2020.03.27 (nle2020.04)

# The Bond Market in India

March 2020

Institute for International Monetary Affairs

The IIMA conducted an analysis of the debt markets in India in a research project commissioned by the Financial Services Agency.

Specific works we did on the basis of the proposed specifications include the followings.

(1) Collection and analyses of relevant documents

(2) Interview with experts within Japan and in India

(3) Interim exchange of views with the client

(4) Compilation and finalization the report

It should be noted that due to the constraints on overseas travel and domestic activities associated with the COVID-19 outbreak, we implemented the interview under (2) above by collecting information and exchanging views through telephone interviews and e-mails.

March 2020

Institute for International Monetary Affairs

Contents

## Preface

India has a population of more than 1.3 billion, and its population is projected to become the biggest in the world in the 2020s exceeding that of China. It is expected for India to maintain high growth rate at around 7% in medium-to long-term, although currently the economy has been struggled with deteriorated function of financial intermediation as is seen in the liquidity crunch triggered by the non-performing asset problems of commercial banks and credit problems of non-banking finance companies (NBFCs).

Many Japanese companies hold a high interest in the Indian markets with such a growth potential and India ranked highest for the first time in three years as the most promising country for business expansion in the mid-term (next three years), according to the "Survey Report on Overseas Business Operations by Japanese Manufacturing Companies--Results of the JBIC FY2019 (31st) Survey--. In fact, there is a sign that Japanese business operations in India have been getting into a full swing on a wide range of industries.

The second Modi administration which took office in May 2019 has been working on the improvement of business environment through legal and tax reforms and deregulations to achieve the goals of "Make-in India" program, an industrial promotion initiative, and the objective of raising India's economic scale to a $5 trillion level in the coming few years. India has prolonged fiscal deficits and it is critical for the government to utilize private sectors and foreign capitals to accelerate infrastructure investment and strengthen industrial competitiveness of enterprises. However, since Indian companies traditionally have been highly dependent on bank loans and stock markets as a funding source and the use of the bond market is limited to some of major companies, it is highly desired for India to further make efforts to accelerate financial and capital market reforms.

Based on such awareness of issues as noted above, we aim here to review the current situation of and future issues for the Indian bond markets including corporate bonds, and explore the potentiality for cooperation between Japan and India.

## Abbreviations

| | |
|---|---|
| BSE | Bombay Stock Exchange |
| CBLO | Collateralized Borrowing and Lending Obligation |
| CCIL | Clearing Corporation of India Ltd. |
| CCP | Central Counter Party |
| CROMS | Clearcorp Repo Order Matching System |
| ECB | External Commercial Borrowings |
| EPFO | Employees' Provident Fund Organisation, India |
| FDI | Foreign Direct Investment |
| FPI | Foreign Portfolio Investor |
| GIC | General Insurance Corporation of India |
| GOI | Government of India |
| HDFC | Housing Development Finance Corporation |
| IBC | Insolvency and Bankruptcy Code |
| IRDAI | Insurance Regulatory and Development Authority of India |
| LIC | Life Insurance Corporation of India |
| NCLT | National Company Law Tribunal |
| NDS-OM | Negotiated Dealing System-Order Matching Segment |
| NPS | National Pension System |
| NSE | National Stock Exchange |
| NSDL | National Securities Depository Ltd. |
| PD | Primary Dealer |
| PFRDA | Pension Fund Regulatory and Development Authority |
| RBI | Reserve Bank of India |
| SEBI | Securities and Exchange Board of India |
| SGL | Subsidiary General Ledger |
| SLR | Statutory Liquidity Ratio |
| TREPS | Tri Party Repo Dealing System |

## Abstract

### ■ Current status of financial system in India

When overviewing the size of financial system in India in terms of GDP, the banking sector and the bond market, especially corporate bond market, are relatively underdeveloped while the stock market is comparable to other major countries in Asia.

Non-financial corporations generally have a high dependence on borrowings from domestic financial institutions including banks, but the larger the corporations, the more they have diversified its funding sources including bonds and foreign currency borrowings from foreign financial institutions. More recently, companies have been increasing their borrowings from abroad against the backdrop of a declined lending capacity of domestic financial institutions reflecting non-performing asset problems of commercial banks and credit problems of non-banking finance companies (NBFCs). Diversification of funding sources is expected to provide lenders with such advantages as a dispersion of risk assets that unevenly concentrate in domestic financial institutions centering on banks. However, the fund raising from abroad is still limited to some of major local companies and multinationals, and there is no change to the fact that SMEs are confronted with the severe environment for fund raising. In addition, there is a mounting expectation for a utilization of private funds to finance strong infrastructure demands, making it indispensable for India to foster bond market together with improvement of domestic financial intermediation function.

### ■ Bond markets in India

Bond markets in India have been expanding mainly in the government bond market as domestic financial institutions have been obliged to maintain a certain percentage of government securities to facilitate a smooth absorption of government bonds which the government have issued to finance the budget deficits. Reform of government bond market had been placed as an important area in the economic structural reforms promoted after the 1991balance of payment crisis and under the leadership of the Reserve Bank of India (RBI), a central bank, deregulations and improvement of practical issuing business and secondary market have been promoted.

On the other hand, corporate bond market has been mostly limited to a private issuance and the liquidity in the secondary market is low because most of the bonds issued are held to maturity. Since 2007 efforts have been made to develop the corporate bond market initiated by the Securities and Exchange Board of India (SEBI), resulting in simplification of issuing procedures and shortening of period for public offering bonds. Yet, there seems to be little change in the heavy burdens on public issuance in terms of time and cost as compared to privately placed bonds. Moreover, a weak system for providing investors with risk hedge tools and protecting their interests, like credit default swap (CDS) market and bankruptcy procedures, is considered to be a major factor that impedes the development of a corporate bond market.

In recent years, there has been a gradual increase in issuance by Indian companies of Yen-denominated bonds (Samurai bonds) and Rupee-denominated bonds (Masala bonds). Fund raising by

issuance of Masala bonds may have an advantage of reducing exchange rate risks and its hedging cost. Also, Masala bonds seem to be more attractive to investors as, in addition to their higher yields, the procedures are simpler than investment in other domestic bonds in India. The advantage of raising funds through Samurai bonds is its low interest rate available in the Yen-denominated bond market. For the Japanese investors, relatively high yields seem to be attractive in an environment of continued low returns due to a prolonged low interest rates in Japan.

## ■ Evaluation of the bond market in India and future challenges

It may be pointed out as a problem of the Indian bond market that a specified number of issuers has repeatedly issued a large variety of corporate bonds. As a result, the outstanding amount of individual bonds is relatively small and their transactions in the secondary market is not active. Therefore, a challenge for India is to further simplify the procedures for public issuance and establish a securities depository center and a credit default swap market.

An obligation imposed on major bond investors to hold government securities has been impeding the flexible decision of investment targets and therefore it is desirable, among others, to further reduce the Statutory Liquidity Ratio (SLR). India could also increase the flexibility of investment through removal of investment restrictions to Foreign Portfolio Investors (FPIs), realization of Euroclear settlement and other relevant measures. If the Indian government bonds were to be included in the major bond indices, it would also enable India to attract more stable capital inflows from a wider range of investors.

## ■ Recommendations to the Japanese authorities

Japan would be able to support the efforts of the Indian authorities to improve the function of corporate bond market by providing them with the knowledges of the Japanese investors that have invest in the Indian bond markets and experiences in the development process of the Japanese corporate bond market.

Japanese investment in India’s bonds could be promoted by improved investment environment through such measures like liberalization of foreign exchange transactions related to bond trading, abolition of margin system and tax agent system on the government bond trading, lifting of limitations on bond investment and removal of capital gains tax on FPIs.

Furthermore, mutual listing of bond EFTs could be helpful in increasing mutual bond investment between Japan and India. To increase Indian issuers of Samurai bonds, in addition to the provision of knowledge on the Samurai bond market, partial guarantee by the JBIC may be utilized to the issuance of Samurai bonds by the Indian government agencies.

## 1. Current Situation of the Financial System in India

### (1) An overview

Comparing the size of the financial system in India with others in terms of GDP, stock market is well comparable to those in other major Asian countries (Figure 1). Combined market capitalization of the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE) exceeds that of Japan, becoming one of the major stock markets in Asia, albeit widely short of the amount of the international financial center of Hong Kong. The number of listed companies stood at 5,233 with the BSE, the largest in the world, and 1,923 with the NSE at the end of 2018. The NSE has a stock market turnover of 7-10 times larger than the BSE, boasting of a high liquidity against a backdrop of an effective trading based on the introduction of an electronic trading system. The NSE is also evaluated as the most prospective market in terms of stock derivatives, with its stock index option trading ranking first and single stock futures trading ranking second.

On the other hand, banking sector and bond market are relatively underdeveloped. Especially the corporate bond market had an outstanding balance of only about 16% of GDP at the end-September 2019.

India once had more than 20 stock exchanges at a peak time, headed by the BSE which has the oldest history in Asia of founding in 1875 and the NSE established in 1994. However, a majority of stock trading has been concentrated in the BSE and the NSE, and the Securities and Exchange Board of India (SEBI) plans to consolidate smaller exchanges other than the BSE and the NSE[1].

Figure 1：Financial Systems in Major Asian Countries

(% of GDP)

| | Domestic Claims (2018) | Stock Market Capitalisation (2018) | Bond Outstanding (at the end of Sep. 2019) | |
|---|---|---|---|---|
| | | | Gov. | Corp. |
| India | 76 | 151 | 31 | 16 |
| China | 222 | 49 | 56 | 30 |
| Indonesia | 43 | 47 | 17 | 3 |
| Malaysia | 144 | 114 | 55 | 50 |
| Philippines | 69 | 78 | 29 | 8 |
| Thailand | 124 | 99 | 33 | 22 |
| Vietnam | 142 | 55 | 28 | 10 |
| Japan | 281 | 106 | 198 | 15 |
| Korea | 166 | 83 | 43 | 77 |
| Hong Kong | 255 | 1,052 | 3 | 27 |

Note: 1) Stock Market Capitalisation in India is total of BSE and NSE.
2) Government Bond in India includes only G-Sec.
3) Stock Market Capitalisation in China is total of Shanghai and Shenzhen.
4) Stock Market Capitalisation in Vietnam is total of Hanoi and Ho Chi Minh.
5) Stock Market Capitalisation in Japan is JPX.
Source: RBI, India's Ministry of Finance, SEBI, IMF, WFE, ADB

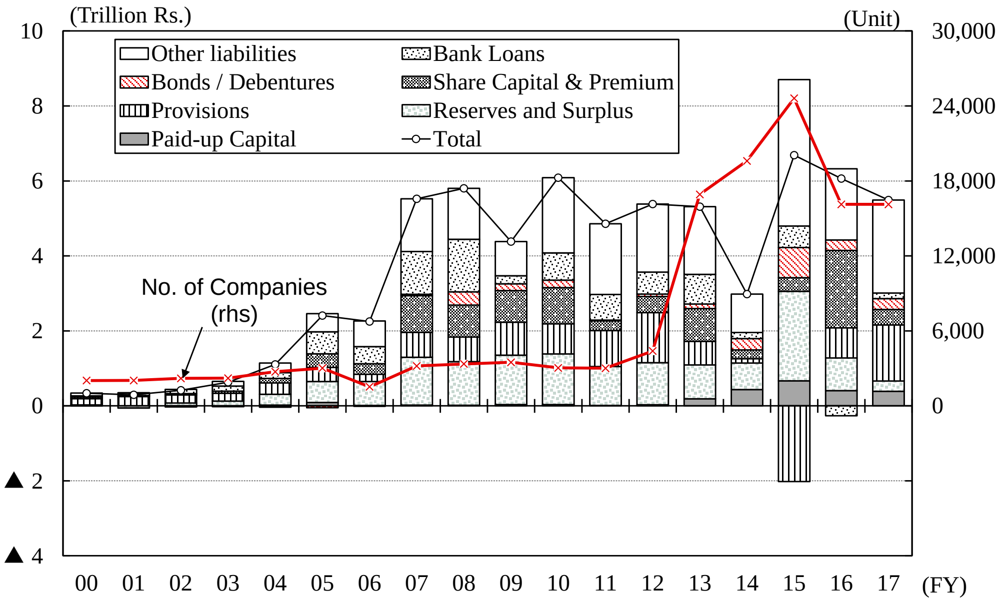
[1] Between 2013 and April 2018, licenses for 19 stock exchanges were cancelled and as of June 2019 the licenses for the Magadh Stock Exchange and the Calcutta Stock Exchange (CSE) were in the process of cancellation.

## (2) Funding structure of business corporations

Since the middle of the 2000s, fund raising increased in India against the backdrop of an investment boom by the business enterprises (Figure 2). More recently, the share of bank loans among fund raised from external sources has declined while the share of share capitals, corporate bonds and other liabilities have increased (Figure 3). In the background, it seems that not only the factors on the borrower's side like an increased repayment of loans but also those on the lender's side including the declining lending capacity of banks due to a need to handle their bad loan problems have affected the decreasing bank loans.

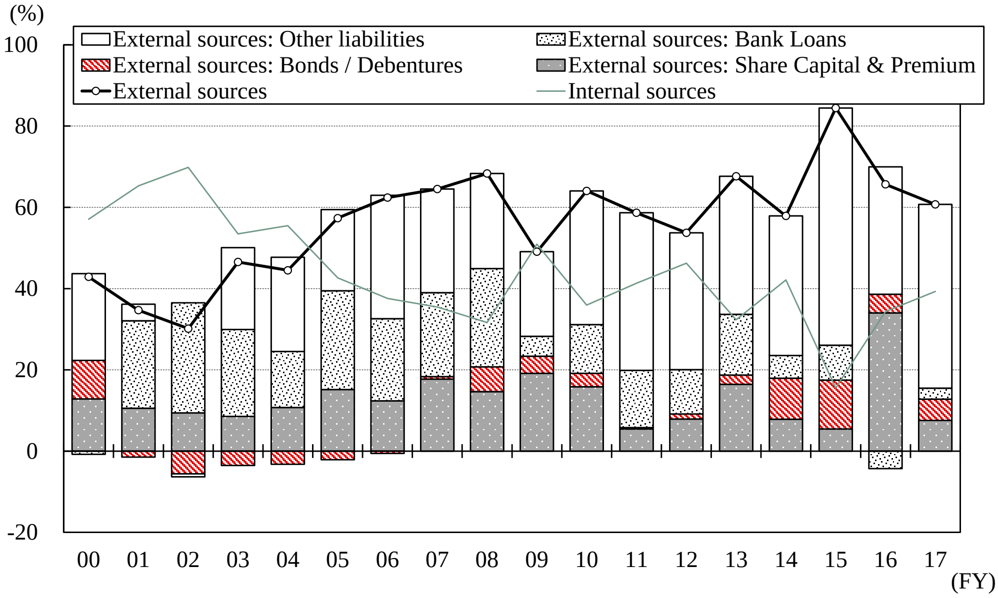
On reviewing the ways of fund raising of nonfinancial enterprises by their scale, it is seen that the larger companies have more diversified their funding sources by tapping bonds and foreign currency denominated loans from foreign financial institutions, although dependence on borrowings from domestic financial institutions centering around banks still remains generally high (Figure 4). Meanwhile, SMEs have a high dependency on the borrowings from domestic banks, but they have also started to utilize nonbank and non-market originated funds included in the "other" category.

Figure 2 : Borrowing of Non-Government Non-financial Listed Public Limited Companies



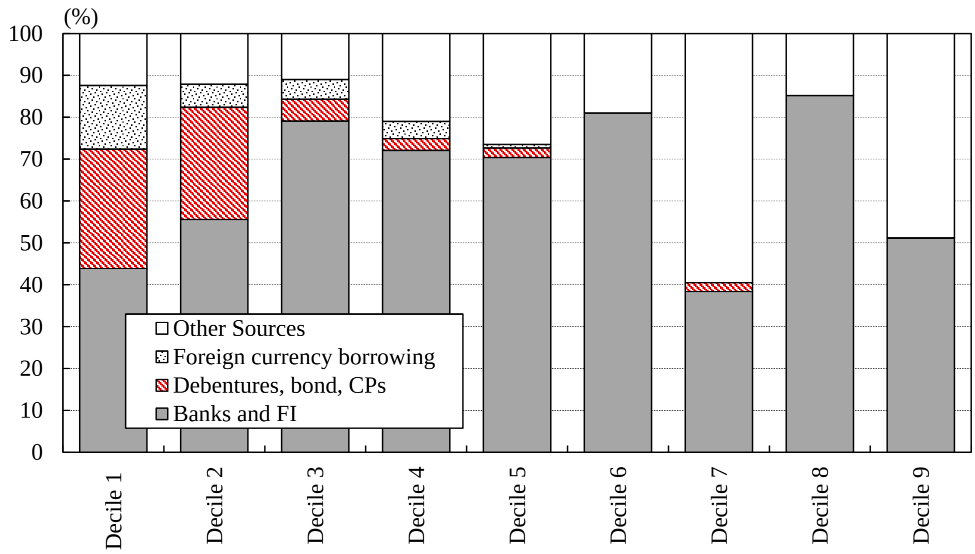

Source: RBI

Figure 3：Composition of Source of Funds of Non-Government Non-financial Public Limited Companies (in Proportions)




Source: RBI

Figure 4：Source of Funds of Non-financial Companies Across Size Categories (As of the end March, 2018)




Note: Size is defined as the three-year average of the total income and total assets of a company.
Decile 1 consists of largest among the sample.
Source: RBI

Currently, it is noteworthy that many Indian companies have been increasing their fund raising from abroad. Amidst the sluggish lending activities of domestic financial institutions at the backdrop of declining lending capacity triggered by the non-performing asset problems of banks and credit problems of non-banking finance companies (NBFCs), capital inflows like Foreign Direct Investment (FDI) and External Commercial Borrowings (ECB)[2] support the economic activities of business enterprises (Figures 5 and 6). It is considered that in addition to medium- and long-term high growth prospect of India, deregulation on FDIs and ECBs and declined borrowing costs reflecting low interest rates have led to this increase of funding from abroad. As for the ECBs, liberalisation has been promoted since 2018, including an expansion of eligible borrowers' list and easing of qualification criteria for lenders, as well as shortening of a minimum average maturity on a certain condition. In addition, introduction of Voluntary Retention Route for Foreign Portfolio Investors (FPIs) investment in March 2019 enabled FPIs to invest in debt market in India without restrictions of investment limit and the minimum retention period.

Looking at the borrowers by sector, manufacturing and finance services stand out (Figure 7). By the purposes, the percentages of "investment" and "on-lending and sub-lending" are high (Figure 8). Especially since the middle of 2018 when the domestic nonbank problems came to light, borrowings by housing finance companies for the purpose of "on-lending and sub-lending" have increased. The prominent increase in March 2019 reflected the borrowings by the major local enterprises like Export-Import Bank of India (totaling $650 million for the purpose of on-lending, sub-lending and working capital), Indian Railway Finance Corporation ($500 million for infrastructure development), National Thermal Power Corporation (NTPC) ($450 million for infrastructure development), which was also boosted by the borrowings by such foreign affiliated companies as Xiaomi Technology India Private Limited, a big Chinese smartphone manufacturer ($290 million for working capital), European steel giant ArcelorMittal India Private Limited ($500 for other purposes[3]).

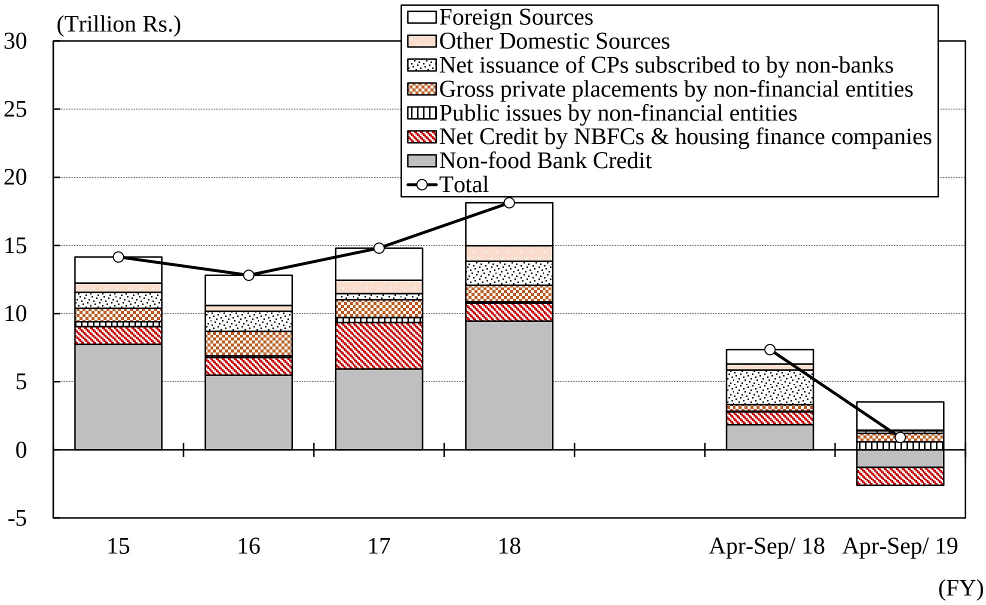
Some advantages are expected from an increased fund raising from abroad as it will give borrowers a way to diversify the funding sources and lenders a way to disperse risk assets that are concentrated in the domestic financial institutions, especially in banks. However, the fact remains that the funding from abroad is limited to some of major local enterprises and multinationals while SMEs are still facing a harsh financing environment. Also, there is a growing expectation for utilizing private funds to cover the booming infrastructure demands. These developments have made it indispensable for India to foster a bond market together with improving the function of domestic financial intermediation.

---

[2] External Commercial Borrowings (ECB) include commercial loans/ syndicated loans provided by nonresidents, borrowings by buyer's credit, supplier's credit, FCCB, FCEB, non-convertible preference shares, optionally convertible preference shares and securitized instruments (Bonds, CP, FRN, etc.).

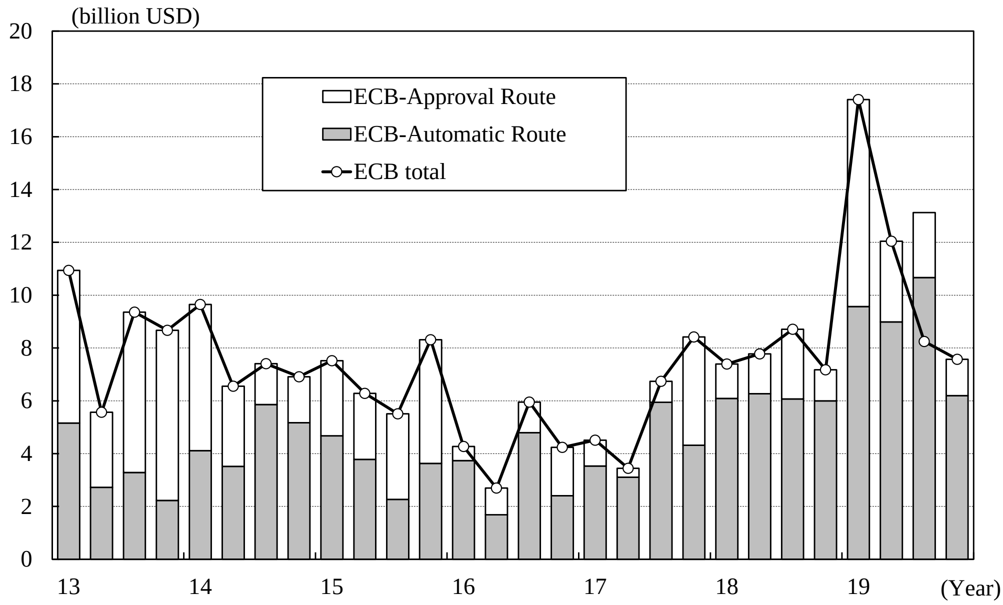
[3] It is considered a financing directed at acquisition of Essar Steel India Limited which was in the process of rehabilitation under the Insolvency and Bankruptcy Code.

Figure 5：Flow of Financial Resources to the Commercial Sector in India



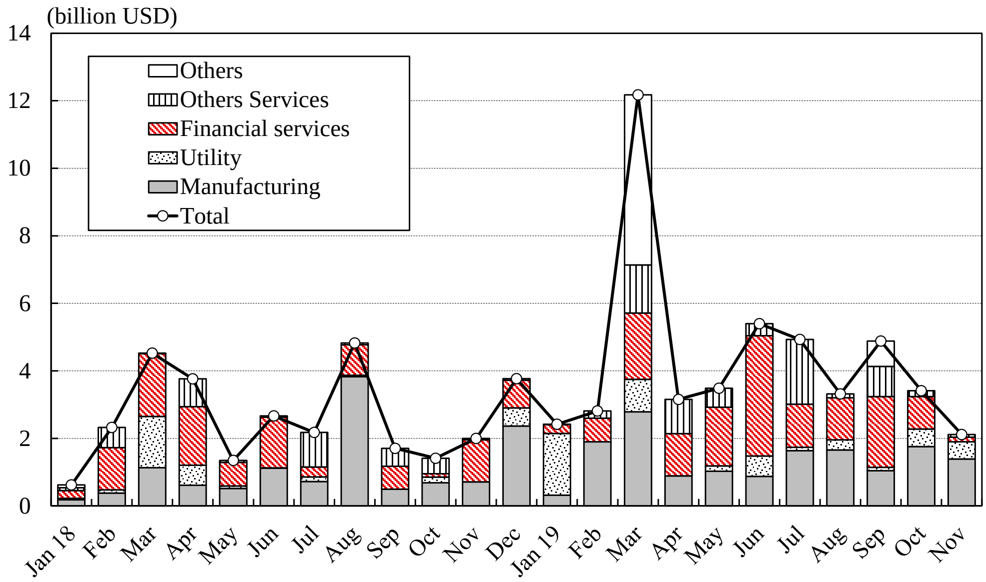

Note: "Foreign Sources" includes ECB, Short-term credit from abroad and FDI.
Source: RBI

Figure 6：External Commercial Borrowings in India



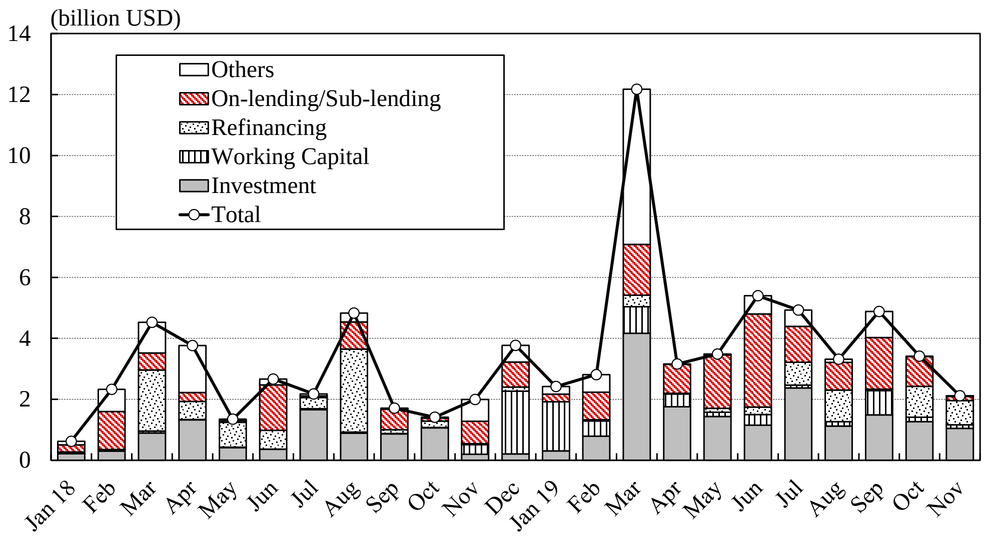

Source: RBI

Figure 7 : External Commercial Borrowings by Sectors




Note: "ECB" includes bank borrowing and foreign currency convertible bonds.
Source: RBI

Figure 8 : External Commercial Borrowings by Purposes




Note: 1) "Refinancing" includes that of earlier ECB and Rupee loans.
2) "Investment" includes import of capital goods, investments for modernisation, new poject and Infrastructure development.
Source: RBI

## 2. India's Bond Markets

### (1) Domestic markets (Market size and structure)

#### ① Government bond market

India's bond markets have developed mainly in the government bond market as domestic financial institutions have been obliged to maintain a certain percentage of government securities to facilitate a smooth absorption of government bonds which had been issued to finance (monetize) the fiscal deficits.

Reforms of the government bond market have been positioned as an important area to be addressed in the economic structural reform efforts promoted after the 1991 balance of payments crisis, and the Reserve Bank of India (RBI) has been playing a major role in promoting deregulations and fostering secondary markets as well as in conducting actual issuing business. Specifically, it introduced an auction issuing system for government bonds in 1992 and primary dealer (PD) system in 1996, and has promoted in stages an expansion of the types of bonds issued and liberalization of interest rates and easing of regulations on short selling. On the other hand, the monetization by the RBI had been phased out, and effective April 2006 the RBI was restricted from participating in the government bond auctions as per the provision of the Fiscal Responsibility and Budget Management Act 2003[4]. As for the secondary markets, efforts to increase liquidity have been made through such measures as regular issuance of 10-year benchmark securities and development of a repurchase transaction (repo) market, introduction of transactions on interest rate futures and interest rate derivatives, together with gradual reduction of ratio of the Statutory Liquidity Requirements (SLR) that obligate commercial banks to hold a certain percentage of government securities.

Auctions for government bonds are conducted every week based on the terms (amounts of borrowing, the range of tenor of securities, and the period during which auctions will be held) indicated in half-yearly auction calendar. It is participated by banks, insurance companies, mutual funds and other financial institutions in addition to PDs. As of July 1 2016, there were 21 PDs, 7 standalone PDs, and 14 certified banks. Most of the government bonds are fixed coupon bonds (G-Sec), accompanied by a variety of other instruments such as T-bills, zero-coupon bonds, floating rate bonds, capital indexed bonds and so on. 90% of the issue is a re-opening of an existing bonds on the same terms.

Outstanding bond issuance by the public sector as of December 2019 stood at Rs 98 trillion, comprising Rs 68 trillion by government bonds (Rs 58 trillion for G-Sec., Rs 5 trillion for T-bills, and Rs 4 trillion for others), Rs 29 trillion by State Development Loans (SDL) issued by state governments, and Rs 2 trillion of UDAY bonds[5] that were issued under the program of resolving the debts of state power distribution companies (Figure 9). In recent years, SDLs have increased to a level that is almost comparable to government bonds while the latter maintains a certain percentage of a share. Government bonds with tenor of 10 years and less account for more than half of the outstanding

[4] GOI (2003)

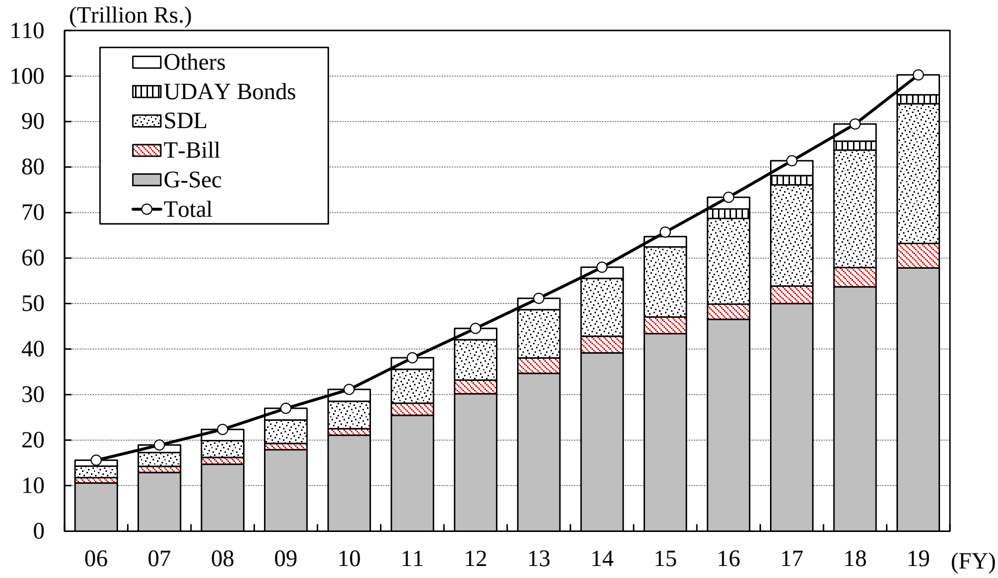
[5] In November 2015, the government of India took a measure to securitize the debts of state power distribution companies and sell them in two years under the UDAY program which aims to resolve the debt problems of state power distribution companies.

issuance (Figure 10). New issuance of short- and medium-term bills and notes of less than 5 years has been increasing together with the long-term bonds of more than 10 years, with the weighted average maturity of outstanding hovering around above 10 years.

By holders of government bonds, the percentage share of commercial banks tended to decline from 70% at its peak in the early 1990s, to 40% as of September 2019, still accounting for the largest share (Figure 11). It is followed by insurance companies at 25%, the RBI (on its own account) at 15%, provident funds at 5%, foreign institutional investors at 3%, and mutual funds at 1%.

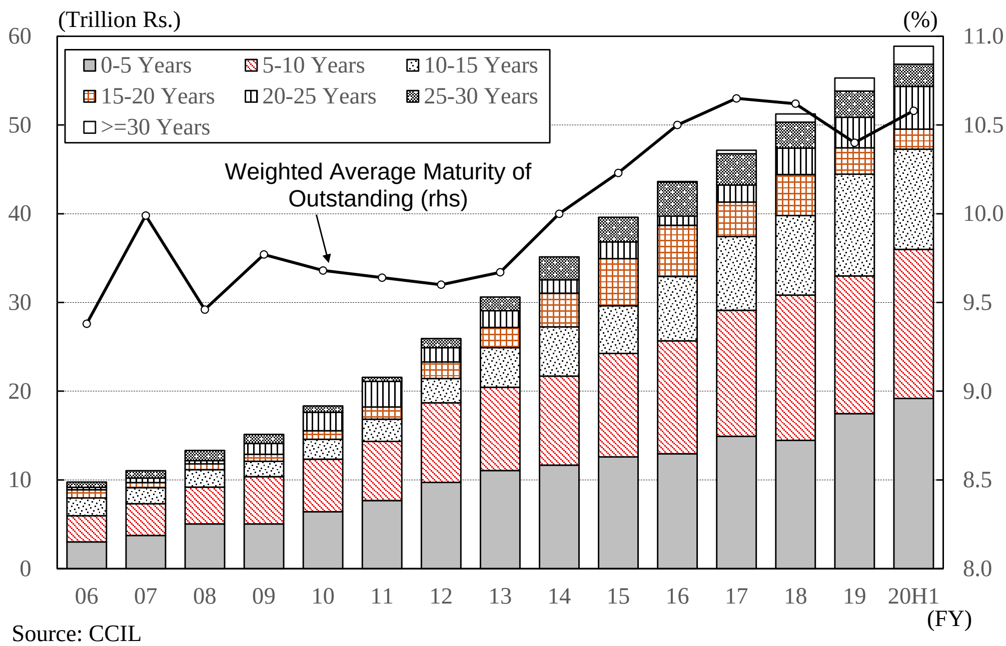
Tenor-wise composition of settlement in the secondary market shows that long-term bonds of 7-10 years account for 60 to 70 % of the total, while short- and medium-term notes under 5 years account for around 20% (Figure 12). By type of investors, the percentage of private banks has risen to about 30% while that of foreign banks declined to around 20%, a level comparable to public sector banks, followed by PDs and mutual funds (Figure 13).

Figure 9：Outstanding of Government Securities, T-Bills and State Development Loan



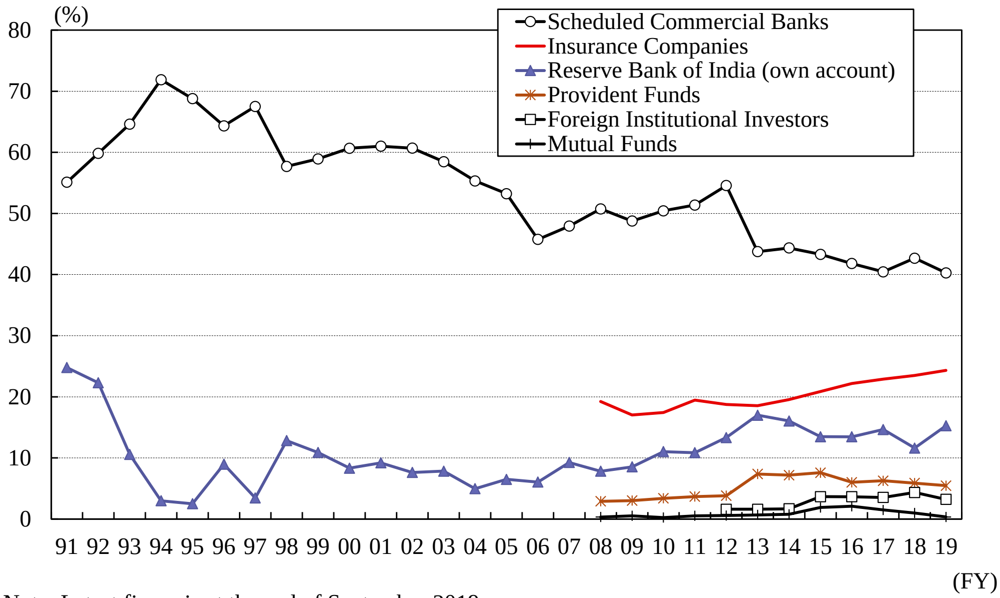

Note: "Others" includes Floating Rate Bonds and Special Securities.
Source: CCIL

Figure 10：Maturity Profile of Central Government Dated Securities Outstanding (End-March)



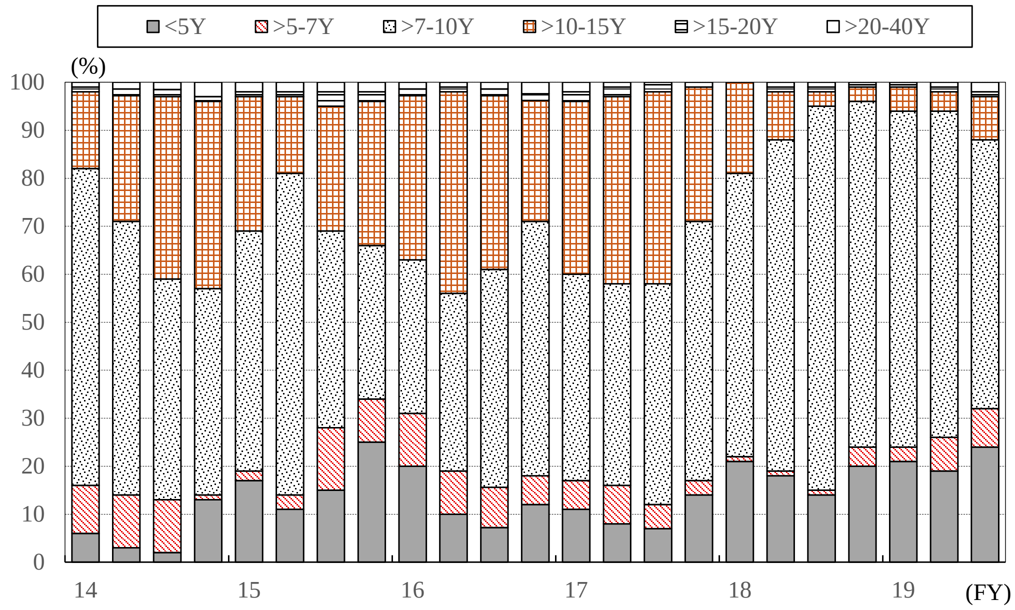

Source: CCIL

Figure 11：Ownership of Central Government Securities by Sector



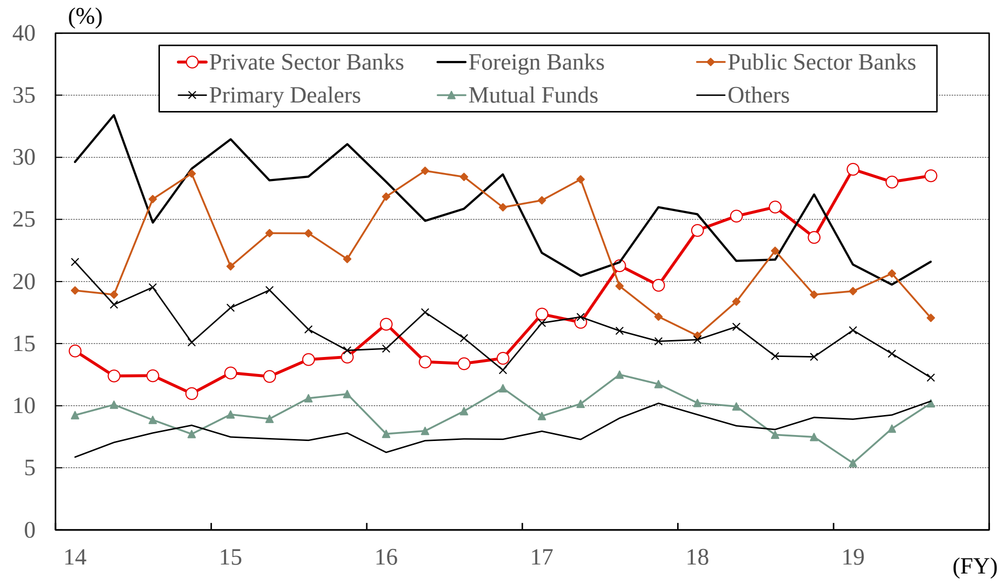

Note: Latest figure is at the end of September 2019.
Source: RBI

Figure 12 : Tenor-wise Settlement Volumes of G-Secs (Percentage Shares)




Source: CCIL

Figure 13 : Category-wise Trade Participation in Secondary Market (Percentage Shares)

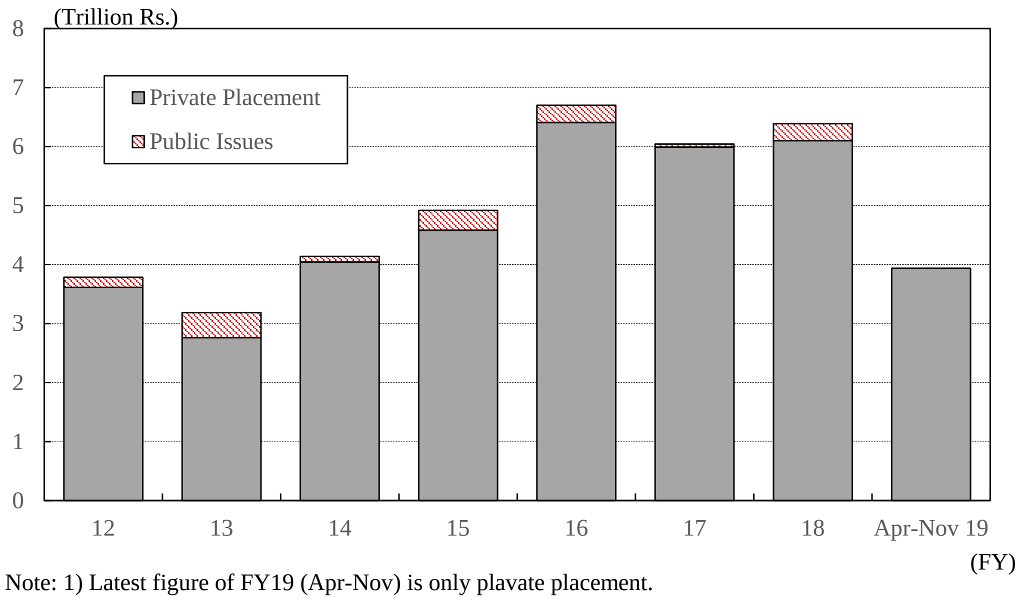



Note: "Others" includes Cooperative Banks, FIs and Insurance Companies.
Source: CCIL

### ② Corporate bond market

Development of Corporate bond market has lagged as compared to a government bond market. The outstanding issuance amounted to Rs 31 trillion at the end of September 2019, less than a half of the government bonds. Most of the issues are of private placement and most of them are held to maturity by institutional investors causing a low liquidity in the secondary market (Figures 14 and 15).

Figure 14：Corporate Bond Issuance




Note: 1) Latest figure of FY19 (Apr-Nov) is only plavate placement.
2) Figure of Public Issues in FY18 is as of Dec. 2018.
Source: NSE, SEBI

Figure 15：Selected Indicators of Government Bonds and Corporate Bonds Market

(Trillion Rs.)

| | Amount raised from Primary Market | | | Turnover in Secondary Market | | |
|---|---|---|---|---|---|---|
| | 2015-16 | 2016-17 | 2017-18 | 2015-16 | 2016-17 | 2017-18 |
| Government | 10 | 11 | 12 | 152 | 252 | 204 |
| Corporate/ Non-Government | 5 | 8 | 7 | 10 | 15 | 18 |
| Total | 16 | 19 | 19 | 162 | 267 | 222 |

Note: Amount Raised from primary market for corporate sector includes public issues and private placement issues.
Source: NSE

Sector-wise breakup of issuances in the primary market for corporate debt shows the dominance of finance and infrastructure companies, which together accounted for about 90 per cent of total cumulative value outstanding during 2017-19. The share of manufacturing was less than 1 per cent. In the primary market, the bulk of bonds issued were 2-5 year tenor range. The highest rated bonds (AAA rated) accounted for more than half of total amount outstanding in the primary segment during the last two years.

Similarly, the secondary market exhibits a similar sector-wise and rating-wise composition, with finance accounting for about 60%, infrastructure about 20%, and manufacturing only a small portion (Figure 16). Major issuers among finance include Power Finance Corporation, a financial institution that invests in Indian power sector, National Bank for Agriculture and Rural Development (NABARD), and many housing finance companies headed by Housing Development Finance Corporation (HDFC), a leading provider of housing finance in India. Infrastructure category is mainly represented by National Thermal Power Corporation (NTPC), National Highways and Infrastructure Development Corporation. The number of issuers is not large, with a limited number of issuers repeatedly issuing various categories of corporate bonds. By rating, high rated bonds (above AA rated) account for about 80 per cent of the total (Figure 17).

Although it difficult to have a precise picture due to constraints on the availability of detailed data, the composition of corporate bonds by investors in their asset under management suggests that insurance companies, provident funds, and banks are the main lenders of funds (Figure 18). It is necessary, though, to take into consideration that the outstanding amounts of insurance companies and provident funds include financial sector bonds issued by public sector financial institutions.

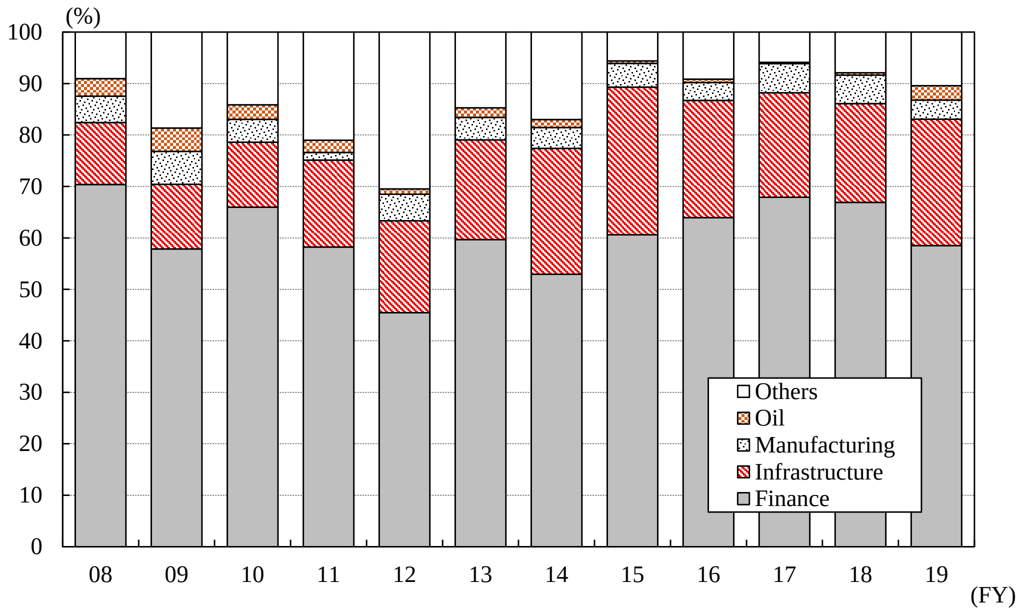
In the background of this delayed development of a corporate bond market in India, there are factors on both sides of supply (issuers) and demand (investors). On the supply side, non-financial corporations traditionally relied highly on bank loans as their financing sources, and issuance of corporate bonds had practically been limited to such issuers as public sector enterprises and infrastructure related enterprises which are virtually guaranteed by the government. Public issuance requires a certain amount of time and cost in preparing prospectus and shelf registration. Although the procedures for shelf registration of public issues have been in the direction of being shortened, it is reported that it will take at least 4 to 5 months even if the procedures are smoothly processed without problem, which is 4 times as long as in Japan (about 1 to 1.5 months). Moreover, it is likely to take much more time to obtain approval it if the issuer needs to get an approval from relevant regulating authorities (RBI, Telecom Regulatory Authority, or IRDAI, etc.). The reason why the number of issuers does not increase seems to be largely attributed to the fragile system regarding risk hedging for corporate defaults and insufficient protection of investors' interests under undeveloped credit default swap (CDS) market and weak bankruptcy procedures. On the other hand, in the case of private placement bonds, such factors as the smaller burdens on disclosures and easiness of re-negotiation on terms seem to be attracting issuers to choose private issues as well as a lower risk for legal liability against false statement since the investors are limited to less than 50 Qualified Institutional Buyers. As a private placement bond can be issued in a single day, some regard it virtually as a syndicated loan because in many cases it is issued in small portions several times within a day, which the same lenders (mostly banks) buy on the similar terms[6].

On the demand side, as stated below, insurance companies and provident funds are obliged under the prudential regulation to maintain a certain percentage of assets in government securities, and their holdings of other securities are also subject to conditions that they should be of high rated bonds issued

[6] Stephen Wells and Lotte Schou-Zibell (2008)

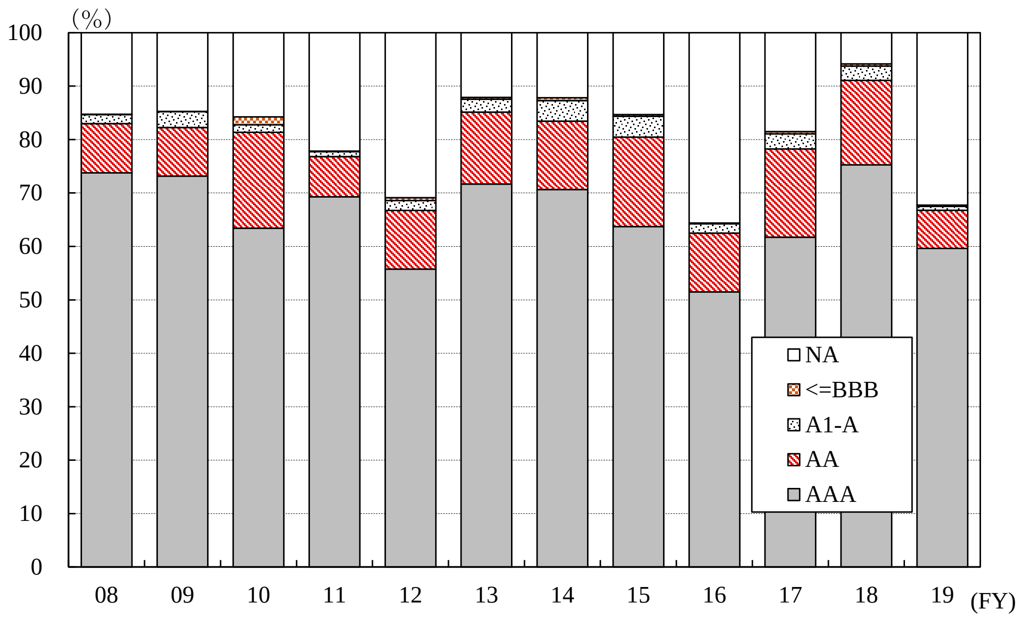
by housing finance companies and infrastructure related entities, while the companies are restricted to hold risk assets like lower rated corporate bonds other than the above. Investment by foreign institutional investors is in the direction of gradual deregulation, but the ceiling regulation on investment has restricted the pace of increase.

Figure 16：Sector-wise Corporate Bonds Trading in Secondary Market



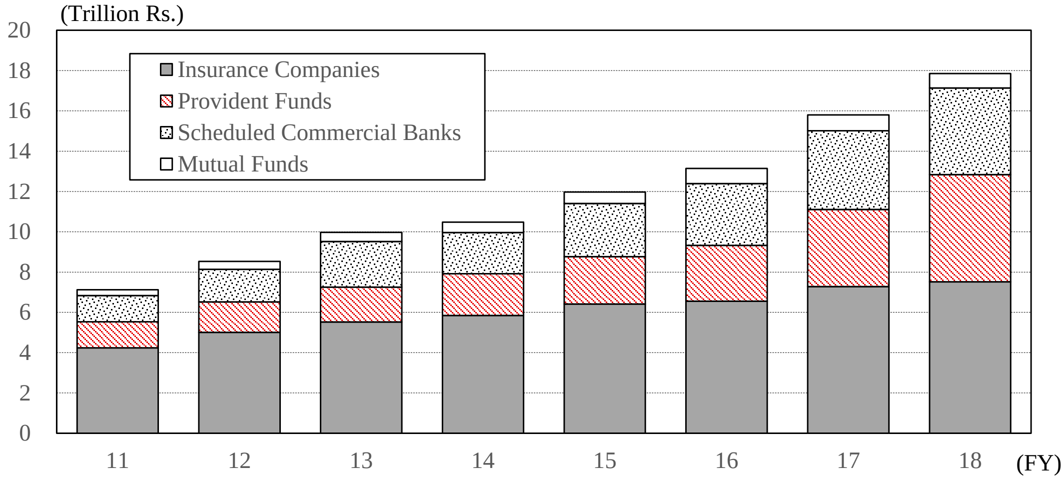

Source: CCIL

Figure 17：Rating-wise Corporate Bonds Trading in Secondary Market




Source: CCIL

Figure 18：Investment Outstanding in Corporate Bonds by Major Investors




Note: 1) "Insurance Companies" includes approved investment other than central and state governement, excluding unit-linked funds.
2) "Provident Funds" includes Public Sector Financial Institutions Undertakings(PSU) (including Private sector bonds/securities (PVT).
3) "Scheduled Commercial Banks" includes Debentures and Bonds excludes governemnt securities.
4) "Mutual Funds" includes Corporate Bond Funds (partly estimated).

Source: IRDAI, EPFO, NPS Trust, RBI, AMFI, IIMA

## (2) Offshore markets

### ① Foreign currency denominated bonds

In the past, the Indian corporations' borrowing from overseas was limited to foreign currency denominated borrowings, led by dollar denominated ones, within the framework of External Commercial Borrowings (ECB) introduced in 2000[7]. Furthermore, on the issuance of bonds within the framework of ECBs, utilization of non-convertible bonds had been limited to so-called blue-chip corporations, while other companies seem to have more often used foreign currency convertible bonds (FCCBs). To issuers, FCCBs are flexible in terms of financing cost (coupon rates and others), borrowing tenor and purpose of use than non-convertible bonds, while it is considered to be attractive to investors that they can be hedged against default risk of issuing companies by converting them to shares at a pre-agreed price.

However, when the Indian rupee plunged against the US dollar in 2011 to 2013 spurred by an increase of the current account deficits and the tapering of the quantitative easing by the US Federal reserve, Indian corporations faced with a problem of increased cost in funding in foreign currencies. Therefore, to facilitate rupee denominated borrowing from overseas, the government of India started to take more initiative, with the support of the International Finance Corporation (IFC), to develop the capital markets for both onshore and offshore market.

### ② Rupee-denominated bonds (Masala bonds)

Borrowing by issuing rupee-denominated bonds (RDB) (Masala bonds) overseas can be expected to give issuers such advantages as to mitigate exchange rate risk and its hedging cost. For investors, higher yields and exchange profits from appreciation of the rupee, and simpler procedures for investment compared to investment to Indian domestic bonds would be attractive advantages[8].

In October 2013, IFC launched a program to sell Masala bonds in overseas markets. During the phase I period to April 2014 (for a total of Rs 62 billion or equivalent to $1 billion), IFC issued 7 tranches with tenors of 3 to 7 years[9]. During the phase II period (for a total of $2 billion equivalent), in addition to the masala bonds (Rs 10 billion with a tenor of 10 years) issued in November 2014 on the London Stock Exchange (LSE) for the purpose of infrastructure development support, it successfully floated the Rs 2 billion of bonds with the then longest maturity of 15 years on offshore rupee market. Moreover, IFC issued Rs 300 million of green masala bonds and Masala Uridashi bonds directed toward Japanese personal investors. The bonds with maturities of less than 10 years were oversubscribed and it is evaluated that these issuances had achieved a certain result in establishing a benchmark yield curve and grasping investor demands. Also, as the masala bonds issued by IFC have yields by 100-190 bps lower than the Indian government bonds with corresponding tenors, they are expected to reduce financing costs. On the other hand, it is also pointed out as a problem that investors

---

[7] For more details of ECBs, please refer to also 1. (2). Although the RBI began to approve ECBs denominated in rupee in 2011, they were restricted to borrowings from foreign shareholders and the like.

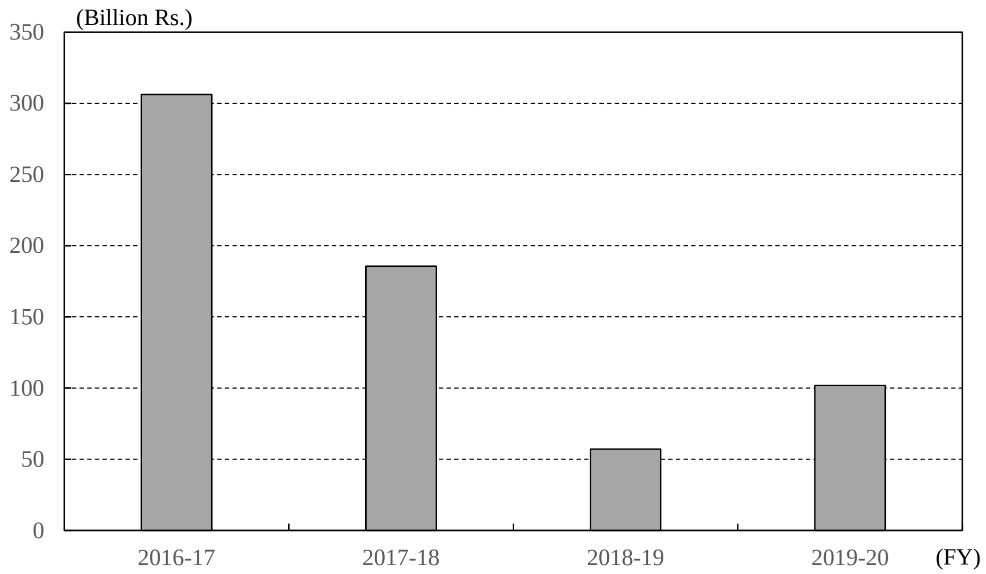
[8] Nomura Research Institute (2017). When foreign investors invest in Masala bonds, they are not required to register as FPIs, but are subject to a bond ceiling applied to FPIs.

[9] Exchange rate of the rupee is fixed and the settlement is made in dollar.

tend to hold the 10 year- and 15 year- Masala Uridashi bonds to maturity, causing a low liquidity.

After these experiences, in September 2015 the RBI issued a guideline arrowing domestic corporations to issue masala bonds overseas[10]. At the beginning, there were restrictions on the eligible borrowers (REIT, infrastructure investment trusts), minimum maturity period, and amount ($750 million per annum under the automatic route), but later some of the conditions on maturity period and all-in-cost ceiling and recognised investors were eased[11]. Following the first issuance of Rs 30 billion by HDFC in July 2016, issuance of masala bonds by NBFCs and SOEs increased, bringing the total financing amount to about $300 billion in the fiscal 2016 (Figure 19). Currently, issuance on the Singapore Exchange (SGX) in addition to the LSE has become a mainstream, with asset management companies, private banks, and commercial banks joining as investors. At present, the growth of funding has slowed reflecting a declining demand for funds due to economic slowdown in India and weakening appetite for investment by foreign investors.

Figure 19: Issuance of Rupee denominated bonds by Indian Companies




Note: Latest figure is as of February 2020.
Source: RBI

### ③ Yen-denominated bonds (Samurai bonds)

In recent years, issuance by Asian issuers of Yen denominated bonds (Samurai bonds) has been increasing. While the availability of funding in low interest rates in the Samurai bond market is attractive to issuers, Samurai bonds seem to be also a prospective target of investment for Japanese investors as they have relatively higher yields amid the continued difficult circumstances for fund management due to prolonged low interest rates. The issuance of Samurai bonds by corporations in Asian emerging countries has been also supported by partial guarantee and acquisition[12] of Samurai

[10] RBI (2015b)
[11] RBI (2017)
[12] https://www.jbic.go.jp/ja/information/press/press-2010/0415-6618.html

bonds under the JBIC's GATE Facility which aims at enhancing the Tokyo Samurai bond market. The publicly-issued Samurai bonds amounted to ¥2.4 trillion in the fiscal 2018 (April 2018 to March 2019), doubling from the previous fiscal year. As the Japanese investors have faced a severe environment of negative interest rates, the demand is strong for Samurai bonds that offer relatively higher yields.

Among the cases of issuance of Samurai bonds by Indian corporations, noteworthy is the issuance by Export-Import Bank of India (EXIM Bank). After issuing private placement bonds in 2011 and 2014 with a guarantee of the JBIC, EXIM Bank issued publicly offered bonds in September 2019, first in 13 years (Figure 20). The final subscription for this public offering amounted to about ¥90 billion, far exceeding the estimated amount of issuance (¥32 billion).

Many of the issuers of Samurai bonds not only from India but also from other emerging economies are limited to sovereign governments or public sector entities and financial institutions and it is the reality that relatively high-profile issuers have repeatedly issued Samurai bonds. Depending on the rating of the issuers, availability of guarantee also has been an important factor for the issuance. Therefore, enhanced collection of credit information on the issuing countries and issuers of Samurai bonds and better utilization of guarantees are considered a key to expand the issuance of Samurai bonds.

Figure 20: Issuance of Yen-denominated Bonds by EXIM Bank of India

| Year | Maturity (Years) | Amount raised (Billion Yen) | Particulars | Guarantee | Coupon Rates (%) |
|---|---|---|---|---|---|
| Feb-06 | 5 | 23 | Public issuance | None | 1.75 |
| Nov-06 | 5 | 26 | Public issuance | None | 2.07 |
| Apr-11 | 10 | 20 | Private placement | JBIC providing partial guarantees | 1.88 |
| Nov-14 | 10 | 20 | Private placement | JBIC providing partial guarantees | 0.97 |
| Sep-19 | 3 | 25 | Public issuance | None | 0.59 |
| | 5 | 7 | | None | 0.66 |

Source: Exim Bank of India, JBIC

## (3) Market participants

### ① Commercial banks

After independence, India operated a system of a "mixed economy", so-called "Socialism in India" that was strongly influenced by the planned economy. Later, amid the strengthened socialistic policies for the economy, the banking sector experienced in 1969 an extensive institutional reform of nationalization of commercial banks. By the nationalization of banks, lending focused on specific areas like agriculture, small manufacturers and export industries was expanded in line with the government plan.

After that, in the economic reforms pursued since 1991, efforts were made on the banking sector to (i) improve profitability, (ii) lower the non-performing asset ratios, and (iii) to establish competitive private banks. However, public sector banks still play a predominant role among the scheduled commercial banks in the banking sector, with their assets accounting for about 60% of total assets of scheduled commercial banks (Figure 21). In recent years, restructuring is under way for the public sector banks which are adversely affected by increasing non-performing assets.

Figure 21 ： Banking Sector in India (as of end-March 2019)

(Trillion Rs.)

| | Type of Banks | Number of Banks | Total Assets |
|---|---|---|---|
| Bank | Scheduled Commercial Banks | 87 | 166.0 |
| | Public Sector Banks | 20 | 101.6 |
| | Private Sector Banks | 22 | 53.0 |
| | Foreign Banks | 45 | 10.6 |
| | Small Finance Banks | 7 | 0.8 |
| | Regional Rural Banks | 56 | 5.6 |
| | Local Area Banks | 4 | 0.0 |
| | Co-operative Banks | 97,792 | 7.0 |
| | Urban Cooperative Banks | 1,544 | 6.0 |
| | Rural Co-operatives | 96,248 | 1.0 |
| Non-Bank | All India Financial Institutions | 4 | 8.3 |
| | Non-Banking Financial Companies | 9,642 | 32.6 |

Note: Figures of Rural Co-operatives are at the end of March 2018.
Source: RBI

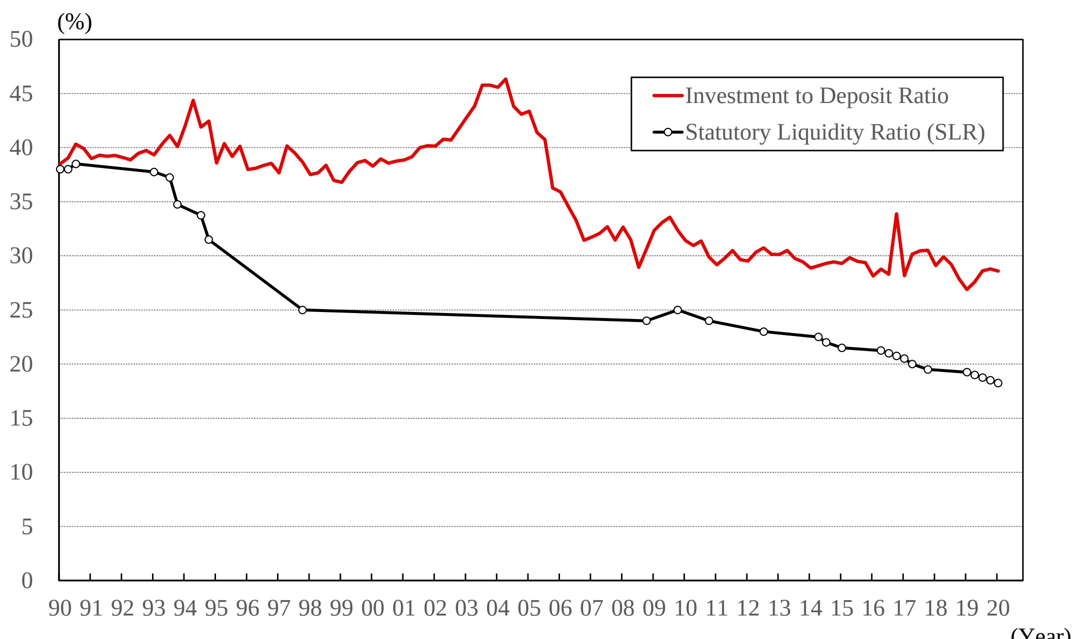
It is the RBI, central bank of India, that has authorization to regulate and supervise commercial banks. Under the Banking Regulation Act, 1949[13], it has such an authority as to issue banks a license, permit establishment of branches, make an on-site examination on banks, and to appoint and remove the managing directors of banks[14]. Within the RBI, the Board for Financial Supervision (BFS)

[13] RBI (2007)
[14] The authority was expanded to cover other financial institutions and nonbanks by the 1964 revision of the law.

undertakes consolidated supervision of banks.

Commercial banks are required by the regulation on Priority Sector Lending (PSL) to achieve a target of lending 40% of Adjusted Net Bank Credit (ANBC) to specified areas[15] such as agriculture and micro, small and medium enterprises and they are also obliged to maintain a certain percentage of government securities against their deposits (Net Demand and Time Liabilities: NDTL) under the Banking Regulation Act and the Statutory Liquidity Requirement (SLR), showing an influence of the old socialistic economic regime remains strongly. Details of SLR-eligible Government securities are described at full length in the prudential policy[16] decided by the RBI. The SLR ratio has been gradually reduced (to18.25% as of March 17, 2020), but actually, commercial banks hold government bonds and government-approved marketable securities at higher level than the SLR requires to maintain (Figure 22). It is considered the main cause for this situation that the government securities held under SLR are not eligible for repo transactions excluding on some exceptions. Most of commercial banks manage to secure funds largely by participating in triparty repo transactions (TREPS) or the Reserve Bank repo transactions conducted through Liquidity Adjustment Facility (LAF) and Marginal Standing Facility (MSF) and they are thus compelled to hold more government securities than the SLR requires. In addition, as the regulations on the liquidity coverage ratio (LCR) were gradually strengthened in 2019, individual banks have had to raise funds far exceeding their lending, with the excess money flowing into government securities.

Figure 22：SLR and Investment Ratio of Commercial Banks in India




Note: Investment includes government securities and other approved securities.
Source: RBI

15 The categories under priority sector include agriculture, micro, small and medium enterprises, export-credit, education, housing, social infrastructure, renewable energy, and others.
16 RBI (2015a)

### ② Insurance companies

In India, the insurance industry had been long monopolized by two state-owned insurance companies (insurers) of the Life Insurance Corporation of India (LIC)[17] incorporated in 1956 and the General Insurance Corporation of India (GIC)[18] incorporated in 1972. In 2000, the Insurance Regulatory and Development Authority of India (IRDAI) was constituted as an autonomous body to regulate and develop the insurance industry under the Insurance Regulatory and Development Authority Act,1999[19], and the IRDAI is now promoting opening-up of the market to private insurers.

At the end of March 2019, 53 insurers are registered (Figure 23), consisting of 24 life insurers, 25 general insurers, 2 specialized insurers[20] and 2 reinsurers. By capital subscription, 8 insurance companies including the LIC, the largest insurance company in India and the reinsurance company GIC and 4 general insurance companies and 2 specialized insurance companies are state owned insurance companies, and the rest 45 are private insurance companies. In addition, 7 standalone (health) insurance companies[21] and 10 foreign insurance companies (branches) are operating in India.

Insurance premium incomes are on the rise (Figure 24) but the density (penetration ratio) is still lower than in other major Asian emerging countries, showing a big room to grow in the future (Figure 25). Although the percentage share of private insurers is increasing with entry of private insurers, LIC still accounts for 70% in total premium incomes.

At the end of March 2019, total assets under management amounted to Rs 35 trillion for life insurers and Rs 3 trillion for general insurers. Under the prudential regulation[22] imposed by the IDRAI, insurance companies are mandated to hold a certain percentage of government securities against their assets (25% and up for life insurers, 20% and up for others) and they are restricted to hold corporate bonds and other risk assets with low ratings (Figure 26). Actually, the percentage shares of central government securities and state and other approved securities in the assets under management of insurers amount to 60 to 70% for life insurers and more than 60% for general insurers (Figure 27). As to LIC, central government securities account for 40% of managed assets, and about 70% if state government and other approved securities are added, suggesting it is operating conservatively.

---

[17] Central government nationalized 245 Indian and foreign insurers and provident societies and formed the Life Insurance Corporation of India (LIC).

[18] Private general insurance companies which were nationalized when General Insurance Corporation of India (GIC) was incorporated became subsidiaries of the GIC.

[19] IDRAI (1999)

[20] Of 2 specialized insurers, Export Credit Guarantee Corporation of India Ltd. (ECGC) underwrites export credit insurance while Agriculture Insurance Co of India Ltd (AIC) underwrites agricultural insurance.

[21] They provide medical insurance, damage insurance and travel insurance.

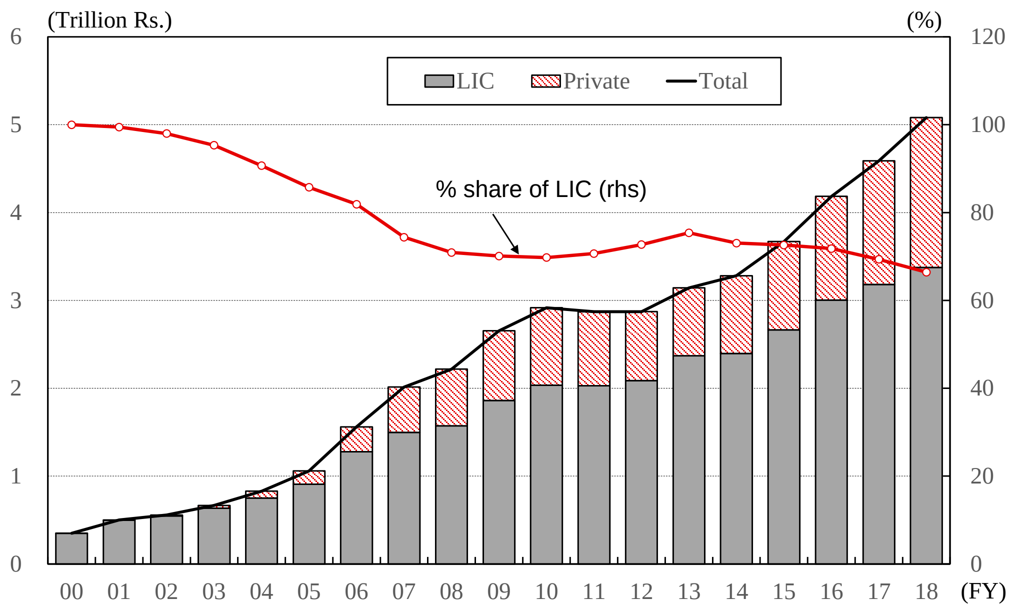
[22] IRDAI(2002)および IDRAI(2016)

Figure 23：Outline of Insurance Companies in India (as of end-March 2019

| Insurers | Public Sector | Private Sector | Total |
|---|---|---|---|
| Life Insurers | 1 | 23 | 24 |
| General Insurers | 4 | 21 | 25 |
| Specialized Insurers | 2 | 0 | 2 |
| Re-insurers | 1 | 1 | 2 |
| Sub total | 8 | 45 | 53 |
| Standalone Health | | 7 | 7 |
| Foreign branches | | 10 | 10 |
| Total | 8 | 62 | 70 |

Source: IDRAI

Figure 24：　Insurance Premiums Income




Source: IRDAI

Figure 25：International Comparison of Insurance Density (as of end-March 2019)

(%)

| | Life | Non-Life | Total |
|---|---|---|---|
| South Korea | 6.12 | 5.05 | 11.17 |
| Thailand | 3.59 | 1.68 | 5.27 |
| Malaysia | 3.32 | 1.45 | 4.77 |
| India | 2.74 | 0.97 | 3.71 |
| China | 2.30 | 1.92 | 4.22 |
| Brazil | 2.10 | 1.80 | 3.90 |
| Russia | 0.47 | 1.06 | 1.53 |
| Japan | 6.72 | 2.14 | 8.86 |
| United States | 2.88 | 4.26 | 7.14 |
| World | 3.31 | 2.78 | 6.09 |

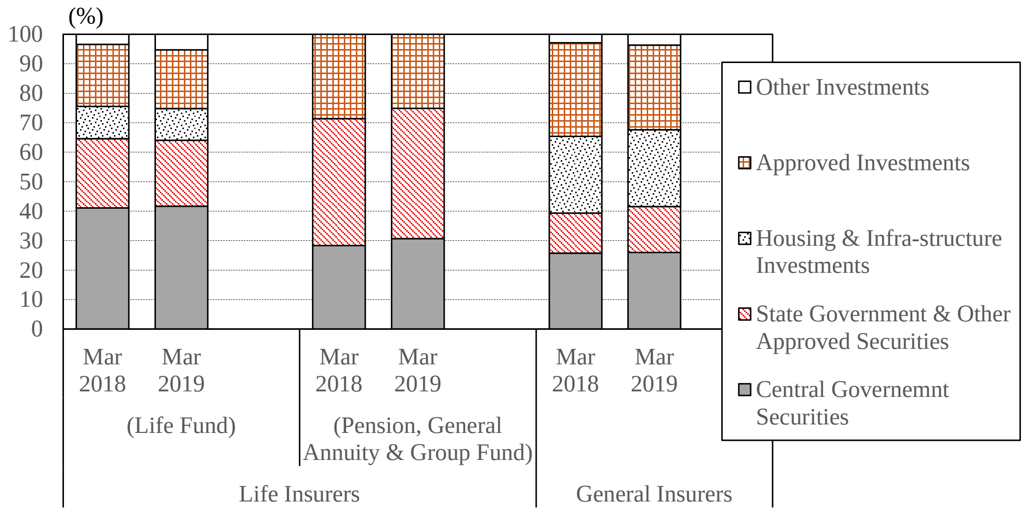
Source: IDRAI

Figure 26：Regulation of Investment in Government Securities of Insurance Companies

| | Life Insurer | Provident Funds | General, Re-insurers and Standalone Health Insurers |
|---|---|---|---|
| Central and state government securities and other approved securities | Not less than 50% | Not less than 40% | Not less than 30% |
| of which Central Government Securities | Not less than 25% | Not less than 20% | Not less than 20% |

Source: IDRAI

Figure 27：Composition of Assets under Management of Insurance Companies in India




Note: "Housing Investment" Bonds / debentures of Housing Finance Companies either duly accredited by National Housing Banks, for house building activities, or duly guaranteed by Government or carrying current rating of not less than ‘AA by a credit rating agency registered under SEBI (Credit Rating Agencies) Regulations.
Source: IDRAI

### ③ Pension funds

Before independence, Indian pension system was applied only to government employees and their families and employees of public corporations, but since 1947, the establishment of retirement provident funds for private enterprises and introduction of pension system covering every citizen were gradually developed.

Major pension schemes include Employees' Provident Fund (EPF) and Employees' Provident Fund Scheme (EPS) operated by the Employees' Provident Fund Organization (EPFO), and National Pension System (NPS) (launched in 2004) and Atal Pension Yojana (APY) (introduced in 2015) which are administered by the Pension Fund Regulatory & Development Authority (PFRDA) (Figure 28). EPF collects combined contributions of 15.67% from employer and employee for workers with wages of below 15,000 rupees a month at the establishments/organizations employing a minimum of 20 workers that belong to about 190 types of industries and businesses that the government designates. It has subscribers of about 111.78 million. EPS is an employees' pension scheme with defined benefits which is operated by EPFO and applied to subscribers of EPF. NPS is a pension scheme designed for all employees joining services of central government on or after 1 January 2004 (compulsory) and all citizens of India between the age of 18 and 65 (voluntary). Subscribers to NPS and APY combined were about 15 million as of the end of March 2017. The central government employees recruited before December 2003 are covered by the Government Employees' Pension Scheme (GEPS)[23].

EPF and EPS are operated by EPFO under the Employees' Provident Fund and Miscellaneous Provisions Act, 1952 enacted in 1952. Its actual asset management used to be handled by the RBI prior to 1995, and by SBI, the largest of public sector banks, between 1995 and 2008, but after that, it has been entrusted to five companies, namely, SBI, followed by ICICI Securities Primary Dealership Ltd., Reliance Capital Asset Management Ltd., HSBC Asset Management (India) Private Ltd., and UTI Asset management Company Ltd., an affiliate of Unit Trust of India (UTI)[24]. Allocation ratio of their assets is specified by the type of securities (Figure 29), and it is seen that most of the assets have been invested, in addition to government securities, in virtually government-guaranteed securities like those issued by public financial institutions[25].

On the other hand, NPS is operated by the PFRDA based on the Pension Fund Regulatory and Development Authority Act. The PFRDA not only manage NPS but also administers establishment and regulation of pension funds, and protection of subscribers' rights. The supervision of pension fund managers (PFMs) who actually manage the pension funds in the market is exercised by the NPS Trust which the PFRDA established in 2008, while the recordkeeping of data on contributions and transactions with subscribers is taken care of by the Central Recordkeeping Agency (CRA).

Of the funds under NPS, the reserve fund of the tier I of civil servants' pension scheme of the central government is managed by three pension fund managers (PFMs) designated by the government, based

---

23 It is a fixed benefit pension directly paid from the central government budget (with no contribution of participants).
24 https://search.epfindia.gov.in/InvestmentManagement.pdf
25 In April 2015, management by exchange traded funds started on the 5% equivalent of an increased portion of the fund.

on a pre-determined scheme. The reserve funds of the tier I of other subscribers than employees of central government and of the tier II of voluntary subscribers are managed by 8 PFMs based on the scheme that the subscribers choose. Investment scheme can be determined by subscribers on a combination of choices from (i) equities (E type), (ii) government bonds issued by central and state governments (G type) and (iii) other fixed-income securities (C type). Major PFMs include SBI Pension Fund which is an affiliate of SBI, Unit Trust of India (UTI) and LIC, with their assets under management accounting for about 40%, 30%, 30%, respectively (Figure 30).

Figure 28：Overview of Main Pension Systems

| | Employees' Provident Fund (EPF) & Employees' Pension Scheme (EPS) | National Pension System (NPS) | Atal Pension Yojana (APY) |
|---|---|---|---|
| Founded | 1952 | 2013 | May, 2015 |
| Legal Frameworks | The Employees' Provident Fund and Miscellaneous Provisions Act, 1952 | The Pension Fund Regulartory and Development Authority Act, 2013 | - |
| Administrator | Employees' Provident Fund Organization (EPFO) under the Ministry of Labor and Employment | The Pension Fund Regulartory and Development Authority (PFRDA) | |
| Qualifications of Subscribers | - In principle, for establishements with minimum workers of more than 20 in the 190 lines of industries and businesses (excl. those located in the State of Jammu and Kashmir )<br>- for workers with monthly wage of below Rs 15000<br>*for all foreign workers regardless amount of wages (those with wages of Rs15000 and more can subscribe to EPF only) | 【Tier I Account】<br>- Employees joining services of Central Government (except Armed Forces) on or after 1st January 2004 (Compulsory)<br>- All citizens of ages between 18-65 after May 2009 (Voluntary)<br>【Tier II Account】<br>- Those with Tier I account<br>【NPS Lite】<br>- Economically and financially disadvantaged citizens in the age group of 18 to 60 employed in unorganized sectors who satisfy certain conditions. | - Citizens in the age group of 18 to 40 who have a bank account (self-employed, workers in small organizations and low income earners.etc.) |
| Number of Subscribers | Number of accounts: 190 million (end-March, 2017) | 15.44 million (end March 2017) | |
| Total Assets | EPF: Rs 5.2 trillion (end-Mar, 2017)<br>EPS: Rs 3.2 trillion (end-Mar. 2017) | Rs 3.2 trillion (end March 2019) | Rs 68.6 billion (end-March 2019) |

Source: EPFO, PFRDA

Figure 29：Instruments Invested by EPFO and Their Allocation Ratios

| Major Investment Pattern | | Percentage amount to be invested |
|---|---|---|
| Government Securities and Related Investments | -Government Securities | Minimum 45% and upto 65% |
| | - Other Securities; the principal whereof and interest whereon is fully and unconditionally gurarranteed by the Central Government or any State Government | |
| Debt Instruments and Related Investments | - Listed debt securities issued by bodies corporate, including banks and public financial institutions, which have a minimum residual maturity period of three years from the date of investment | Minimum 35% and upto 45% |
| | - Rupee Bonds having an outstanding maturity if at least 3 years issued by institutions of IBRD, IFC and ADB | |
| | - Infrastructure related debt instruments | |
| | (d) Term Deposit receipts of not less than one year duration issued by scheduled commercial banks | |
| Short-term Debt Instruments and Related Investments | - Commercial Paper issued by body corporates shall be made only such instruments which have minimum rating of A1+ by at least two credit rating agencies registered with the SEBI | Upto 5% |
| | - Term Deposit Receipts of up to one year duration | |
| Equities and Related Investments | - Shares of bofy corporate listed on BSE or NSE, which have market capitalization of not less than Rs. 5000 crore as on the date of investment | Minimum 5% and upto 15% |
| | - Exchange Tradede Funds (ETFs) / Index Funds regulated by the SEBI | |
| | - Exchange traded derivatives regulated by the SEBI having the underlying of any pe | |
| Asset Backed, Trust Structured and Miscellaneous Investments | - Commercial mortgage based Securities (CMBS) or Residential mortgage based securities | Upto 5% |
| | - Units issued by Real Estate Investment Trusts regulalted by the SEBI | |
| | - Asset Backed Securities (ABS) regulated by the SEBI | |
| | - Units of Infrastructure Investment Trusts regulated by the SEBI | |

Source: Employees' Provident Fund Organisation

Figure 30：Assets under Management of Pension Fund Managers (PFMs)

(As of end March 2019)

| | AUM (Million Rs.) | (% Share) |
|---|---|---|
| SBI Pension Fund PVt. Ltd. | 1,219,590 | 38.3 |
| UTI Retirement Solution Ltd. | 937,077 | 29.4 |
| LIC Pension Fund Ltd. | 927,193 | 29.1 |
| HDFC Pension Management Company Ltd. | 51,647 | 1.6 |
| ICICI Prudential Pension Funds Management Company Ltd. | 34,760 | 1.1 |
| Kotak Mahindra Pension Fund Ltd. | 7,847 | 0.2 |
| Reliance Capital Pension Fund Ltd. | 2,893 | 0.1 |
| Birla Sunlife Pension Management Ltd. | 1,132 | 0.0 |
| Total | 3,182,139 | 100.0 |

Source: NPS Trust

### ④ Mutual Funds

In the mutual trust fund market in India, Unit Trust of India (UTI), the oldest asset management company founded by the RBI in 1964, used to be predominant, but since the 1990s, entry of private fund management companies and foreign affiliates (independent or joint venture with local financial institutions) gradually increased[26]. Under the Securities Exchange Board of India (Mutual Funds) Regulations[27] enacted in 1993, all funds except UTI became subject to registration (of their applications) to SEBI and to its regulations. UTI also became subject to SEBI (Mutual Funds) Regulations after it was divided in February 2003 into two companies of Specified Undertaking of the Unit Trust of India and UTI Mutual Fund. As of the end of March 2019, the number of mutual fund asset management companies stood at 42, with average assets under management Rs 24 trillion in January-March period of 2019 (Figure 31).

Figure 31 : Outline of Mutual funds in India

| | | No. | AUM (Billion Rs.) | % Share |
|---|---|---|---|---|
| Bank Sponsored | | 7 | 4,866 | 19.9 |
| | Joint Ventures - Predominantly Indian | 4 | 3,063 | 12.5 |
| | Others | 3 | 1,803 | 7.4 |
| Institutions | | 2 | 158 | 0.6 |
| Private Sector | | 33 | 19,461 | 79.5 |
| | Indian | 21 | 5,131 | 21.0 |
| | Foreign | 6 | 4,261 | 17.4 |
| | Joint Ventures - Predominantly Indian | 5 | 9,993 | 40.8 |
| | Joint Ventures - Others | 1 | 76 | 0.3 |
| Total | | 42 | 24,484 | 100.0 |

Note: Average Assets Under Management (AUM) for the quarter ended Macrh 2019.
Source: Association of Mutual Funds in India

By instrument under their management, income funds account for about 30% while equity scheme funds and liquidity/ money market funds are increasing in recent years (Figure 32). Most of the income funds invest in short term securities with high liquidity, with those investing in corporate bonds remaining at a small percentage.

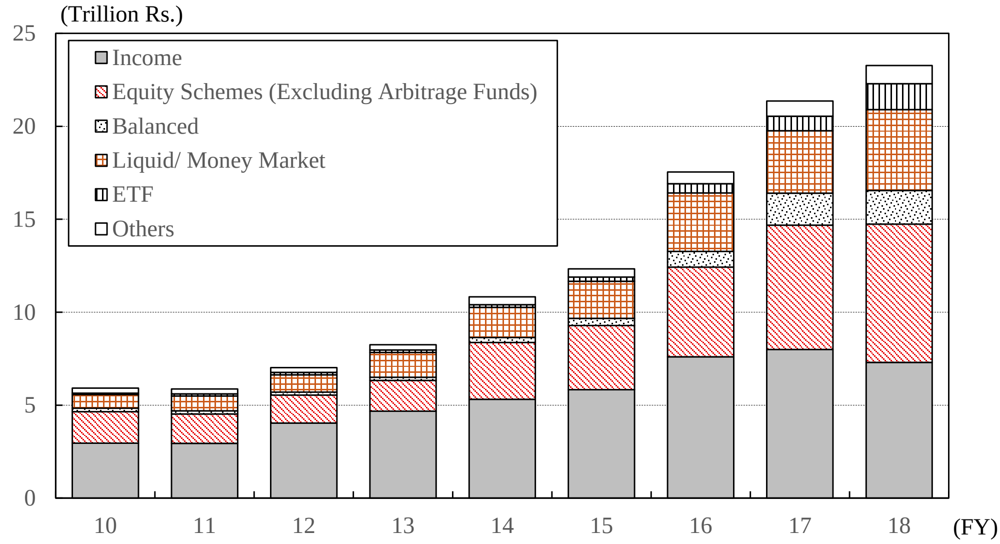
As of January 2020, individuals held 52.7% of total mutual funds, while corporates and institutional investors (corporates account for 93% of them) held 47.3%. By asset composition of investors, individuals had a high weight in equity scheme funds, while corporations and institutional investors had a higher weight in income funds and liquidity/ money market (Figure 33).

In recent years, reflecting a popularization of KYC procedures using Aadhaar (national identification number system utilizing biometric data) and online financial services, opening of bank account (Demat Account) to hold financial securities (equity or debt) in electronic form is increasing.

[26] There is no restrictions of foreign currency holding of asset management companies and it is possible for them to hold 100% in foreign currencies. However, capital adequacy ratio is set in proportion to the ratio of foreign currencies held in total assets.
[27] SEBI (2020)

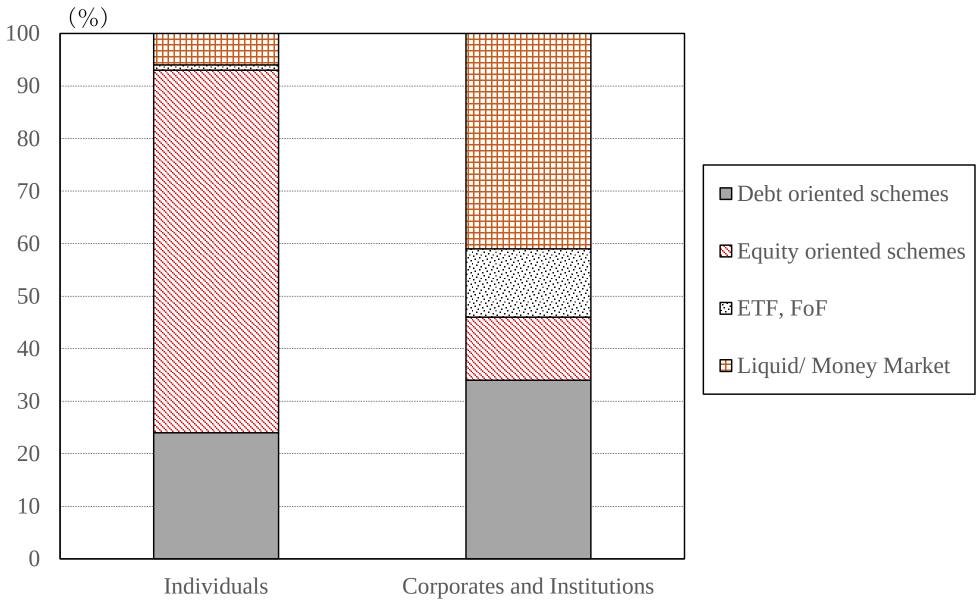
It is seen that there is an increase of securities investment by individual investors in the form of Systematic Investment Plan (SIP) where a fixed amount of money is deducted from a savings account every month and it is transferred to the mutual fund in which the person chooses to invest.

Figure 32 : Outstanding of Assets Under Management of Mutual Funds




Note: 1) "Income" includes Debt Funds, Infrastructure funds and Government bond funds.
2) "Others" includes ELSS - Equity and Investing Overseas / Fund of Funds Investing Overseas.
Source: Association of Mutual Funds in India.

Figure 33 : Asset Composition of Mutual Funds By Investor (as of January 2020)




Source: Association of Mutual Funds in India

### ⑤ Foreign portfolio investors

In India, there are restrictions on portfolio investment by foreign investors, but in order to expand foreign investment, simplification of procedures and deregulations are being promoted. In the past, when foreign investors wanted to make a portfolio investment in India, they had to register as either category of the categories of Foreign Institutional Investor (FII), FII sub account or Qualified Foreign Investor (QFI). FII is a category introduced in 1995 by SEBI and FII sub account is the one represented by a resident of India who makes investment on behalf of a FII. QFI category was introduced in 2011 by the government of India. As a result, each category of investors was supervised by different regulators, resulting in a complicated process of procedures. Accordingly, in 2014 SEBI unified these 3 investment categories into a new category of Foreign Portfolio Investor (FPI) to improve effectiveness and transparency of fund management.

The regulations on the types of investable securities and their conditions have been gradually eased. Starting from October 2015, FPIs are permitted to investment in securities issued by state governments and corporate bonds, the minimum residual maturities of investable corporate bonds were changed in April 2018 from more than 3 years to more than 1 year, and investment in government bonds with maturity of less than 1 year was permitted. Moreover, regarding FPI's portfolio investment on a voluntary holding route, restrictions on minimum residual maturity and investment ceiling were also lifted in March 2019.

Currently, the types of investable securities of FPIs are specified by the SEBI (FPI) Regulations[28] as follows.

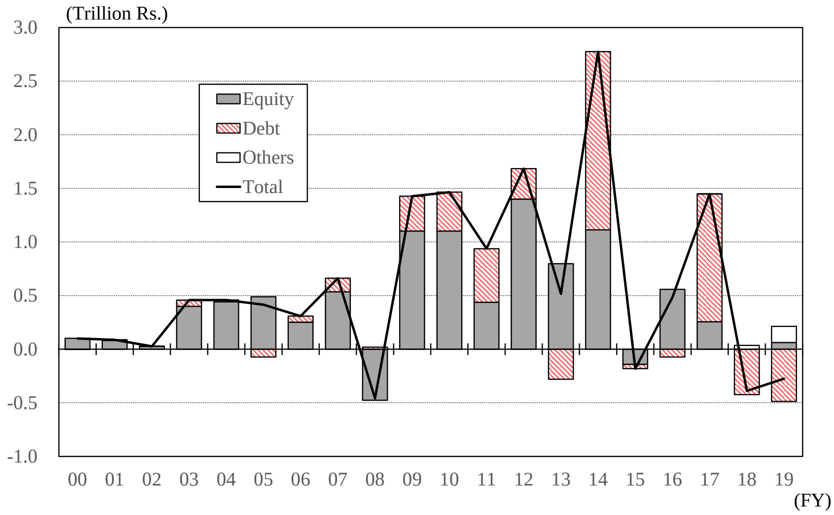
- shares, debentures and warrants listed or to be listed on a recognized stock exchange in India
- mutual funds under the SEBI (Mutual Fund) Regulations[29]
- collective investment schemes under the SEBI (Collective Investment Schemes) Regulations[30]
- derivatives traded on a recognized stock exchange
- real estate investment funds, infrastructure investment funds
- Indian Depository Receipts
- any debt securities or other instruments as permitted by the Reserve Bank of India
- such other instruments as specified by the Board from time to time

The limit for investment by FPIs were gradually raised and stood at Rs.2.46 trillion for government bonds and Rs. 3.17 trillion for corporate bonds as of the end of 2019. The rate of utilization of the investment limit have remained at a high level of around 80% for government bonds while it hovered below 60% for corporate bonds, indicating that improvement of market liquidity is an agenda of priority.

[28] SEBI(2019)
[29] SEBI(2020)
[30] SEBI(2014a)

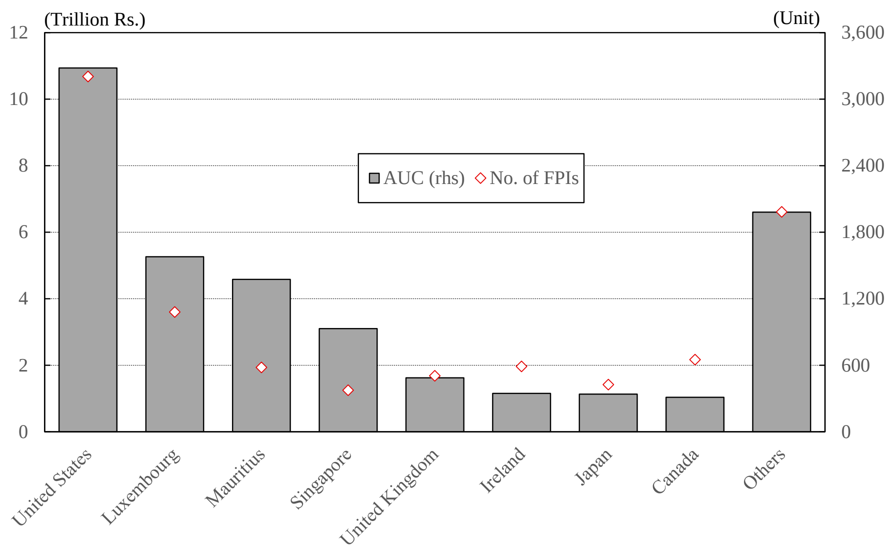
In the past not only SEBI but the RBI performed the authorization and registration procedures on FPIs, but later, they came to be administered by the custodians called Designated Depository Participants (DDP) designated by SEBI. At the end of March 2019, there were 9,390 FPIs and 16 DDPs registered with SEBI. Most of the DDPs are financial institutions in and out of the country. The presence of the US companies is notably high in terms of both the number of the registered FPIs and their assets under custody (Figure 35), followed by Luxemburg, Mauritius and Singapore, indicating that most of the investments come from the countries where taxation benefits can be expected.

Figure 34： FPIs Investment by Instrument




Source: NSDL

Figure 35：Assets Under Custody (AUC) of FPIs by Country (as on March 31,2019)




Source: SEBI

### (4) Infrastructure functions

#### ① Transaction and settlement system

In the Indian bond market, reforms of clearance and settlement have been promoted through improvement in efficiency of transactions, like shortening of settlement cycles, dematerialization of securities and introduction of electronic trading.

Eligible participants in the auctions of government bonds include PDs, insurance companies, pension funds, and mutual funds that have subsidiary general ledgers (SGL) at the RBI which offers trading space through its electronic platform (E-Kuber). Other investors (corporations, NBFCs, foreign institutional investors) conduct their transactions through PDs and banks after opening Constituents' Subsidiary General Ledger Account (CSGL) at the RBI.

In the secondary market, most of the transactions (about 80%) are conducted through anonymous Negotiated Dealing System-Order Matching (NDS-OM) the RBI introduced in August 2005, while their settlements are concentrated in the Clearing Corporation of India Limited (CCIL) [31] launched in 2001. Part of transactions are made on an over-the-counter basis, but they are required to report on the site of NDS-OM. Settlements on the following business day (T+1) are made possible by Delivery vs Payment (DvP) through Real Time Gross Settlement (RTGS).

In addition to repo transactions made between the RBI and market participants through E-Kuber, the CCIL introduced Collateralized Borrowing and Lending Obligation (CBLO), a bond lending transaction based on government bonds, and transactions through CBLO increased spurred by the safeness of their settlements guaranteed by CCIL. In addition, in November 2018, Clearcorp Dealing System (India) Ltd. (CDSL), a subsidiary of CCIL started its operation of Tri Party Repo Dealing System (TREPS) which replaced CBLO as a platform for order matching of repo transactions[32]. CBLO and TREPS have in common in that both are an anonymous method for repo and reverse-repo transactions and CCIL guarantees the settlement of these transactions while TREPS differs from CBLO in that CCIL plays the role of a tri-party agent in transactions under TREPS. Moreover, while both investors and security names are disclosed in repo transactions that market participants mutually conduct on negotiation through Clearcorp Repo Order Matching System (CROMS), in transactions under TREPS, investors are anonymous and security names are not to be disclosed (though security names are disclosed on a daily base), hence the amounts of transactions through TREPS have increased to twice of the repo transactions (Figure 36).

Transfer service of securities is provided on an electronic real-time basis by depository institutions of National Securities Depositories Ltd. (NSDL) and Central Depositories Services Ltd., with the Public Debt Office (PDO) of the RBI acting as the registry and central depository of government securities (G-Secs) and Treasury bills (T-Bills).

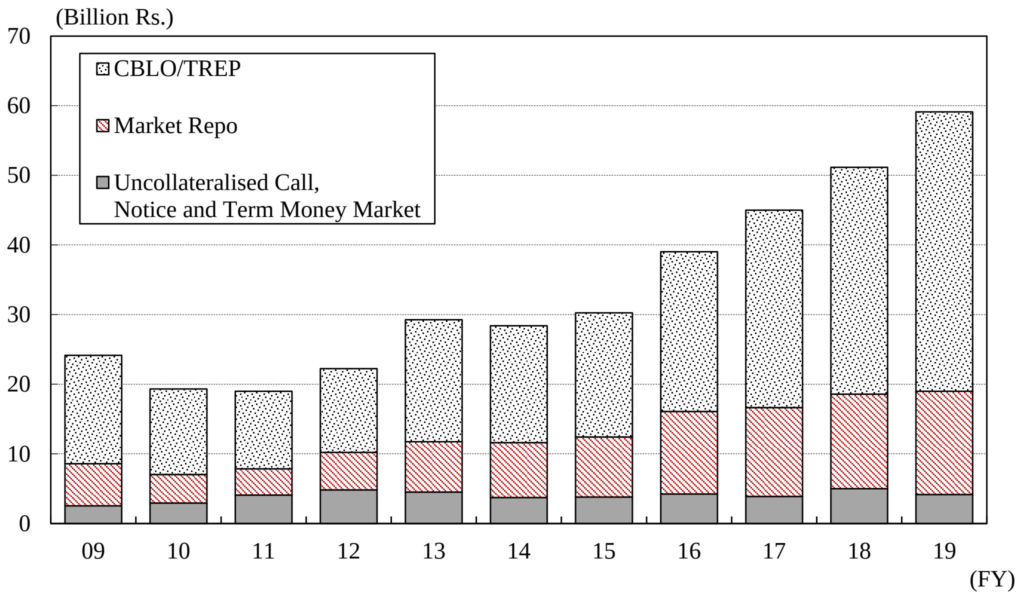
As is seen above, while the sophistication of infrastructure has been going smoothly in the

[31] CCIL was founded mainly by private sector like major banks under the initiative of the RBI. There is no capital relationship between CCIL and the RBI, but the former is under the supervision of the RBI based on the Payment and Settlement System Act, 2007. CCIL offers a clearing service on the platform of National Dealing System (NDS) including NDS-OM.

[32] With the start of TREPS in November 2018, the service of CBLO was suspended in the same month.

government bond market including settlement systems, improvement of infrastructure has been delayed in the corporate bond market. Most of the transactions of corporate bonds have been made over the counter, but since the BSE and the NSE started in 2007 to manage a corporate bond transaction platform, it seems that some of the transactions have been made on the exchanges. SEBI introduced in 2016 an Electronic Book Provider Platform (EBP Platform) for issuance of private placement bonds, which requires the tendering of private placement bonds exceeding Rs. 5 billion to use the EBP Platform. Settlement of OTC transactions can be made on the RTGS base through NSE Clearing (former National Securities Clearing Corporation Limited: NSCCL) or Indian Clearing Corporation Limited (ICCL) as a subsidiary of BSE. The following business day settlement (t+1) has come to be almost realized on these transactions with the use of DvP. Although corporate bonds are eligible for repo transactions and CBLO (also TREPS), there has been no actual transaction yet as Clearcorp Dealing System (India) Ltd. (CDSL) has not provided a platform for corporate bonds. Meanwhile, the NSE introduced in 2018 a framework of tri-party repo transactions aimed at corporate bonds.

Figure 36：Money Market Volumes




Note: CBLO segment was discontinued and replaced with TREP with effect from November 5, 2018.
Source: CCIL

On the CDS transactions for corporate bonds, the RBI published a guideline[33] in May 2011, and CDS transactions of individual securities started on the OTC base in October the same year. Commercial banks, PDs and NBFCs are permitted to be both a seller and a buyer. Participation as a buyer is also permitted, in addition to the above, to mutual funds, insurance companies, provident funds, listed companies, and FPIs. At the beginning, only listed securities and those issued by infrastructure related companies were eligible for CDS transactions, but later eligibility was expanded to include unlisted securities issued by companies other than infrastructure related ones. Currently,

[33] RBI(2011)

CDSs are traded only on the OTC base, and although their transactions are required to be reported to CCIL, there is no established framework like a Central Counter Party (CCP), and this is pointed out as an issue to be tackled. With a CCP intermediating CDS transactions, the CCP always can become a counterparty of transactions, and the debt burdens in the event of default of other participants are unified to the CCP while individual participants can continue to make transactions without concerning about default risks of other participants by depositing a certain amount of margin money to the CCP in proportion to their risk exposure. An effect of reducing credit risks can also be expected from mutually netting out of the exposures to credit risks by multiple participants.

### ② Rating agencies

When a company raises funds in India, it must obtain ratings from local rating agencies. According to the SEBI regulations, when a company issues a bond privately or publicly to be listed in stock exchanges, the company is obliged to obtain ratings from local rating agencies designated by SEBI[34]. There are three qualified rating agencies, namely Credit Rating Information Services of India Ltd (CRICIL), Investment Information and Credit Rating Agency of India Ltd (ICRA) and Credit Analysis and Research Ltd (CARE) (Figure 37). CARE is an independent local rating agency while CRICIL and ICRA have been funded by over half from the US rating majors of S&P and Moody's, respectively.

Figure 37：Major Rating Agencies in India

| Credit Rating Agencies | | Founded | Parent/ Alliance |
|---|---|---|---|
| Credit Rating Information Services of India Ltd | CRISIL | 1987 | S&P |
| Investment Information and Credit Rating Agency of India Ltd | ICRA | 1991 | Moody's |
| Credit Analysis and Research Ltd | CARE | 1993 | - |

Souece: JCR

### ③ Information services on corporate and credit information

All domestic corporations are required to register financial information with the Registrar of Companies India (ROC) under the umbrella of the Ministry of Corporate Affairs, which is disclosed to the public for a fee.

On credit information, Credit Information Companies (CIC) led by the Credit Information Bureau (India) Limited (CIBIL)[35] established in 2000 under the initiative of the RBI provide credit data of domestic individuals and corporations to member companies (financial institutions, credit companies, etc.) When they make transactions with non-listed companies (mainly SMEs), financial institutions including banks utilize the information from, in addition to CICs like CIBIL, research firms like Dun & Bradstreet and rating agencies like CRICIL and CARE.

[34] When a company borrows more than Rs 100 million of money from a bank, it is also obliged by the RBI regulation to obtain a rating from local rating agencies.
[35] It was in 2006 that it actually started its business.

### ④ Taxation

Main taxes on securities transactions in India include Tax Deduction at Source (TDS) and stamp duties. TDS rates on interest payment (including coupon on bonds) are set at 10% for residents, and 20% for nonresidents (on a gross base, in the case of foreign currency borrowings)[36].

Stamp duty rates differed from state to state because the duty was administered by the federal law of Indian Stamp Act, 1899 and state laws, and since the rates differed between stock issuance and bond issuance, it had been pointed out that the higher stamp duty on bond together with TDS contributed to higher transaction costs, tempting investors to hold bonds to maturity. This point was addressed by an amendment of the Stamp Duty Act and improvement of related regulations[37] (to be implemented on April 1 2020) based on the Finance Bill, 2019. This amendment removed the difference of tax rates among the states, and unified the rates on stock issuance and bond issuance at 0.005% with a result of reduced tax amount. The amendment is expected to give an impetus to an activization of bond trading.

## (5) Responsible Ministries and regulatory authorities

The framework of Indian financial regulations is characterized by the division of regulations applied to individual areas (Figure 38). Government securities market is regulated and supervised independently by the RBI, while corporate bond market is controlled in a complicated way by three institutions of SEBI, RBI, and IRDAI. This complexity of regulatory frameworks had been pointed out as one factor for the slow development of corporate bond market[38]. To deal with this problem, the government took in 2007 an initiative to divide the regulatory and supervisory authorities on corporate bond market, giving SEBI authority to administer the primary market (issuance of public and private placement by listed companies) and secondary markets (OTC and exchanges), while limiting the responsibility of the RBI to repurchase and reverse repurchase transactions. The main responsibility of SEBI's supervision is to protect investors' interests while that of the RBI is absolutely to ensure the economic and price stability through provision of liquidity to private sector based on the adjustment of money market.

The authorities of each regulatory institutions are stipulated in the relevant laws and regulations, with the authority and management of the RBI defined by the Reserve Bank of India Act,1934[39]. However, it is also defined that the central government has the power to appoint and remove the governor, deputy governor and other directors of the RBI. In addition, the central government is permitted to give an instruction to the RBI at any time if needed for the public interest, and when the central government determines that the RBI has not fulfilled its specified duties, the government can

[36] As a special measure to June 2020, a reduced rate of 5% has been applied to interest payments on borrowings from abroad, like foreign currency borrowings, long-term corporate bonds denominated in foreign currencies, and rupee-denominated corporate bonds (masala bonds).

[37] The Indian Stamp (Collection of Stamp Duty through Stock Exchanges, Clearing Corporations and Depositories) Rules, 2019

[38] Examples of harmful effect associated with the complicated system of supervision include a case where a conflict of authority emerged over a variable insurance (Unit Linked Insurance) that combines insurance with investment between IRDAI which argues it should be an extension of death security and SEBI that argues it should be regulated as Collective Investment Schemes (CIS).

[39] RBI(2009)

invalidate the central council of the RBI and delegate the authority and responsibilities to other institutions the central government designates[40].

Under the Securities and Exchange Board of India Act, 1992 and the Depositories Act, 1996[41], SEBI is granted authority for all matters relating to securities transactions and regulates and supervises capital subscription and transfer of securities in addition to registering and regulation of stock exchanges and securities intermediaries. Moreover, authorities under the jurisdiction of other ministries and agencies have gradually been transferred to SEBI, which is now granted under Securities Laws (Amendment) Act, 2014[42] such authorities as to supervise Securities Depository Centers and custodians, demand banks to submit record on securities transactions, and examine the books and records of listed companies. In addition, under the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996[43], SEBI also regulates mutual funds on multiple areas ranging from disclosure to a level of fees, stipulation of soliciting documents, evaluation method of investment and advertisement regulation. The SEBI Act also stipulates that SEBI shall follow the policy guidelines of the central government (Article 16) and that the central government may make rules for carrying out the purposes of the Act (Article 29).

In addition, supervision and regulation of insurance companies and pension funds are stipulated in the specific Acts like the Insurance Regulatory and Development Authority Act,1999[44], the Employees' provident Fund and Miscellaneous Provisions Act, 1952[45], and the Pension Fund Regulatory and Development Authority Act, 2013[46].

Figure 38：Main Regulatory Authorities in India

| | Area of Supervision/ Regulation | Laws |
|---|---|---|
| Reserve Bank of India (RBI) | Bank, Non-bank and PD. Government Securities and FX market, OTC trading of FX and interest rate derivatives. Repo/ reverse repo tradings in corporate debt market. | Reserve Bank of India Act,1934 |
| Securities and Exchange Board of India(SEBI) | The business in stock exchanges and any other securities markets; registering and regulating the working of stock brokers, sub-brokers, share transfer agents, bankers to an issue, trustees of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisers and such other intermediaries who may be associated with securities markets in any manner | Securities and Exchange Board OF India Act, 1992<br>The Depositories Act, 1996 |
| Insurance Regulatory and Development Authority of India(IRDAI) | Inrurers | Insurance Regulatory and Development Authority Act,1999 |
| Employees' Provident Fund Organisation, India (EPFO) | The Employees' Provident Funds Scheme (EPF), The Employees' Pension Scheme (EPS) | The Employees' provident Fund and Miscellaneous Provisions Act, 1952 |
| Pension Fund Regulatory and Development Authority (PFRDA) | National Pension System(NPS), Atal Pension Yojana(APY) | The Pension Fund Regulatory and Development Authority Act, 2013 |

Source: RBI, SEBI, IRDAI, EPFO and PFRDA

[40] Accordingly, the central government can be involved in the regulation and supervision of banking sector through the RBI..
[41] SEBI(1996)
[42] SEBI(2014b)
[43] SEBI(2019a)
[44] IRDAI(1999)
[45] EPFO (1952)
[46] PFRFA(2013)

### (6) Related regulations

Among the laws and regulations relating to securities transactions in general, Securities Contracts (Regulation) Act, 1956[47] should be firstly cited. It stipulates not only the regulations on stock exchanges but also on contract, listing, and penalties on securities. Issuance of a security and its prospectus have to follow the provisions of the Companies Act, 1956, 2013[48]. As noted above, many of the authorities relating to securities transactions were later integrated to SEBI and under the initiative of SEBI, efforts were made in the 2000s to improve market conditions through the Company Act and SEBI related regulations. However, on a public issuance of bond, issuer is required to follow the provisions of not only the Company Act but the SEBI (Issue and Listing of Debt Securities) Regulations, 2008[49] and others.

Meanwhile, portfolio investment by nonresidents is regulated by the Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2019[50] and the Foreign Exchange Management (Transfer or Issue of Security by a Person Resident outside India) Regulations, 2019[51], one of the implementing regulations of the Foreign Exchange Management Act (FEMA) [52].

Also, it is reported that many regulations are formulated jointly by the Department of Economic Affairs of the Ministry of Finance, SEBI, RBI, and Ministry of Corporate Affairs. In addition, each category of bonds is regulated by different authorities and a limitation is imposed on the investment in bonds issued by low rating companies. They are pointed out as the factors that have prevented the market development in India.

---

[47] SEBI(1956)
[48] GOI(2013)
[49] SEBI(2008)
[50] SEBI(2019b)
[51] RBI(2019a)
[52] GOI(1999)

## 3. Evaluation of India's securities markets and future challenges

Followings can be pointed out as the evaluations of securities markets in India and their future challenges.

### (1) Issuing entities and types of bonds

Corporate bond market in India has many areas in which improvement could be made, such as uneven distribution of issuing entities as well as investors and low liquidity in the secondary markets.

As is the case with many corporate bond markets in emerging economies, issuing entities in India are also heavily concentrated in corporations with high rating evaluated by local rating agencies in the specific business sectors like infrastructure and finance.

Especially characteristic of the corporate bond market in India is its limited number of issuing entities and relatively small outstanding amount of individual corporate bonds because each of issuers has issued various kinds of bonds. For this reason, transactions in the secondary market remain stagnant, with no bond index available to be broadly used by investors. In the background of this market structure seems to be a fact that many of the corporate bonds are of private placement. Therefore, more incentives should be taken to issue public placement bonds by simplifying the issuing procedures which have imposed heavy burdens on the issuers of public offering bonds.

### (2) Investor class

In addition to commercial banks, insurance companies and provident funds are also obliged to hold government securities in an equivalent amount of a fixed percentage of their assets, and this is considered to have impeded their flexible asset-liability management.

From a perspective of fostering bond markets in India, there seems to be a room for further lowering of Statutory Liquidity Ratio (SLR) on banks and reducing obligations on insurance companies and provident funds to hold government securities. For FPIs, it should also be considered to give them more flexibility to invest and increase the number of investors by deregulating investment controls.

The government policymakers of India had been very sensitive to an increase of external debts (including holdings of rupee-denominated securities by nonresidents) and therefore the opening of securities markets to foreign investors has been made gradually by raising investment limits. However, because of stricter regulations on investment limit and the like compared to other neighboring countries, India's government bonds have not been adopted yet in the major bond indices, thus limiting the number of foreign investors who invest in India's securities markets. Currently, rupee-denominated government bonds have been included neither in FTSE Russell World Government Bond Index (WGBI) nor in Barclays Bloomberg Global Aggregate Bond Index, nor J.P. Morgan Government Bond Index-Emerging Markets Global Diversified (GBI-EM GD). For this reason, index funds that track the components of these indices do not invest in the Indian government bonds. So the foreign portfolio investors (FPIs) that have invested in the Indian government securities are estimated to be active investors who invest without a benchmark index or those with a benchmark index but holding Indian government securities as an off-benchmark investment. The bonds held by these investors are likely to be easily sold on a risk-off phase associated with an economic slowdown in major countries and a rise in credit risks. Therefore, it may be presumed that some of the policymakers have an impression that foreign portfolio investment is potentially unstable. However, instead of maintaining regulations to mitigate the influence of capital flows, they should understand that it is more helpful for the stability of market to increase the number of foreign investors through deregulations. If the authorities take such liberalization measures as lifting of investment limit, it can be expected that the government bonds are adopted in the above-mentioned bond indices and relatively stable capital inflows will increase from index funds that follow such indices[53].

Also it will contribute to expanding the participation of foreign investors if the means of bond settlement becomes available through international settlement institutions like Euroclear.

### (3) Transaction costs

On the corporate bond markets, underdeveloped market for credit default swaps (CDS) is often cited as a problem by the local market participants. It is also desired for boosting investors' confidence that transparency is improved through such measures as construction of comprehensive data base on corporate bond markets, intensification of timely disclosure and so on.

India's sovereign bonds (foreign-currency long-term) are now rated relatively low at Baa2 by Moody's, BBB- by S&P, remaining either at the bottom of investment grade or only one notch higher. Even corporate bonds with the highest grade by local rating scale are in most cases rated at the lowest investment grade by the international scale (Figure 39), which means they are narrowly investable bonds for foreign investors. In order to encourage bond issuance by companies with relatively low credibility and increase the number of issuing entities, development of CDS market and credit enhancement by the government will be worth considering.

Meanwhile, although the stamp duties had been pointed out as a factor for increased transaction costs in the bond markets and thus encouraging the investors to hold bonds to maturity, they were addressed by the amendment of the Stamp Duty Act and the revised related regulations which eliminated the different duty rates among the states in April 2020 while the rate was reduced. These can be positively evaluated. In the future, abolition of Tax Deduction at Source (TDS) should also be expected.

[53] Some local media report that the government is preparing for an adoption of a bond index and for that purpose it seems the government is discussing an issuance of new government securities that are not subject to such regulations like investment ceiling. However, it is considered such an approach will little contribute to an increase and stabilization of capital inflows as it will lead to an adoption of only a limited scale of government securities and therefore their weights in the index will remain small.

Figure 39 : Major Issuers of Bonds and their Ratings

| Issuers | Local scale ratings (in local currency) | | | Global scale ratings | | | |
|---|---|---|---|---|---|---|---|
| | | | | in local currency | | in foreign currency | |
| | CRISIL | ICRA | CARE | Moody's | S&P | Moody's | S&P |
| Indian Railway Finance Corp Ltd | AAA | AAA | AAA | Baa2 | BBB- | Baa2 | BBB- |
| National Highways Authority of India | AAA | AAA | AAA | Baa2 | BBB- | Baa2 | BBB- |
| Export-Import Bank of India | AAA | AAA | AAA | Baa2 | BBB- | Baa2 | BBB- |
| Food Corp of India | AAA | AAA | AAA | — | — | — | — |
| National Bank for Agriculture and Rural Development | AAA | AAA | AAA | — | — | — | — |
| Reliance Industries Ltd | AAA | AAA | AAA | Baa2 | BBB+ | Baa2 | BBB+ |
| ICICI Bank Ltd | AAA | AAA | AAA | Baa3 | — | Baa3 | BBB- |
| HDFC Bank Ltd | AAA | — | AAA | Baa2 | BBB- | Baa2 | BBB- |
| Axis Bank Ltd | AAA | AAA | AAA | Baa2 | BBB- | Baa2 | BBB- |
| LIC Housing Finance Ltd | AAA | — | AAA | — | — | — | — |
| Power Grid Corp of India Ltd | AAA | AAA | AAA | Baa2 | BBB- | Baa2 | BBB- |
| NTPC Ltd | AAA | AAA | AAA | Baa2 | BBB- | Baa2 | BBB- |

Note: Long-term issuer ratings

Source: Bloomberg

### (4) Supervision and legal framework

In the government securities market, the RBI takes the responsibility of developing and regulating the market, while in the corporate bond market three institutions of the RBI, SEBI, and IRDAI are involved, taking their own responsibilities in their field of regulation and supervision. Yet it is undeniable that the regulation and supervision system has been complicated because different agencies set regulations independently on their field of responsibility. On issuance of public placement bonds, approval process and its length of time by the agencies that have jurisdiction over the issuing entities would also be the points to be improved. As different institutions are involved in the regulation of each category of investors, such as insurance companies by the IRDAI and pension funds by the PFRDA, and each of them independently regulates investment in low rated corporate bonds, it has led to a difference in instruments in which each type of investors can invest. It is true that these regulations are aimed at securing soundness of investors, and they should be respected in that sense. However, from the perspective to promote development of a bond market, it should be considered whether there is a room or not for gradual deregulation of them.

Figure 40 : Challenges for Developing Corporate Bond Market in India

**(1) Issuing entities and types of securities**

- A limited number of entities have issued various types of corporate bonds, resulting in a relatively small outstanding of individual bonds and therefore inactive transaction in the secondary market.
- It should also be considered to reinforce incentives for public placement by simplifying procedures for public issuance which are now very burdensome to issuing entities.

**(2) Investor class**

- Obligation on major bond investors to hold government securities has decreased investor's flexibility in deciding investment targets. Further lowering of Statutory Liquidity Ratio (SLR) and other deregulations are desirable.
- Flexibility for investment should be increased through abolition of investment restrictions to Foreign Portfolio Investors (FPI) and realization of settlement through Euroclear. Adoption of India's government securities in major bond indices could increase the investors base and thus encourage more stable capital inflows.

**(3) Transaction costs**

- In the corporate bond market, establishment of Securities Depository Center and development of credit default swaps market are areas to be addressed.
- Abolition of Tax Deduction at Source should also be considered.

**(4) Supervisory and legal frameworks**

- As for the corporate bond market, it is undeniable that the existence of multiple supervising agencies has complicated the regulation and supervision.
- Deregulation of investment regulations on major bond investors should be considered.

## 4. Measures taken by the government and regulatory authorities

### (1) Efforts made in the past

The government and regulatory authorities have worked on fostering bond market based on the recommendations made by experts' committees. Regarding the government bond markets, as was noted in Chapter 2 above, deregulations and development of market had been promoted since the 1990s under the initiative of the RBI (Figure 41). On the primary market, measures were taken to introduce government securities auction system and primary dealer (PD) system, increase types of bonds issued, and liberalize interest rates. In addition, regulations on short-selling were gradually loosened. Also, based on the Fiscal Responsibility and Budget Management Act 2003[54] the RBI withdrew from auctions in April 2006. Moreover, to increase the liquidity in the secondary market, such measures were implemented as regular issuance of 10 year benchmark bonds, development of a repurchase transaction market and introduction of interest rate futures and interest rate derivatives as well as step-by-step reduction of SLR which obliges commercial banks to hold a certain level of government securities.

Figure 41：Main Measures Taken to develop Primary Market for Government Securities

| Policy | Instruments | Infrastructural |
|---|---|---|
| ･Auction system for 91 dsay Bills (Jan-93) | ･364 day T-Bills (Apr-92) | ･PD system (Mar-96) |
| ･WMA for Government of India (Mar 97) | ･Zero Coupon Bond (Jan-94) | ･Non Competitive Bidding (Jan-02) |
| ･Reduction in SLR (Oct-97) | ･Flooating Rate Bonds (FRBs)(Sep-95) | ･Issuance calendars (Mar-02) |
| ･Government Debt Buy-Back scheme (Jul-03) | ･Capital Indexed Bonds (Dec-97) | ･When-issued trading (May-06) |
| ･Fiscal Responsibility and Budget Management Act (Aug-03) | ･Cash Management Bills (CMBs)(Aug-09) | ･NDS-auction module for T-Bills (Jan-07) |
| ･Withdrawal of RBI from auctions (Apr-06) | ･Inflation Indexed Bonds (Jun-13) | ･NDS-auction ver.2 for dated securities (May-09) |
| ･Enactment of the Government Securities Act (Aug-06) | ･40 year Bonds (Oct-15) | ･NDS-auction Web based Module (Feb-NDS) |
| ･Medium-Term Debt Management Strategy (Dec-15年) | | |

Source: CCIL

Since 2007, efforts for improvement and reform of corporate bond market gathered momentum led by SEBI based on the recommendations of the Report of High Level Expert Committee on Corporate Bond and Securitization (chaired by Dr. R.H.Patil)[55] which was released in December 2005. To improve market transparency, reporting system was introduced on the OTC transactions of corporate bonds, and reporting of transactions on private placement bonds was also required to be made through either BSE, NSE, or FIMMDA. In 2007, corporate bond transaction platforms were launched on both the BSE and the NSE although utilization of EBP platform was required for bidding of private issues over Rs. 5 billion. In respect of procedures, contents of disclosures needed at the issuance of a private placement bond were tightened while on the public placement, required number of rating agencies was reduced to one from the former two[56], realizing equalization of procedures between private bonds and public bonds by easing the former's rating requirements of being rated above "investment grade".

[54] GOI(2003)
[55] SEBI(2005)
[56] SEBI(2007)

Furthermore, starting in October 2018, online application and payment were obligated to public placement issuance in order to shorten the period needed for processing the procedures[57]. Cost burdens were also reduced by the cut of Debenture Redemption Reserve (DRR) ratio from 50% to 25%.

With these efforts, the period needed for procedures for public placement has been much shortened than before, but it is said that it still usually takes at least 4-5 months even when they are smoothly processed without problems. Moreover, there seem to be cases where it takes much more time to obtain approval when the issuance is subject to approval by the authority in charge (the RBI, TRAI, IDRAI, etc.).

What is pointed out as another factor blocking the development of corporate bond market in India is the unclear process of legal procedures surrounding implementation of agreements and corporate insolvency and bankruptcy[58]. In a circumstance where systems for risk hedging and investors' interest protection are underdeveloped, lenders are limited to some of institutional investors who can make risk analysis by themselves and are oriented to hold the securities to maturity, which in turn has been lowering the liquidity of the secondary market. It seems India has been deeply caught in this vicious cycle. However, the huge amount of time and cost needed for legal procedures on corporate bankruptcy which has long been pointed out as a problem of investment environment is expected to be improved by the enactment of the Insolvency and Bankruptcy Code, 2016[59] which will facilitate more speedy process of bankruptcy procedures in the future (See BOX).

**BOX: Path to the enactment of Insolvency and Bankruptcy Code in India**

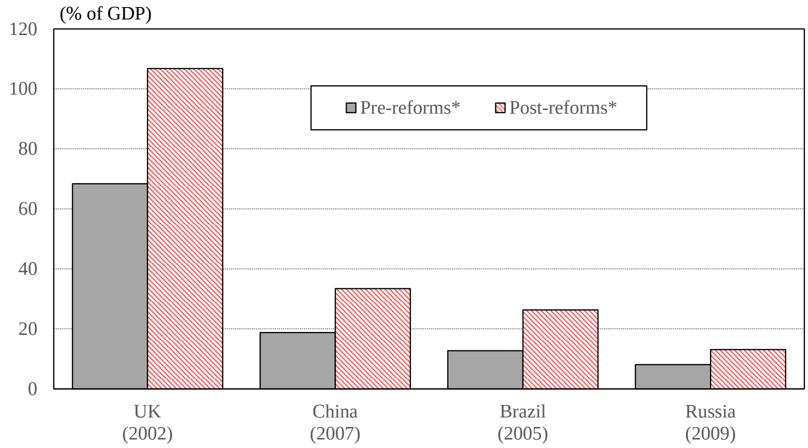
In India, the huge amount of time and cost needed for going through legal procedures on bankruptcy has long been pointed out as a problem hampering the investment environment. Although the ranking in the World Bank's Doing Business placed India at 63rd among 190 countries in 2019, up from the 142nd among 189 countries in 2014, in the individual indicator of "enforcing contract" it remained at the low level of 163rd in 2019, with a very slow improvement from 186th in 2014.

Effective and highly transparent legal system is indispensable for fostering a capital market. However, there were no general laws in India that comprehensively dealt with bankruptcy and indemnity of individuals and corporations. Restructuring procedures of manufacturers were administered by the Sick Industrial Companies Act, 1985 (SICA), while debt-collection procedures of secured creditors like banks and other financial institutions were taken care of by the Recovery of Debts Due to Banks and Financial Institutions Act, 1993 and the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest ACT, 2002 (SARFAESI). In addition, the government introduced other legal systems like the guidelines of the RBI for procedures of collection of private debts by a syndicate of banks, and those by the Companies Act for procedures of company liquidation. However, these complicated procedures coupled with the debtor-oriented bankruptcy procedures prevented speedy handling of the procedures, with the difficulty of exit (out of bankruptcy) being widely recognized as an investment risk. These multiple laws were unified into one by the enactment of the Insolvency and Bankruptcy Code, 2016, which obligated companies to file bankruptcy to the National Company Law Tribunal (NCLT)

57 SEBI(2018)
58 Vikramaditya Khanna and Umakanth Varottil (2012)
59 GOI(2016)

and the procedures of bankruptcy to be completed within 180 days of the start of the procedures. Although an extension up to 90 days is approved, the law enabled the procedures of corporate bankruptcy completed in less than a year, and creditor-led bankruptcy procedures were introduced. This is a major advancement forward to a protection of investor's interest through speedy and smooth disposal of corporate bankruptcy procedures, which in turn is expected to lead to an increase in investment. In fact, in many countries the size of corporate bond markets has largely increased after the reforms on the bankruptcy laws were implemented.

Comparison of Size of Corporate Bond Market before and after the Bankruptcy Reforms




Note: 1) Five-year average corporate bond to GDP ratio.
2) Figures in parentheses indicates the year of bankruptcy reforms.
Source: CRISIL

### (2) Measures taken in recent years

Priority areas that have been stressed in recent years include an increase of investor class through expansion of credit enhancement instruments and fostering of credit default swaps market (CDS).

Credit enhancement measures in India include issuance of Letter of Credit (LOC) by banks and frameworks of credit guarantees which are given by the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE),[60] PTC India Financial Services Limited (PFS) and India Infrastructure Finance Company Limited (IIFCL) to infrastructure projects of the companies specialized in infrastructure areas. Furthermore, aiming at securing the funds for infrastructure investment, the Modi administration that took office in May 2014 allowed banks to offer partial credit enhancement to bonds issued by companies implementing infrastructure projects and to issue long-term bonds for financing of infrastructure. In April 2015, the RBI allowed with conditions banks to hold long-term infrastructure bonds issued by other banks. These bonds are treated as those not subject to liquidity requirements on banks. In the fiscal 2020 draft budget, the government announced a policy to establish a Credit Enhancement Fund. If it is realized, it is expected to contribute to the expansion of corporate

[60] CGTMSE was set up in 2000 with the subscription of the government and the Small Industries Development Bank of India (SIDBI). It provides credit guarantees thorough member lending institutes (MLI).

bond issuance not only by infrastructure related companies but also by low rated companies.

Also, as a means of reform in order to ramp up infrastructure investment, the Modi administration pointed out in the report of Infrastructure Task Force released at the end of 2019 the importance of attracting private capital and revitalising bond and credit markets as well as re-examination existing investment guidelines for insurance companies and pension funds which are expected to be major lenders of long-term funds. These points are likely to be reflected in the future policies.

## 5. Recommendations to the Japanese authorities (Further possible co-operations between Japan and India)

### (1) Efforts for improvement of functions of India's bond market

As we described in the Chapter 3 above, there are many areas to be improved in the securities markets (especially corporate bond market) in India. It will be helpful that Japan supports the efforts of India to improve functions of corporate bond market by sharing with the problems perceived by the Japanese investors who invest in the Indian market as well as knowledge and experiences of market participants and the Japanese authorities involved in the development of Japanese corporate bond market.

### (2) Promotion of cross-border investment between the two countries

In promoting cross-border investment between Japan and India, efforts could be made (a) to encourage securities investment in India by Japanese investors, (b) to promote investment in both directions thorough mutual listing of bond ETF on both markets, (c) to encourage Indian issuers to increase the issuance of yen-denominated bonds (Samurai bonds).

(a)Regarding the Japanese investment in the Indian securities, there have already been several Japanese publicly offered investment trusts incorporating Indian bonds. As noted before, the Indian authorities have promoted in recent years deregulations on portfolio investment by FPIs including increase of types of investable securities, and relaxation or removal of restrictions on residual tenors and investment limits. Actually, some fund managers of the Japanese asset management companies we interviewed commented that the investment environment has been surely improved due to such deregulation measures as noted above. However, others also pointed out that much remains to be addressed. Specifically, they said that the restriction on foreign exchange transactions associated with bond trading inhibits the same day netting, which is the point that the Indian market lags behind other markets in Asia. There were also voices that, in addition to liberalization of foreign exchange transactions and implementation of netting-out as noted above, abolition of margin requirements on government securities and tax agency system should also be considered. Moreover, abolition of limit on bond investment as well as capital gain tax on the income of foreign investors would encourage more capital inflow from abroad and contribute to diversification of investor class. Removal of investment limit would also raise the possibility that the Indian government bonds are adopted in major bond indices. As we described in the Chapter 3, if the foreign index funds that move in tandem with those indices come to invest in the Indian bond market, it would also encourage a relatively stable capital inflow from abroad.

(b) On promotion of bilateral bond investment, mutual listing of debt ETFs on both markets could be considered. In April 2019, the Japan Exchange Group (JPX) agreed with the Shanghai Stock Exchange on building of Japan-China ETF connectivity, aiming at promoting mutual listing of ETFs with asset classes in two countries used as trust asset and paving the way to improve environment leading to expanded investment opportunities of investors of both countries to invest in the both securities markets. As a result, listing on the Shanghai Stock Exchange of EFTs of Japanese stocks and listing of ETFs of Chinese stocks on the Tokyo Stock Exchange were realized. It would also be helpful to consider whether the similar approach can be taken to the mutual listing of bond-linked ETFs after probing the needs in Japan and India.

(c) As shown previously, India has past records of issuance of Samurai bonds, like by the EXIM Bank of India. In order to increase the scope of issuers, in addition to sharing of our experience on Samurai bond market, a use of partial guarantee by JBIC to issuance of Samurai bonds by governmental agencies of India could be considered.

Figure 42：List of Recommendations

**(1) For improvement of functions of the Indian bond markets**

- Corporate bond market of India has many areas to be improved, and we can support the efforts of the Indian authorities to improve the functions of market by sharing with the them knowledge and experience of Japanese investors on the development of the Japanese corporate bond market.

**(2) Promotion of cross-border investment**

- Japanese investment in Indian securities can be encouraged through implementing such measures as liberalization of exchange transactions related to bond trading, abolition of margin requirement, tax agency system on government bond trading as well as removal of limit on bond investment and capital gain tax on foreign investors.
- If the Indian government bonds should be adopted in the major bond indices, it will contribute to expand an array of foreign investors, leading to stable capital inflows.
- On the bond investment between two countries, mutual listing of debt ETFs should also be considered.
- In order to expand the number of Indian issuing entities of Samurai bonds, sharing of Japanese knowledge and experience on the Samurai bond market coupled with the partial guarantee by JBIC to the issuance of the Indian governmental agencies that issue Samurai bonds would be helpful.

## Conclusion

In this research project, we have deliberated on the current situation and challenges for the Indian bond market which is expected to play an important role in economic growth of India. Although a certain level of expansion has been seen in the primary and secondary markets of the government bond market, its corporate bond market remains underdeveloped. Majority of the corporate bonds are of private placement, causing a low liquidity in the secondary market.

Factors constraining the development of corporate bond market especially include complicated procedures for public placement and cost burdens thereof together with requirement on major investors to hold government securities and restrictions on investment in low rated corporate bonds. Moreover, insufficient means of risk hedging against corporate defaults, like credit default swap market and bankruptcy procedures, and weak system for protecting investors' interests are seen as a major factor that has impeded expansion of issuers. In this regard, however, the enactment of the Insolvency and Bankruptcy Code, 2016 is expected to positively influence on protection of investors' interests by speed-up processing and facilitation of bankruptcy procedures, which in turn will contribute to an expansion of investment. It will be further requested for the Indian government to take more measures to provide risk hedging tools and reduce credit risks related to investment in corporate bonds with low credit ratings, through establishment of Securities Depository Centers and development of CDS market.

To broaden investor base in India, deregulation of investment controls on each type of investors including SLR regulation on commercial banks should be promoted, together with an increased flexibility of investment through removal of investment restrictions on FPIs and introduction of Euroclear settlement. If the Indian government securities should be accepted in major indices, it will help broaden the investor base and lead to a stable inflow of capital from abroad.

Specifically, to promote Japanese investment in the Indian securities market, such measures are requested as liberalization of exchange transactions related to securities trading, abolition of margin requirements on government securities trading and tax agency system, as well as removal of limits imposed on securities investment and capital gain tax on FPIs. In addition, promotion of investment in both directions through mutual listing of debt ETFs in both countries and facilitation of issuance of Samurai bonds utilizing the partial guarantees by JBIC will also contribute to expand the participation of issuers and investors. It can be said that there is much room to support India's efforts directed toward improvement of functions of corporate bond market by sharing with the Indian authorities knowledge of Japanese investors who have invested in the Indian securities market and Japanese experience on the development of Japan's corporate bond market.

## References

KAMIYAMA, Tetsuya (2007): India's Mutual Investment Industry, *Nomura Capital Market Review*, 2007 Autumn, 2007 (http://www.nicmr.com/nicmr/english/report/repo/2007/2007win05.pdf)

KAWANA, Tsuyoshi(2008): Chapter 13, India of the report on "Regulatory Considerations on Fostering of Capital Markets in Asia and Consumer Protection Framework", Financial Stability Agency, July 2008 (in Japanese)（https://www.fsa.go.jp/news/20/sonota/20080724-2/02-13.pdf）.

KITANO, Yohei (2017), "Increasing Issuance of Masala Bonds as a New Funding Tool for Indian Corporations", *Nomura Capital Market Quarterly*, Summer 2017 (in Japanese) (http://www.nicmr.com/nicmr/report/repo/2017/2017sum05.pdf).

SUGITA, Koji (2006): "Collective Investment Schemes in Emerging Economies (Attachment: Overview of Mutual Funds in India)", Japan Securities Research Institute, October, 2006 (in Japanese) （http://www.jsri.or.jp/publish/topics/pdf/0611_01.pdf）.

Japan Securities Research Institute (2016): Illustrated Review of the Asian Capital Markets, 2016 Edition, March 2016 (in Japanese) （http://www.jsri.or.jp/publish/market/market_27.html）.

FRANKLIN, Allen, and others (2009), Present Situation and Challenges of the Financial and Capital Markets in India, Nomura Research Institute, October 2009 (in Japanese)

ASIFMA (2017), "India's Debt Markets -The Way Forward-," July 2017 (https://www.asifma.org/wp-content/uploads/2018/05/asifma-indias-debt-markets-the-way-forward1-1.pdf)

CCIL (2019), "Quarterly Market Analytics," December 2019 (https://www.ccilindia.com/Research/CCILPublications/MarketAnalytics/Pages/QuarterlyMarketAnalytics.aspx).

------ (2020), "Monthly Newsletter," January 2020 (https://www.ccilindia.com/Research/CCILPublications/Lists/CCILPubRakshitra/Attachments/309/Rakshitra%20-%20January, %202020.pdf).

EPFO (1952), "The Employees' Provident Funds and Miscellaneous Provisions Act, 1952" (https://epfindia.gov.in/site_docs/PDFs/Downloads_PDFs/EPFAct1952.pdf)

-------- (2017), "64th Annual Report FY2016-2017," (https://search.epfindia.gov.in/Annual_Reports/Annual_report_2016-17_english.pdf)

GOI (1999), "The Foreign Exchange Management Act, 1999," December 29, 1999 (https://dor.gov.in/sites/default/files/Foreign%20Exchange%20Management%20Act%201999.pdf)

----- (1993), "The Recovery of Debts Due to Banks and Financial Institutions Act, 1993," (https://indiacode.nic.in/handle/123456789/1775?locale=en)

----- (2002), "The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest ACT, 2002," December, 2002 (http://legislative.gov.in/sites/default/files/A2002-54.pdf)

----- (2003), "Fiscal Responsibility and Budget Management Act, 2003," Ministry of Finance, August 2003 (https://dea.gov.in/sites/default/files/FRBM%20Act%202003%20and%20FRBM%20Rules%202

004.pdf).
----- (2013),” The Companies Act, 2013,” Ministry of Corporate Affairs, August 30, 2013 (https://www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf).
----- (2016), “The Insolvency and Bankruptcy Code, 2016,” Ministry of Corporate Affairs, May 28, 2016 (https://www.mca.gov.in/Ministry/pdf/TheInsolvencyandBankruptcyofIndia.pdf).
IDRAI (1999), “Insurance Regulatory and Development Authority of India Act, 1999,” (http://legislative.gov.in/sites/default/files/A1999-41.pdf)
-------- (2002), “The Insurance Act 1938 [As Amended by Insurance (Amendment) Act, 2002],” (https://www.irdai.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=PageNo107&flag=1)
-------- (2016), “IRDAI (Investment) Regulations, 2016,” (https://www.irdai.gov.in/ADMINCMS/cms/frmGeneral_NoYearList.aspx?DF=RL&mid=4.2)
-------- (2019), “Annual Report 2018-2019,” (https://www.irdai.gov.in/admincms/cms/uploadedfiles/annual%20reports/IRDAI%20English%20Annual%20Report%202018-19.pdf)
IFC (2017), “Masala Bond Program – Nurturing A Local Currency Bond Market,” January 2017 (https://www.ifc.org/wps/wcm/connect/be6c1b09-9e08-4fc4-9630-45ecc078cc88/EMCompass+Note+28+Masala+Bond+Program+FINAL.pdf?MOD=AJPERES&CVID=lDmkW5e)
NPS Trust, “Annual Reports,” (http://www.npstrust.org.in/annual-reports).
NSE (2019), “Indian Securities Market, A Review (ISMR) - 2019,” (https://www1.nseindia.com/research/dynaContent/ismr.htm)
PFERDA (2013), “The Pension Fund Regulatory and Development Authority Act, 2013,” September 2013 (https://www.pfrda.org.in/myauth/admin/showimg.cshtml?ID=353).
----------- (2018), “Annual Report of PFRDA-FY2017-2018,” December 2018 (https://www.pfrda.org.in/myauth/admin/showimg.cshtml?ID=1594).
Radhika Pandey and Ila Patnaik (2019), “Financial Sector Reforms in India,” National Institute of Public Finance and Policy (NIPFP) Working Paper Series No. 267, May 10 2019 (https://www.nipfp.org.in/media/medialibrary/2019/05/WP_267_2019.pdf).
RBI (2007), “The Banking Regulation Act, 1949 [As amended by The Banking Regulation (Amendment) Act, 2017],” (https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/BANKI15122014.PDF)
----- (2009), “Reserve Bank of India Act, 1934 [As modified up to February 28, 2009],” (https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/RBIAM_230609.pdf)
----- (2011), “Guidelines on Credit Default Swaps (CDS) for Corporate Bonds,” RBI/2010-11/542 IDMD.PCD.No. 5053 /14.03.04/2010-11, May 23, 2011. (https://rbidocs.rbi.org.in/rdocs/notification/PDFs/FGCD240511F.pdf)
----- (2015a), “Master Circular – Prudential Norms for Classification, Valuation and Operation of Investment Portfolio by Banks,” July 1, 2015 (https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=9904&Mode=0#112).

----- (2015b), "External Commercial Borrowings (ECB) Policy - Issuance of Rupee denominated bonds overseas," RBI/2015-16/193 A.P. (DIR Series) Circular No.17 September 29, 2015 (https://www.rbi.org.in/scripts/NotificationUser.aspx?Mode=0&Id=10049).

----- (2017), "Issuance of Rupee denominated bonds overseas," RBI/2016-17/316 A. P. (DIR Series) Circular No.47, June 7, 2017 (https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10994&Mode=0).

----- (2019a), "Foreign Exchange Management (Transfer or Issue of Security by a Person Resident outside India) (Amendment) Regulations, 2019," January 31, 2019 (https://m.rbi.org.in/Scripts/BS_FemaNotifications.aspx?Id=11496)

----- (2019b), "India's Corporate Bond Market: Issues in Market Microstructure," RBI Bulletin, January 2019 (https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/2ICBMIMM141CFFF458BB4B3A9F4C006F4AE4897F.PDF).

SEBI (1956), "Securities Contracts (Regulation) Act, 1956 [As amended by the Finance (No. 2) Act, 2019]," Feb 16, 1957 (https://www.sebi.gov.in/legal/acts/feb-1957/securities-contracts-regulation-act-1956-as-amended-by-the-finance-no-2-act-2019-and_4.html).

----- (1992), "Securities and Exchange Board of India Act, 1992 [As amended by the Finance (No. 2) Act, 2019]," Jan 30, 1992 (https://www.sebi.gov.in/legal/acts/jan-1992/securities-and-exchange-board-of-india-act-1992-as-amended-by-the-finance-no-2-act-2019-_3.html).

----- (1996), "The Depositories Act, 1996 [As amended by Finance Act, 2018]," Sep 20, 1995 (https://www.sebi.gov.in/legal/acts/sep-1995/the-depositories-act-1996-as-amended-by-finance-act-2018-_1.html).

----- (2005), "Report of High Level Expert Committee on Corporate Bonds and Securitization," December 23, 2005 (https://www.sebi.gov.in/debt/expertreport.pdf).

----- (2007), "Amendments to SEBI (Disclosure and Investor Protection) Guidelines, 2000," December 03, 2007 (https://www.sebi.gov.in/legal/circulars/dec-2007/amendments-to-sebi-disclosure-and-investor-protection-guidelines-2000_9842.html).

----- (2008), "Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008 [Last amended on May 07, 2019]," Dec 15, 2017 (https://www.sebi.gov.in/legal/regulations/dec-2017/securities-and-exchange-board-of-india-issue-and-listing-of-debt-securities-regulations-2008-last-amended-on-may-07-2019-_38451.html).

----- (2014a), "SEBI (Collective Investment Schemes) Regulations, 1999 [Last amended on January 9, 2014]," January 2014 (https://www.sebi.gov.in/legal/regulations/oct-1999/sebi-collective-investment-schemes-regulations-1999-last-amended-on-january-9-2014-_34701.html)

----- (2014b), "Securities Laws (Amendment) Act, 2014," Aug 22, 2014 (https://www.sebi.gov.in/legal/acts/aug-2014/securities-laws-amendment-act-2014_27855.html).

----- (2018), "Streamlining the process of public issue under the SEBI (Issue and Listing of Debt

Securities) Regulations, 2008, SEBI (Issue and Listing of Non-Convertible Redeemable Preference Shares) Regulations, 2013, SEBI (Public Offer and Listing of Securitised Debt Instruments) Regulations, 2008 and SEBI (Issue and Listing of Debt Securities by Municipalities) Regulations, 2015," Circular No.: CIR/DDHS/P/ 121/2018, August 16, 2018 (https://www.sebi.gov.in/legal/circulars/aug-2018/streamlining-the-process-of-public-issue-under-the-sebi-issue-and-listing-of-debt-securities-regulations-2008-sebi-issue-and-listing-of-non-convertible-redeemable-preference-shares-regulations-_40004.html).

----- (2019), "Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2019 [Last amended on December 19, 2019]," December 2019 (https://www.sebi.gov.in/legal/regulations/dec-2019/securities-and-exchange-board-of-india-foreign-portfolio-investors-regulations-2019-last-amended-on-december-19-2019-_44436.html).

----- (2020), "Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 [Last amended on March 06, 2020]," March 06, 2020 (https://www.sebi.gov.in/legal/regulations/mar-2020/securities-and-exchange-board-of-india-mutual-funds-regulations-1996-last-amended-on-march-06-2020-_41350.html).

Stephen Wells and Lotte Schou-Zibell (2008), "India's Bond Market-Developments and Challenges Ahead," Working Paper Series on Regional Economic Integration No.22, December 2008.

Vikramaditya Khanna and Umakanth Varottil (2012), "Developing the Market for Corporate Bonds in India," NSE WORKING PAPER, March 2012.


Address: Nihon Life Nihonbashi Bldg., 8F 2-13-12, Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan
Telephone: 81-3-3510-0882, Facsimile: 81-3-3273-8051
〒103-0027　東京都中央区日本橋本 2-13-12　日本生命日本橋ビル 8 階
電話：03-3510-0882（代）ファックス：03-3273-8051
e-mail: admin@iima.or.jp　URL: https://www.iima.or.jp