utilised. For FPI investment in central government securities (all categories), 98 per cent of the FPI limit has been utilised.

Main Recommendations

1) Increase diversity in the investor base in the G-Sec market: In order to accomplish this and also to free up banks' portfolios for investment in other assets, the share of scheduled commercial banks in the investor base should be gradually brought down by lowering the SLR ratio, which currently stands at 19.5 per cent. The market should also be made more accessible to retail investors. Some measures have already been taken in this direction by introducing odd lot trading and non-competitive bidding, but more needs to be done to attract retail investors. For instance, certain targets for investment by retail investors can be mandated for primary dealers.

Foreign investment in the G-Sec market is only about 3.5 per cent, which is low and can be increased to add diversity to the investor base. The government has intentionally kept the share of foreign investment low to avoid currency risk. However, rupee-denominated bonds do not carry currency risk and should be used increasingly by the government to raise debt internationally. The International Finance Corporation has successfully raised debt by issuing "Masala Bonds" (bonds denominated in Indian currency) internationally to finance infrastructure projects in India.[29] Global investors are likely to find the Masala Bond market

[29] *Source: http://bit.ly/2q354pX*

attractive, given the positive growth outlook for the Indian economy and low interest rates in advanced economies. Hence, the government should consider tapping into this market to diversify its investor base.

Issuing rupee-denominated bonds internationally will also increase the circulation of Indian currency in the international market, which is important for India to eventually become a major player in international financial markets. Although issuing Masala Bonds may not always be cost effective in the short term—as shown by the experiences of the Housing Development Corporation of India, the National Highways Authority of India, and the National Thermal Power Corporation—it will bring long-term rewards. The high interest rates paid by these entities in the Masala Bond market may reflect liquidity premiums and the rates should go down eventually as the market matures.

2) Issuance of inflation-indexed bonds and floating-rate bonds: Inflation-indexed bonds and floating-rate bonds currently account for less than one per cent of the outstanding dated government securities.[30] The difference in yield between nominal bonds and inflation-indexed bonds reflects inflation expectations of the market. The government should increase issuance of such bonds as they will not only be more attractive assets for investors, but will also provide a measure of inflation expectations and help guide monetary policy. In addition, they will encourage fiscal discipline by making inflation costly for the government, thereby serving as a commitment device for maintaining low inflation.

3) Expedite the creation of PDMA: Currently, the RBI manages the market borrowing of the central and state governments. This creates a potential conflict of interest between the RBI's objective of inflation targetting and the institution's role as the manager of public debt. Creation of an independent debt management agency would enhance the RBI's autonomy by avoiding any conflict between the monetary policy objective and debt management, making the inflation targetting regime more credible (and sustainable). However, the PDMA needs to incorporate an institutional mechanism for putting to good use the RBI's significant expertise on debt management and close contact with financial markets.

[30] *Long-term government bonds (with maturity more than one year) are called dated government securities, while government bonds with maturity less than one year are known as T-bills.*

Other Financial Markets

Liquid secondary markets are instrumental in developing primary markets as liquidity in the secondary market reduces the cost associated with trading of the underlying financial instrument. It is important to have well-developed markets for insurance, which provide enough tools to market participants to hedge their exposure to the risk associated with various financial products. Financial sector reforms should adopt an integrated approach and target simultaneous development of primary and secondary financial markets.

Where Things Stand

1) **Well-developed equity markets:** Equity markets are the most developed financial markets in India in terms of size as well as liquidity. Stock market capitalisation to gross domestic product has increased from 30 per cent in 1995 to more than 70 per cent in 2016. Equity markets are also reasonably liquid—the average daily traded volume on the National Stock Exchange (NSE) has risen steadily from 13.25 crore in 2003 to 143.61 crore in 2017. The average monthly turnover ratio as of April 2017 was 5.4 per cent.[31]

2) **Commodity markets are characterised by high risk and falling liquidity:** At present, commodities markets are characterised by high risk and lack of diversity in the investor base. Liquidity, as measured by turnover, has been falling in commodity markets in recent years. The National Spot Exchange Limited (NSEL) settlement scam in 2013 dented market confidence and frequent government intervention in commodities trading has kept investors away from this market.

3) **Limited tools to hedge risk in the commodities derivatives market:** Until June 2017, only futures trading was allowed and hedging options were limited in the commodities derivatives market, rendering these markets very risky. In 2016, the commodity derivatives advisory committee had proposed introducing options contracts for commodities.[32] Guidelines on risk management and price discovery for options trading were recently

[31] Daily turnover ratio is calculated as the ratio of daily traded value to daily market capitalisation. Monthly average is calculated by multiplying the daily statistic by 30. As discussed later, much of this turnover is accounted for by a relatively small number of stocks.
[32] Globally, the underlying for commodity options are commodity futures. However, operationalising trading of option contracts with futures as the underlying requires legal changes in the definition of derivatives contracts. In a press release in April 2017, SEBI notified that it has approved the proposal to amend the relevant provisions of Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2012, which would enable Commodities Derivatives Exchanges to operationalise trading in options.

issued by SEBI in July 2017. According to the guidelines, options trading with futures as the underlying is allowed only on one commodity in the pilot period. Moreover, to be eligible for options trading, the average daily turnover of underlying futures contracts of the corresponding commodity during the previous 12 months needs to be at least ₹200 crore for agricultural and agri-processed commodities and ₹1000 crore for other commodities.

4) **Restrictions on participation in the commodities derivatives market:** There is no retail participation in this market. Foreign investors, banks, mutual funds, and other institutional investors are not allowed to participate in the commodities derivatives market.[33] In June 2017, SEBI allowed participation of Category III alternative investment funds in commodity derivatives.

5)**Interest Rate Futures (IRFs):** After failed attempts in 2003, 2009, and 2011, the IRFs market picked up in 2014 but trading volumes have started to fall again. Globally, trading in IRFs is much greater than trading in equity and currency derivatives but in India the daily average turnover in the IRF segment is less than one per cent of the volume in the equity derivatives segment. There are restrictions on FPIs—their gross short position cannot exceed their gross long position in the government securities and in IRFs.

6) **Currency derivatives**: Exchange-traded currency derivatives contracts were introduced by the NSE and the Metropolitan Stock Exchange of India (formerly known as MCX-SX) in 2008, while the BSE launched trading of these contracts in 2013.[34] Trading is currently allowed in four currency pairs—INR-USD, INR-GBP, INR-EUR, and INR-JPY, with a majority of the trading concentrated in the INR-USD contract. Even though traded volume is high in this market, there are concerns that currency derivative markets in India are characterised by high speculation and proprietary trading rather than trading for the purpose of hedging against foreign currency risk. The share of corporates in total turnover is in the range of 30-35 per cent and that of proprietary traders is over 60 per cent. Trading volume in the currency derivatives

[33] *According to a circular issued by the RBI in September 2017, banks can now become professional clearing members of the commodity derivatives segment of SEBI-recognised exchanges, but they cannot undertake trading on their own account. Banks are also allowed to offer broking services in the commodity derivatives segment by setting up a separate subsidiary for the purpose. SEBI released a consultation paper on December 7, 2017 to seek market feedback on permitting mutual funds and portfolio managers to participate in commodity derivatives markets.*

[34] *NSE launched currency futures trading platform in August 2008 and currency options were introduced in October 2010.*

market has increased significantly over the years and at a rate faster than the increase of foreign trade.

7) FPIs were allowed to invest in the currency derivatives market in 2014 but, as of June 2015, the share of FPIs was less than one per cent. FPIs can take long and short positions on each stock exchange (NSE, BSE, and MCX-SX) of up to US$15 million in the INR-USD pair and up to US$5 million in the INR-GBP, INR-EUR, and INR-JPY pairs combined, without having to establish the existence of any underlying exposure. To invest more than these limits, FPIs will need to have underlying exposure in Indian debt or equity securities.

8) The RBI introduced cross-currency futures and options contracts in EUR-USD, GBP-USD, and USD-JPY currency pairs. Further, exchange-traded option contracts were introduced on EUR-INR, GBP-INR, and JPY-INR currency pairs (USD-INR already has option contracts). Eligible participants include stock brokers, domestic institutional investors, FPIs, and clients.

Main Recommendations

1) Increase retail participation in the equity market: Measures should be implemented to increase the low retail participation in equity markets in India and mobilise the large pool of household savings through the equity markets, perhaps by educating people about the benefits (and risks) of investing in equity markets. Eliminating regulatory arbitrage and increasing the ease of investment can also increase investor participation in the equity market. Trading in equity markets requires a dematerialised (demat) account; investors have to pay capital gains tax, securities transaction tax, a dividend tax, and a brokerage fee. This makes investment in equities more burdensome than acquiring and trading other assets such as gold.

2) Steps should be taken to reduce market concentration in equity markets: As of December 2016, the top 100 securities accounted for 70 per cent of turnover in the equity cash segment on the NSE and 61 per cent share on the BSE.[35] On the supply side, participation of smaller firms should be encouraged to make the market less concentrated, in part by making entry costs less prohibitive.[36] To bolster demand for shares issued by small firms, tax incentives can be given to investors for investment in small- to mid-cap firms. For instance, according to a 2015 study by the Organization of Economic Co-operation and Development, Sweden offers a tax deduction on stock ownership of small firms to enhance capital market liquidity for these firms.[37]

3) Improve the facility of high-frequency algorithmic trading on exchanges: Algorithmic trading can help improve market liquidity as it allows for execution of large orders within microseconds. While algorithmic trading on Indian exchanges has slowly gathered pace, there is room for improvement, especially if Indian equity markets have to compete with their developed counterparts. At the same time, it is important to take steps to forestall market abuse, a problem that even advanced economy financial markets have been susceptible to. SEBI should put in place robust market surveillance mechanisms to avoid erosion of market confidence in algorithmic and high-frequency trading.[38]

4) Restore confidence of market participants in the commodities market by minimising ad hoc government interference and strengthening measures to detect market abuse: Confidence of market participants took a hit when a sudden ban on trading of almost all contracts on the NSEL was imposed in 2013, which later turned out to have been triggered by a settlement scam at the NSEL. In order to revive the market, it is important to restore the confidence of market participants by putting in place adequate surveillance measures to detect abuse and also by limiting arbitrary government intervention in the market.

5) Improve liquidity in the commodities derivatives market: Banks, mutual funds, institutional investors, and foreign investors are currently not allowed to invest in the commodities derivatives market. Restrictions on their participation should be removed to enhance liquidity in this market.

[35] *Source: Handbook of Statistics, 2016, SEBI*
[36] *The United States recently eased registration guidelines for public offering by small firms to improve capital market access for these firms. Source: http://bit.ly/2DzSKmK*
[37] *Source: http://bit.ly/2CmcYmY*
[38] *The recent controversy at NSE regarding unfair access to the servers located at the exchange, and the subsequent resignation of the Vice-Chairman of NSE has stirred up debate around this issue.*

6) Introduce more hedging instruments for commodities: Trading in commodities is inherently risky, partly because commodity prices are determined internationally and also because they are influenced by both domestic and global factors. Hence, to improve liquidity in this market, there is a need to introduce more hedging instruments. SEBI recently permitted options trading on commodity derivatives exchanges. According to the guidelines released by SEBI in June 2017, options trading with futures as the underlying is allowed on only one commodity.[39] To ensure that the introduction of options trading has significant impact on the market, SEBI should allow options trading on a broad set of commodities.

7) Increase participation of farmers in trading of agricultural commodities: In India, participation of farmers in commodities futures trading is very limited. Derivatives markets in commodities can help farmers hedge price risk and get a fair price for their harvest. One of the factors that limits farmers' participation in the commodities markets is the prevalence of complex procedures and guidelines. Having a demat or a trading account is a prerequisite to participate in the market. Many farmers do not even have access to a savings bank account and are not familiar with how the formal banking system works. Furthermore, in the absence of adequate storage facilities, future delivery of agricultural products is difficult, especially for perishable commodities. To increase participation of farmers in commodities trading, procedural complexities need to be reduced. At the same time, farmers should be given formal training on how to manage futures trading, perhaps by appointing special agents who can assist them in trading.

8) Develop the Interest Rate Futures (IRF) market: A well-functioning IRF market will not only provide an instrument to hedge interest rate risk, but will also help in monetary policy transmission as the price of the futures contract will take into account the expectations of the market about the future direction of monetary policy.

One of the major reasons for low liquidity in this market is the limited retail participation in the government bond market, which dampens demand for interest rate futures to hedge interest rate exposure. Also, commercial banks and the RBI, which together are the biggest holders

[39] *The underlying agricultural commodity futures are required to have a turnover of at least Rs 200 crore to be eligible for options trading.*

of government bonds, may not feel the need to hedge their interest rate risk since the RBI is the manager of public debt. To increase participation in the IRF market, participation in the underlying G-Sec market should be made more diverse. Further, interest rate futures should be introduced on money market instruments that more closely track monetary policy changes.[40]

9) Relax investment rules for foreign investment in exchange-traded interest rate futures: Requirements that the gross short position in IRFs be less than the gross long position in government securities and IRFs may curtail foreign investment in IRFs. Guidelines for investing in IRFs should be relaxed for FPIs to make the market more liquid.

10) Increase participation of firms in the currency derivatives market by increasing open position limits: While some degree of speculation may be required for the smooth functioning of currency derivatives markets, there should not be a huge disconnect between currency derivatives and the underlying market (foreign trade). Participation by firms to hedge currency risk can be encouraged by increasing open position limits for clients, which are much lower than position limits for proprietary traders and stock brokers.

Financial Inclusion

Financial sector development should go hand-in-hand with reducing inequality in access to finance, with the aim of achieving universal coverage of banking and financial services.

Where Things Stand

1) The degree of financial inclusion has improved significantly as a result of the PMJDY. The PMJDY, launched on August 28, 2014, has been instrumental in improving access to banking services for unbanked households in India. A large number of bank accounts were opened under this scheme. The usage of these accounts was limited at first but has improved over time.[41]

[40] In October 2016, the RBI issued a circular on the introduction of money market futures, but the exchanges have not launched them yet.
[41] Agarwal et al. (2017) find that, in the early stages of the scheme, about 80 per cent of new accounts had little deposit activity in the first six months after the accounts were set up. The level of account usage rose as households became more familiar with banking services available through the accounts. Also see Ramadorai (2017) for analysis and recommendations regarding various facets of household finance in India.

While there has been significant improvement in the degree of financial inclusion, India still lags behind its peers. Between 2004 and 2016, the number of bank branches per 100,000 adults increased from 8.9 to 14, which is low compared to countries like Brazil, which had 20.4 branches per 100,000 adults in 2016. For Russia and the United States, this number was close to 33. There were only 21 Automated Teller Machines (ATMs) per 100,000 adults in India in 2016, compared to 109 ATMs in Brazil and over 160 ATMs in Russia.[42]

The use of financial services is also limited in India. In 2014, only 6.4 per cent of the population (age 15 or older) borrowed from a financial institution in the previous year, 10.7 per cent made payments using a debit card, and only 14.4 per cent saved at a financial institution.[43]

2) Inequality in access to finance has declined but there is room for improvement: According to the Intermedia Survey of financial inclusion, 60 percent of males and 48 per cent of females were financially included in 2014.[44] In 2016, these numbers increased to 66 per cent for males and 60 per cent for females, an overall improvement and also a smaller but still significant gender gap. This is also true for inequality in access to finance along other dimensions, such as employment and education.

3) Issues with the Business Correspondent (BC) model: The BC model introduced by the RBI in 2006 is a good idea in principle to provide door-step banking services in rural villages, but there are no statistics available on the effectiveness of this scheme. Since the BC model requires people to reveal their biometric data, there have been concerns that the agents employed by the BCs are misusing the data for their own purposes. A few cases of misappropriation of funds by BC agents have also been reported.[45]

According to a study conducted by the Center for Microfinance (CMF), the financial sustainability of the BC model is questionable.[46] The compensation of agents is tied to the usage of bank accounts by clients, who are low-income households and rarely use their bank accounts. Typically, agents have to spend a fair amount of resources on travelling

[42] *Source: Financial Access Survey, IMF.*
[43] *These are the latest available numbers taken from the World Bank's Global Findex database.*
[44] *According to the survey, financial inclusion is defined as having an account with an institution that provides a full suite of financial services and comes under some form of government regulation. Services include: savings, money transfers, insurance or investment.*
[45] *Source: http://bit.ly/2rcGMtk*
[46] *Source: http://bit.ly/2rcHkzz*

to the physical branch, which is located in the city. This often results in losses as the transportation cost outweighs the small commission earned due to low usage of bank accounts by clients. This may adversely affect the incentives of agents, which could have an effect on the quality of the services delivered to clients.

4) Rationalisation of branch authorisation policy: In May 2017, the RBI issued guidelines on the opening of banking outlets by Scheduled Commercial Banks, Small Finance Banks, and Payment Banks. These banks are now allowed to open banking outlets in Tier 1- 6 centres without requiring prior approval from the RBI. A banking outlet is “a fixed point service delivery unit, manned by either bank’s staff or its Business Correspondent where services of acceptance of deposits, encashment of cheques/cash withdrawal or lending of money are provided for a minimum of four hours per day for at least five days a week”. This move will increase the reach of banking services in the rural and unbanked areas of the country, as banks are not constrained by the need to open a brick and mortar branch. It should reduce the cost of opening a branch and should enable greater use of the BC model to deliver services at such outlets.

Main Recommendations

1) Scale up efforts to improve financial literacy: Having a bank account is a necessary but not a sufficient condition for people to rely on formal sources of finance. Measures to increase the reach of financial services will have to be complemented with efforts to improve financial literacy. The RBI has been striving to promote financial literacy in rural areas. However, there is a need to reassess existing financial literacy programmes, as a precursor to scaling up the infrastructure of financial literacy centres and developing innovative methods to engage with target audiences in order to ensure greater participation.

While the share of population with bank accounts has gone up sharply thanks to the government’s initiatives, active use of these accounts remains low. Many studies have shown that technology adoption cannot be forced and has to be brought about by inducing behavioural change. First, trust has to be instilled in the local communities regarding the use of financial services. Banks should employ local staff in rural areas to provide doorstep knowledge about the use of financial services; local vendors should be given incentives to use their bank accounts to make transactions. Network effects can play an important role. If people see their neighbours or friends using these services, they are more likely to use them, too.

In its April 2017 monetary policy statement, the RBI announced that it will initiate a pilot project on financial literacy at the block level to explore innovative and participatory approaches to financial literacy. The project has been commissioned in nine states. The RBI should, over time, consider expanding the frequency and scale of such projects.

2) Shift away from saving in gold: A majority of households invest their savings in gold, thereby diverting a large pool of savings from the formal banking system. Incentives should be given to people to deposit their savings in bank accounts by offering attractive savings options. The government had introduced sovereign gold bonds in 2015, but the market for these bonds has not picked up. Tranches of these bonds are offered for sale intermittently in a short time window. Making them available for sale on-tap (continuously) could boost their demand. The lock-in period of eight years makes these bonds less attractive as compared to investment in physical gold and could be reduced. More awareness needs to be created about these bonds and, in general, about the various savings options that people can use. Making these bonds eligible to serve as collateral for personal loans could also help increase the demand for these bonds. To increase awareness about these bonds, jewellers could be provided incentives to market them.

3) Make the BC model more reliable and putting together a database to evaluate its effectiveness: The BC model is a good idea in principle to provide banking services in rural villages. There is a need to make the BC model more reliable and restore trust of local communities in this programme. The agents should go through proper screening and should be certified by the associated banks so that security of the data is not compromised. Grievance settlement centres should be made accessible to people in rural areas where cases of misappropriation of funds by BCs can be reported. A database on BCs would help to evaluate the effectiveness of this programme and assess the changes required in the programme to ensure a greater reach of financial services in rural areas.[47]

The RBI should evaluate the financial viability of the BC model, assess cost/revenue sharing mechanisms among the bank, the BC, and the agents, and make appropriate changes to the compensation structure of the agents so that they are incentivised to provide high quality service to their clients. Currently, the BCs are mostly responsible for accepting deposits and facilitating withdrawal of funds. Their services should be expanded to include loan sourcing, loan recovery, etc. This can possibly lead to higher remuneration for BCs and make the BC model more viable over time.

4) Use of technology: In 2015, 79 of every 100 persons in India had mobile cellular subscriptions.[48] This implies that mobile banking can be used to a greater extent to provide banking services in the unbanked/under-banked areas, especially in remote areas where internet connectivity is poor. The Unstructured Supplementary Service Data (USSD) technology can be used to avail of financial and non-financial services even without an internet connection and on a basic cell phone. The USSD technology has been in place for some time but more awareness needs to be created about this technology. Also, a nominal fee is charged for the transactions using USSD even if the transaction does not go through. This fee can discourage people from using this service. To induce more usage, the fee on failed transactions should be refunded to customers.

Regulation and Supervision

Information asymmetry is an integral feature of all financial markets. This market friction accords financial regulation and supervision a particularly important role in the enforcement of financial contracts. India should have a robust legal framework and effective judicial apparatus that provides an enabling environment for the smooth functioning of financial markets. Such a framework

[47] *The RBI has already started work on many of these recommendations and also the ones made by the Committee on Medium Term Path on Financial Inclusion. It has also initiated implementation of BC registry and BC certification in collaboration with other industry stakeholders.*
[48] *Source: World Bank*

would include strong consumer protection, well-defined creditor rights, and speedy recovery of assets in case of bankruptcy.

Where Things Stand

Fragmented trading and regulation: At present, the regulation of different financial sectors is fragmented. SEBI governs the equity market, corporate bond markets, and commodities derivatives market while the RBI supervises the government bond market, money market, foreign exchange market, and interest rate derivatives market. Trading is fragmented. Equities, bonds, and equity derivatives are traded on the NSE and the BSE. Commodity derivatives trading takes place on commodity exchanges—the National Commodity and Derivatives Exchange (NCDEX), Multi Commodity Exchange of India (MCX), and National Multi Commodity Exchange of India (NMCE).[49] Spot trading in commodities takes place through Agricultural Produce Market Committees, state-level *mandis*, and the recently-launched national agricultural spot market platform (e-NAM). Market intermediaries such as brokers also have to float separate entities for trading in equities and commodities.[50]

Main Recommendations

1) Consolidation of trading regulation: There is some merit to having one regulatory body for trading of different financial products, as this would limit regulatory arbitrage and simplify complex guidelines for market participants.[51] Consolidating regulation of all financial markets under one roof will complement integration of trading. Having one regulatory body for all financial markets will make financial oversight easier as disclosure requirements will be harmonised across financial markets. It will also enable better identification of risks and spillovers across financial markets.

[49] *Three other national multi-commodity exchanges also offer futures trading in commodities. These are the Indian Commodity Exchange, the Universal Commodity Exchange, and the Ace Commodity Exchange. According to the Commodity Insights Yearbook, 2017, MCX is the market leader, accounting for about 90 per cent of the total volume in commodity derivatives trading. According to a December 28, 2017 SEBI press release, suitable amendments are being made to the Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporation) Regulations, 2012 to integrate trading of commodity derivatives with other segments of securities markets. These amendments will take effect on October 1, 2018.*

[50] *According to a circular issued by SEBI on September 21, 2017, broking activities in equity markets and commodities derivatives markets have been integrated under a single entity to facilitate the ease of doing business. The NSEL scam in 2013 triggered the merger of the Forwards Market Commission, which had been the regulator of commodities markets, with the SEBI.*

[51] *Some form of institutionalised cooperation between SEBI and RBI may be required in regard to the government bond market and currency derivatives markets, since the RBI conducts open market operations in the former and has an interest in the latter as part of its "leaning against the wind" strategy to mitigate short-term volatility in exchange rates.*

2) Integration of financial markets: Integration of trading will also bring about economies of scope and reduce costs of trading, as participants will not need to maintain separate margins for separate trades. For instance, commodity exporters are prone to price risk as well as currency risk. If they want to hedge the risk exposures in both dimensions, they have to maintain two separate margins—one at the commodity exchange and another at the securities exchange, which is inefficient and increases the cost of participating in the market. Integration of trading between spot and derivatives markets for commodities will also help in better price discovery by harmonising the price of future contracts with the price of the underlying contracts.

3) Reforms on resolution of financial firms: India does not have a well-defined resolution mechanism for failing financial firms. The Financial Resolution and Deposit Insurance (FRDI) Bill on the resolution of financial firms, which was referred to the Joint Parliamentary Committee (JPC) in August 2017, should be pursued as a high priority to strengthen the legal landscape. The recent Banking Regulation (Amendment) Bill, which empowers the RBI to initiate the insolvency resolution process in the case of default under the provisions of the Insolvency and Bankruptcy Code (2016), should be seen as only a temporary measure to accelerate the clean-up of banks, and not as a substitute for a formal bankruptcy code. India still needs a formal bankruptcy code for financial firms, which lays down a clear resolution process for these firms and minimises the scope for arbitrary intervention.

4) Effective implementation of the Insolvency and Bankruptcy Code (2016): IBC (2016) is a welcome step in strengthening the legal infrastructure but the challenge will be to see that it is well implemented. The capacity of Debt Recovery Tribunals to deal with the large number (thousands) of pending cases may be constrained by limited manpower and will require adequate planning to resolve these cases in a timely manner.

Other Reforms

1) Improve data gathering and dissemination: There is a need for improvement in data gathering and dissemination to promote research on macroeconomics and finance.[52] For instance, India does not have high-quality micro data with broad coverage on household finance, which is important to study how people make investment decisions, to understand the transmission of monetary policy, and to address a host of other important macroeconomic questions. Household survey data would also facilitate testing the effectiveness of various financial inclusion schemes, such as the BC model.

2) Step up technological infrastructure: To support innovation in financial products and also to keep pace with the increasing complexity of financial contracts, state-of-the-art IT infrastructure will have to be developed. Integration of financial markets would require strengthening of monitoring and surveillance mechanisms and enhancing the capability of trading exchanges to execute large orders rapidly.

3) Measures to make India a global financial centre in the long term: As India strives to become a global player in international financial markets, controls on foreign investment in India's financial markets should gradually be removed. This will also discipline these markets as foreign participants invest in markets that are more transparent and liquid. To remain globally competitive, the financial sector will have to maintain high levels of transparency and corporate governance, and follow global best practices in areas such as accounting and auditing.

[52] *In a speech delivered at the 11th Statistics Day Conference held at the RBI, Acharya presented the case for setting up a public credit registry, which would have loan level details of borrowing/lending transactions. A high-level task force has been set up on this matter and its report is due by April 2018.*

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