

Giving debt its due

A look at the products, players, policies, and the big corporate bond imperative



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Message from SEBI

The Indian debt market's penetration is abysmal compared with those in developed economies, especially with respect to the participation from individuals and smaller institutions, such as SMEs/MSMEs. One of the reasons for this is the lack of awareness about products available and their role in financial planning/treasury management.

ASSOCHAM is hosting a series of events to improve the awareness about the debt market, with CRISIL as the knowledge partner. The report covering these events focuses on investor education on various products in the debt market/investment process and is targeted towards enhancing participation through direct and indirect investments (through institutions).

The report is in the form of a primer on the Indian debt market, allowing readers to understand various aspects of the industry, such as investors, instruments, infrastructure and intermediaries. Additionally, it includes case studies on relevant developments in the debt market and views from leading participants about the industry.

I wish ASSOCHAM all the best for this endeavour and wish them great success.



**Shri G Mahalingam,
Whole-time member, SEBI**

Message from ASSOCHAM

A country's economic growth is contingent on availability of timely and adequate capital to firms and businesses.

In India, the fund requirement to develop the country's infrastructure is very large. While banks remain a major source of funds, they are seen as increasingly unable to meet the funding needs of companies, given their own stressed financial position. Alternative sources of funds are needed to meet this funding gap to sustain and push the economy forward. Hence the need for a vibrant and developed capital market, comprising both equity and debt segments.

The recent policy measures for development of the corporate bond market by the RBI, the SEBI and the finance ministry reiterate the importance the financial market holds for the country. Although these measures provide the much needed impetus and are in the right direction, deepening and development of these markets would need a sustained concerted effort by the entire institutional framework to address and iron out the issues and challenges.

Against this backdrop, ASSOCHAM is organising a conference on the bond market in the main corporate hubs – Kolkata, New Delhi, Chennai, Bengaluru, Hyderabad and Ahmedabad. It has also come out with a knowledge paper prepared jointly by ASSOCHAM and CRISIL, with valuable inputs from and guidance of Mr Ashvin Parekh, Managing Partner, Ashvin Parekh Advisory Services LLP.

We hope this report will be useful for all stakeholders.

Your valuable suggestion/comments are welcome.



Shri D S Rawat,
Secretary General, ASSOCHAM

Message from CRISIL

Development of the bond market is linked to development of an economy as it allows efficient flow of capital from the surplus/savings to areas where it is needed. The efficiency is on account of the market's inherent advantages such as predictable returns and clear risk-reward relationship.

However, the Indian bond market has not grown the way it should have due to structural constraints – dominance of banks in lending, risk appetite of investors limited to higher ratings, regulatory arbitrage between loans and bonds and prescriptive regulatory limits on investments. Having closely tracked the market on key parameters such as depth, breadth and liquidity, CRISIL believes there is much room for development on each count.

First, the Indian debt market is skewed towards sovereign securities, which make up nearly 3/4th of the pie. As of June 2016, the corporate bond to G-sec ratio stood at 0.38 compared with 1.6 for the US. The ratio is higher even for developing economies such as Malaysia and China, at 0.81 and 0.47, respectively. At 18%, the penetration of corporate bonds as measured by outstanding/GDP ratio for India also lags developed markets – the US (129.48%) and Asian peers South Korea (76%) and Malaysia (44%). Also, within the corporate bond market, the issuances are concentrated on higher rated papers – specifically AAA and AA, which together formed 88% of the issuances in Q1 of FY17 compared with 80% in FY16 – led by financial sector entities.

The second issue pertains to lack of liquidity. The problem aggravates for lower-rated instruments as more than 90% of the trading is restricted to AAA and AA segments. It also underscores the fact that the lower rated segment is an accrual and HTM market. Finally, the market breadth remains narrow for lack of retail (individuals) participation despite a strong preference in the country for fixed-income products and the fact that 47% of the annual household financial savings flow into bank fixed deposit.

The series of events being held by ASSOCHAM under the guidance of SEBI, along with CRISIL and APAS – in Kolkata, New Delhi, Chennai, Bengaluru, Hyderabad and Ahmedabad – are a well-intended step towards reaching out to retail and other untapped investor segments. I believe this report, being released as part of this campaign, will allow readers to get a better understanding of the entire bond market ecosystem and how to benefit from participating in it.



Nagarajan Narasimhan
Sr. Director & Business Head
CRISIL Research

Message from APAS

The Indian debt market has been dominated by bank-led financing of both corporates and public-sector entities. The reluctance to move to other forms of debt can be seen in higher bank financing for large firms (14.4% in 2000-01 versus 17.8% in 2010-11), compared with the bond market (3.5% in 2000-01 versus 3.9% in 2010-11).

The insubstantial contribution of the bond market has spawned a number of committees to introduce reforms for making the bond market beneficial for investors and issuers. The reforms have resulted in several changes in the past and has led to the removal of considerable roadblocks in the bond market development.

Investors have evolved to a great extent and are now more receptive and open to diversification into new asset classes.

Spotting this opportunity, ASSOCHAM, in co-ordination with APAS and CRISIL, has organised a series of events in various parts of the country. The -series is more investor-centric and has been organised to address their unfamiliarity of the bond markets. Participants included corporates, regulatory authorities, issuers, intermediaries and investors.

All events in the series have been designed around the same theme of increasing the bond market penetration in India. The events attracted top leaders in the bond market analysing current challenges in and discussing ways in a top-down approach to tackle challenges. The event has been blessed by the regulatory authorities too, as a result of which there was a focus on regulatory reforms as well.

APAS and CRISIL, the knowledge partners for the event, brought out a report discussing the Indian bond market backdrop, changes in the market over years, and the five important pillars of the bond market - namely investors, infrastructure, institutions (issuers), instruments and intermediaries. The report also includes a study of the global markets, where corporate bond markets have evolved at a pace in a relatively short time.

An informed investor can easily assess the risk-return tradeoff between bonds and other asset classes, thus evaluating the viability of bond investments. Other major factors, such as the importance of inflation and returns, have been discussed. The report provides a basic knowledge to the investor about bond market stability.

APAS believes the bond market has a potential to widen its ambit and reduce the burden on the banking system, given the current volatility in the secondary market.



Ashvin Parekh
Managing Partner – APAS

Executive Summary

Debt forms a huge part of financial markets across the world. In the USA, with an outstanding of \$40,000 billion, it is almost 1.6 times the size of the equity market. In India, however, it is ~90% of the equity market. While India's GDP as a share of global GDP is 2.99% (Source: IMF), its share of debt market capitalisation is less than 2% of global outstanding.

Within this small market, again, government securities reign supreme, with corporate bonds relegated to a minority. The corporate bond market is a fifth of the equity market. Worse, the penetration of corporate bonds, as measured by amount outstanding to GDP, was 18% in 2016, up moderately from over 10% at the turn of this decade.

Hindering growth of the market are factors such as dominance of banks in lending, risk appetite of investors limited to higher ratings, regulatory arbitrage between loans and bonds, and prescriptive regulatory limits on investments. Also, retail (individuals) participation in debt markets is almost non-existent, even though the Indian investor psyche is skewed towards fixed income instruments – with as much as 47% of the annual household financial savings flowing into bank fixed deposits.

The importance of a thriving corporate debt market cannot be lost on anyone. It would be a win-win for both industry participants and investors – issuers will benefit from being able to generate stable funding at low costs, while investors can get secure and predictable cash flows with higher returns compared with plain-vanilla bank fixed deposits.

In the long run, this also offers economic benefits to the country as a whole, and is growth-conducive. It becomes especially important for funding the government's ambitious infrastructure agenda, which will require an estimated Rs 43 trillion in the five fiscals to 2020.

We believe three steps will go a long way in deepening this market.

First, facilitate larger institutional investment in corporate bonds: Here mutual funds, insurance companies and pension funds have the best chance of channelling financial savings.

Second, wean companies away from bank loans: Bank financing is by far the most preferred mode of funding in India today and as of September 2016, the corporate bond outstanding to bank loans (corporate) was just 31.73%. For the debt market footprint to expand, it is imperative that more companies come out with bonds.

Third, put in facilitative policies and infrastructure: This is a sine qua non from the perspective of both issuers and investors. Setting up of a dedicated team of experts or department within the Ministry of Finance to facilitate development of the corporate bond market and following up on relevant implementation initiatives will help.

The individual investor, too, has a role to play. Recent years have seen several encouraging measures from regulators, but the segment hasn't quite taken off. A vigorous investor education and awareness initiative is, therefore, the need of the hour. This report is a major step in that direction. It offers readers an overview of the debt market in India, the different products available and the key stakeholders involved in the investment process.

India Inc's debt aversion is confounding

The article is authored by APAS

Along with banks, the bond and equity markets form major pillars of the financial sector, which is critical for overall growth of any economy. Yet, in India, while banks and equity markets have seen breakaway growth in the past few decades, the debt market has been rather subdued, and still largely a stranglehold of sovereign papers.

Bonds are less risky than equity and predictably get primacy from risk-averse investors. Therefore, development of the debt market should ideally precede development of the equity market. This has not happened in India.

Trading in the corporate debt market

Year/month	BSE		NSE	
	No. of trades	Traded value (INR crore)	No. of trades	Traded value (INR crore)
2010-11	4448	39528	8006	155951
2011-12	6424	49842	11973	193435
2012-13	8639	51622	21141	242105
2013-14	10187	103027	20809	275701
2014-15	17710	204506	58073	886788
Apr 15 – Dec 15	12469	161880	39471	605499

Source: SEBI

This is surprising, given that Indians' penchant for fixed-income products is well-known. Somehow, this appears to have rubbed off on even the corporates, which prefer bank loans to raising debt through bonds.

Banks and equity markets remain the dominant sources of capital for businesses in India, even as the corporate bond market has languished for decades.

Today, corporate bonds are a \$287 billion (about Rs 19 trillion) market, around 14% of GDP. This is largely on an absolute basis, but small compared with bank assets (89% of GDP) and equity markets (80% of GDP). Also, in comparison to India, the outstanding amount of corporate bonds is around 115% of GDP in the US, 15% in Japan and 110% in the UK.

This needs to change – and soon – if India is to meet its huge infrastructure investment needs, underscoring the need for a well-developed and active corporate bond market that can provide an alternative source of finance for the long-term needs of both public and private sector firms.

The reasons behind lacklustre growth of the bond market are not far to seek:

- **Unpopularity of debt financing among corporates:** Significant supply and demand are prerequisites for an efficient bond market. Sufficient supply can be ensured by enhancing the issuer base. Unlike corporates in developed economies, which prefer the bond market for their financing needs, corporates in India prefer banks. This may be attributed to an inefficient bond market.
- **Popularity of private placements:** Private placements are popular and dominated by financial institutions, PSUs and banks. The popularity may be attributed to the operational flexibility and ease the route offers, which impacts the debt markets significantly.

- **Insufficient supply and lack of variety:** Investors in India are restricted from investing in sub-investment grade corporates. This limits the availability of bonds compared with other developed markets.
- **Insufficient demand in the domestic market and restrictions for foreign investors:** Foreign institutional investors (FIIs) invest in equity and debt in emerging markets, provided these markets are efficient. The presence of FIIs in any segment of the financial market makes a significant difference for growth of that segment. Although India's equity market is top-ranked and FIIs invest heavily in the segment, the bond market is not one of their favourites.
- **Lack of committed market makers:** Market makers such as primary dealers (PDs) play a significant role in developing the market at a nascent stage. They can provide required support and exit options to investors. There is a visible paucity of PDs in India.
- **Illiquidity in government debt market:** The primary government debt market in India is quite big. However, the secondary market has very thin liquidity. Apart from the factors discussed above, improper pricing, clearing and settlement system, risk-averse investors, lack of hedging instruments, stringent norms and higher transaction cost (stamp duty) stand in the way of growth.

For the corporate debt market to realise its full potential and contribute to growth of the economy, it is imperative to address all these issues, and soon.

Need for growing the corporate bond market

There are various types of bonds in the Indian market. These include government bonds (G-Secs, issued by Government of India), borrowings by state governments (state development loans or SDLs), tax-free bonds (issued directly by quasi-sovereign companies), corporate bonds, bonds issued by banks and other financial institutions, tax-saving bonds issued by Government of India (which provide investors tax rebates, in addition to the normal rate of interest), and tax-saving infrastructure bonds (issued directly by infrastructure companies approved by the government, offering tax rebates along with a decent rate of interest).

The growth of the economy depends on development of each of these segments, in particular the corporate bond market.

The corporate bond market can serve financial needs, minimise the cost of intermediation between issuers and investors, and bring significant economic benefits. It can promote diversification in allocation of funds in the economy to the most productive uses. Giving the private sector regular and fair access to the bond market can ease the pressure on public funding. And as the corporates grow, it will create a strong foundation for employment, which would contribute to enlargement of the middle class and help reduce the wealth gap.

Investors in corporate bonds include institutional investors (domestic and foreign) and retail investors (domestic and foreign). The borrowers or bond issuers are the corporate bodies expected to get their projects financed.

Currently, it is a market for highly rated, plain vanilla instruments, issued by financial firms and public sector enterprises. Also, issuance is fragmented and trading dries up within a few days of issuance.

In India, infrastructure companies, PSUs and NBFCs dominate the corporate bond market and frequently issue debentures.

Advantages of a strong corporate bond market

A thriving local currency bond market offers several benefits to issuers and investors alike. It can help corporates avoid balance sheet mismatches and foreign currency exposures. To institutional investors, on the other hand, it assures of quality long-term financial assets, helping them match assets and liabilities and ensure risk diversification. Let's look at the benefits to both sides:

Advantages for issuer companies

- **Stable funding at low cost:** Companies get secure and stable funding for growth and value creation. The cost of funding from the bond market is less compared with equity and bank loans. This improves efficiency of use of capital, maximising economic benefits. Bond funding acts as an alternative to bank finance and will enable continuous finance even when bank loans are not available and corporates would not need to hoard cash in their balance sheet.

In turn, this will ease pressure on banks for lending to big corporates for a longer tenure. It will also offer flexible funding for businesses needs and development. Also, since bonds have fixed terms, as determined by the issuing corporates, it enables them to match the bond's maturity with expected cash flows from operations.

Mounting NPAs and increased capital requirements under Basel III have forced banks to tighten lending to corporates. In such a situation, bond markets become pivotal in supporting the diverse financing requirements of the growing Indian economy. This is especially so for small and medium enterprises and infrastructure projects, which carry higher risks or require longer-term financing that banks with their asset-liability constraints cannot provide.

- **Financial instruments:** Bond market can provide various types of instruments to serve corporates' funding needs. It will provide a mechanism for SMEs to grow into international markets.
- **Transparency in governance:** Information demanded by investors encourages corporates raising funds in the bond market to maintain high standards of transparency and corporate governance. This will, in turn, improve management and efficiency of the corporates.
- **Cheaper rates:** Corporate bond market facilitates cheaper rates compared with bank loans at least for less creditworthy borrowers. However, this cost-effectiveness becomes meaningful only when the corporate bond market is well-developed, with complete standardisation.
- **Foreign exchange risk:** Corporates raising funds offshore and dealing in foreign currency become vulnerable to abrupt changes in offshore interest rates. The recent volatility in currency market and devaluation of Indian rupee has squeezed corporates' profits. Lowering the level of borrowing from foreign markets would insulate domestic market from currency and liquidity volatility. The bond market would block a channel through which external shocks can be passed to the domestic market.

Advantages for investors

- **Secure and predictable cash flows:** Corporate bonds provide investors a stable and secure form of investment with regular income. Bonds offer potentially higher returns than banks, predictable investment income and assist in efficient investment of savings. Issuers of bonds provide much detailed information and hence informed assessment of risk.

Given the more committed periodic payments in case of debt market, investors would prefer to invest in debt market than equity market provided it is developed and vibrant.

Even though commercial banks can lend to the corporates, the difficulty arises when a large loan amount has to be sanctioned for longer tenure, especially in case of financing long-term infrastructure projects. Since the liability of commercial banks consists of deposits accepted from the public, which are of shorter tenure, it becomes difficult for the banks to maintain huge amount of long term assets in the form of long-term infrastructure loans.

Asset-liability mismatch of banks can be reduced if banks act as investors and fund raisers in the bond market, but it makes banks more vulnerable to market crisis. Hence, existence of bond market in bank dominated financial sector is a successful substitute of bank loans.

In the current scenario, where banks are under severe pressure due to stressed assets, inadequate capital requirements to comply with Basel III norms and hence have tightened their lending, a developed bond market can come to the rescue of the economy and help keep it going by providing alternative financing.

- **Diversification:** Corporate bonds acts as an alternative financial instrument to bank deposits, equity markets and public sector bonds. The number of corporate bonds in the market facilitates diversification in maturity, credit quality, rate of return, etc. A more liquid and accessible bond market across sectors, maturities and ratings would create investment opportunities for domestic institutional investors. This will in turn encourage foreign investors to invest in Indian bond market.
- **Mechanism to link investors and borrowers:** The bond market serves to bring investors and borrowers together and maximise the benefits for both, thereby achieving economic goals. Easing investment restrictions would help broaden the investor base which could ultimately function as a shock absorber.

Given all this, there is a strong need for a well-developed corporate bond market. Cheaper and easier financing to corporates will lead to an increase in efficiency in production and output, and thereby aid economic growth. Plus, since the government's plans for massive infrastructure development are long-term in nature, involve huge investments and several risks, and are difficult for banks to finance, a well-developed corporate bond market becomes the need of the hour.

Deepening the market an urgent imperative

Despite a string of measures taken over many years, the corporate bond market in India remains shallow compared with government securities, leave alone equities. In 2016, India's total debt outstanding was ~98 trillion. Sovereign securities accounted for 72% of the total debt outstanding to GDP, even though the penetration of corporate bonds showed an improvement at 18% compared with 10.31% in 2010.

Contrast this with the overall emerging economies universe, where the corporate bond market had tripled in size to \$6.9 trillion as of 2014, compared with \$1.9 trillion in 2005 (*IOSCO working paper, September 2015*). Even that was but a small fraction of the total global debt (including households, corporate, government and financial), which stood at ~\$199 trillion that year, according to a McKinsey & Co estimate.

The penetration of corporate debt is very low compared with developed markets such as the US and peers in Asia, though G-Sec penetration at 42% is comparable to other countries. Indeed, the G-Sec market in India is fairly developed, with facilities like DVP III settlements, availability of trading platforms, guaranteed settlements, presence of market makers, limited securities with higher outstanding and significant demand from major institutional investors, unlike for corporate bonds.

Country	Penetration (Outstanding/GDP)		Ratio (Bonds/G-Sec)
	as of Jun-16		
	G-Secs	Corp bonds	
USA	80.99%	129.48%	1.6
China	44.16%	20.74%	0.47
Japan	206.79%	15.4%	0.07
South Korea	53.54%	76.01%	1.42
Singapore	45.28%	33.04%	0.73
Malaysia	54.3%	43.8%	0.81
India	42%	18%	0.388

Even in secondary markets, corporate bonds are illiquid compared with G-Secs, with the trading ratio as low at 0.19%. To be sure, debt markets are illiquid in general across the globe, not just in India. This can be attributed to multiple issues from issuers and investment behaviour (hold to maturity or HTM) of majority of investors.

Country	Trading ratio (Trading to Amount Outstanding)	
	G-Secs	Corp bonds
USA	3.84%	1.14%
China	0.88%	0.29%
Japan	1.62%	0.05%
South Korea	0.91%	0.18%
Singapore	0.47%	N.A.
Malaysia	0.65%	0.14%
India	1.02%	0.19%

And this is not because evangelists are few and far between. The development of the corporate bond market has been an oft-repeated theme across research papers and conferences for years.

We believe the time to identify and pursue *actionable* steps to increase the depth of India’s corporate bond market depth is nigh. We have identified three of these, and it will be pertinent to note that all of them have facilitated growth in the corporate bond market of developed nations, which underscores their significance. These measures are:



Let us look at each measure in detail:

1. Increase investor demand:

India has a gross domestic savings rate of 33% of GDP, comparable with the best in the world. Close to 40% of the total savings is in the form of financial savings, of which 47% goes into fixed deposits.

Curiously, while the fixed-income nature of bank deposits appeals to the Indian saver, bonds, despite being fixed-income instruments, do not have the same appeal. Therefore, we believe investment products such as mutual funds, insurance and pension funds have the best chance of mobilising financial savings to corporate bonds in India. Even in the US, close to 70%¹ of the bond issuances are consumed by MFs, Insurance firms and Pension funds. The numbers for India are much lower, as the following table shows.

¹Source – ICI, NAIC, IOSCO Pension statistics

Institutional investment in corporate bonds in FY15

Investor	Corporate bonds (Amount in Cr)	Total Investments (Amount in Cr)	% investments in Corporate Bonds
EPFO	182,128	636,039	28.63%
Corporate*	137,708	1,032,299	13.34%
Banks	267,765	2,983,576	8.97%
FPI	181,781	2,320,539	7.83%
MFs	250,054	1,194,774	20.93%
Insurance	420,349	2,344,228	17.93%
Total	1,439,786	10,511,455	13.70%

*Based on FY2013/2014/2015

Measures that can be taken to improve penetration of investment products are given in Annexure I.

2. Transition from bank loans to bonds:

Bank financing is by far the most preferred mode of funding in India today. Corporate bond outstanding to bank loans (corporate) was 31.73% as on September 2016. Various factors such as differences in pricing, accounting/valuation treatment for the asset, time lag permitted for recognition of event of delayed payment/default etc contribute to the arbitrage that exists presently between loans and the capital market.

Transition from loans to bonds shall be can help increase debt capital base. Measures that can be taken in this regard are:

- i) Provide impetus to securitisation market through –
 1. Encouraging insurance companies and provident funds to invest in long-term mortgage-backed securities. The regulators have permitted investments in ABS/MBS. However, there is limited demand from these investors, which primarily invest in traditional top-rated instruments
 2. Persuading banks to securitise their housing and infrastructure portfolios
 3. Enhancing market for innovations such as commercial mortgage-backed securitisation transactions, toll road receivables, annuity receivables and education receivables. In the last few years, a few instruments for future flow securitisation and collateralised mortgage backed securities have been widely accepted by the industry participants, and this market has huge potential to evolve.
- ii) **Remove loan-bond arbitrage by measures** such as allowing banks to classify (and reclassify) bond and loan assets into held to maturity or available for sale buckets based on their declared intention rather than automatically based on legal documentation. Some of these will be addressed by implementation of Ind AS. Reducing the statutory liquidity ratio requirements will free up capital. And the implementation of Basel III norms requiring banks to maintain high-quality liquid assets will push banks to invest in corporate bonds.
- iii) Measures taken to limit the amount of bank loan that can be taken by specific categories of issuers -- say for instance, higher-rated issuers. The limits have already been drafted for large issuers, but it needs to evolve to smaller issuers too.

3. Direct oversight by dedicated team in North Block

Facilitative policy measures, both from the perspective of investors and issuers, are a sine qua non. Setting up of a team or department of experts within the Ministry of Finance, whose mandate will be to facilitate the development of India's corporate bond market, and follow up on relevant implementation initiatives, will be a huge help. Some of the measures that can be taken up by such a department are:

i) Investors:

1. Facilitate liberalisation of investment policies of key market participants by permitting them to take higher exposure to corporate bonds across the rating spectrum. For instance, provident and pension funds, which manage some of the largest corpuses in India, have caps on investments into corporate bonds. The EPFO can invest only 45% of its incremental investments into corporate bonds and that too only in public issuers rated AA and above. Only 10% of incremental investments are permitted into private companies and private banks that meet specific eligibility criteria such as dual AAA ratings for private companies and dual AA+ for private sector banks, consistent profit track record and dividend history, among others. Introduction of the new investment norms for retirement funds has opened up investment options and has therefore been a welcome step. However, the new pattern still limits investments in corporate bonds up to the AA category.²

In comparison, in developed pension markets, regulators do not impose any investment limits. Even in emerging pension markets, limits have been relaxed. Countries such as Australia, Canada, Korea, Germany and Japan impose no limits for investment in bonds. In countries such as the US, limits are prescribed only for bonds issued by employers. Sweden has a limit of 75% for non-state or equivalent papers. Emerging pension markets such as Chile have restrictions ranging from 40% to 80% in case of Lifecycle funds; investments up to 5% are permitted in non-investment grade securities. Brazil and South Africa allow 80% and 75% allocation, respectively, to corporate bonds.

2. Even if policies mandate exposure only to higher-rated bonds, facilitation of a credit enhancement mechanism by creating innovative instruments (such as partial guarantees, securitisation of annuity on roads, securitisation of receivables by municipal corporations) can be considered. This will also allow issuers/ projects with moderate creditworthiness to access the corporate bond market, and also meet investor need for higher credit quality.

Partial guarantee mechanism permitted for banks has not been effective due to provisioning norms and lower reward to risk. Since September 2015, when the banks were permitted to extend partial credit enhancement (PCE) to corporate bonds, there haven't been any transactions based on this provision.

The primary reason for the lack of effectiveness of this mechanism seems to be the upper limit of 20% PCE of the bond issue size. Contemporary experience suggests the PCE requirement had exceeded the current maximum of 20% in majority of successful transactions so far. Recently, RBI

² Investments in corporate bonds rated below AA is permitted if the exposure is hedged through CDS protection. The CDS market is virtually non-existent today.

has increased this limit to 50% of the bond issue size subject to the PCE provided by any single bank not exceeding 20% of the bond issue size and the extant exposure limits.

The issuers seem to be concerned about the PCE commission charged by the banks, which potentially adds 30-50 bps to the cost. Added to this, higher yield sought by investors on account of the structured nature of the transaction, as against a vanilla instrument of a similar rating, has made this alternative unattractive. In such situations, a proposed institution like the Bond Guarantee Fund of India (BGFI) may prove helpful if it extends full guarantee. The said structures would be simpler to understand for investors and would add significant comfort.

Apart from this, credit enhancement mechanisms from multilateral institutions and the BRICS Bank can also be evaluated for this. Given the limitations faced by banks in extending third party guarantees, some emerging markets have introduced agencies that specialise in providing financial guarantees to lower-rated corporations only. For example, in Malaysia, the government has established Danajamin Nasional Berhad, the country's first Financial Guarantee Insurer. It provides financial guarantee and credit enhancements for corporate bond issuances by facilitating non-AAA rated companies to access the corporate bond market.

3. Develop standard and independent valuation practices to reduce arbitrage on account of pricing. HR Khan Committee report also highlighted the need for uniform valuation practices across industry. Across financial markets in India, different rules are laid down by regulators for valuation of assets, especially corporate bonds. Financial regulators have prescribed the guidelines to their corresponding regulated entities on best practices. However corporates, AIFs, etc do not have any specific guidelines.

For regulated entities, in some cases, multiple approaches are prescribed by the same regulator depending on the period for which investments are held. For example, banks follow different valuation norms for held to maturity, held for trading and available for sale portfolios. Likewise, insurance companies value the same corporate bond differently if it is held in both unit- and non-unit linked portfolios.

Even in cases where mark-to-market valuations are prescribed, approaches vary across market participants. For instance, some financial products do not recognise the intra-rating spread on account of credit perception and illiquidity that exists between securities. This leads to differences between the prices used for reporting and the actual realisable value of the asset. Besides the mispricing of investments, such anomalies also hinder price discovery, which is critical to ensure that appropriate risk-to-reward relationship exists to incentivise investors. Over time, these measures should also translate to more efficient pricing in case of bank loans.

4. Incorporate strong and stable legal and regulatory framework and simplify process to settle financial disputes, and enforce laws for insolvency and bankruptcy. The current legal structures don't seem to be effective as the delays and high costs involved in legal procedures relating to enforcement of debt contracts and corporate insolvency increase the risk to corporate bond

investors. Also, in case of a default on a debt instrument, the process of liquidation to repay the bond investor is important.

A significant step in correcting this has been the introduction of new Bankruptcy code. Once implemented fully, many of the suggestions are expected to help improve the situation.

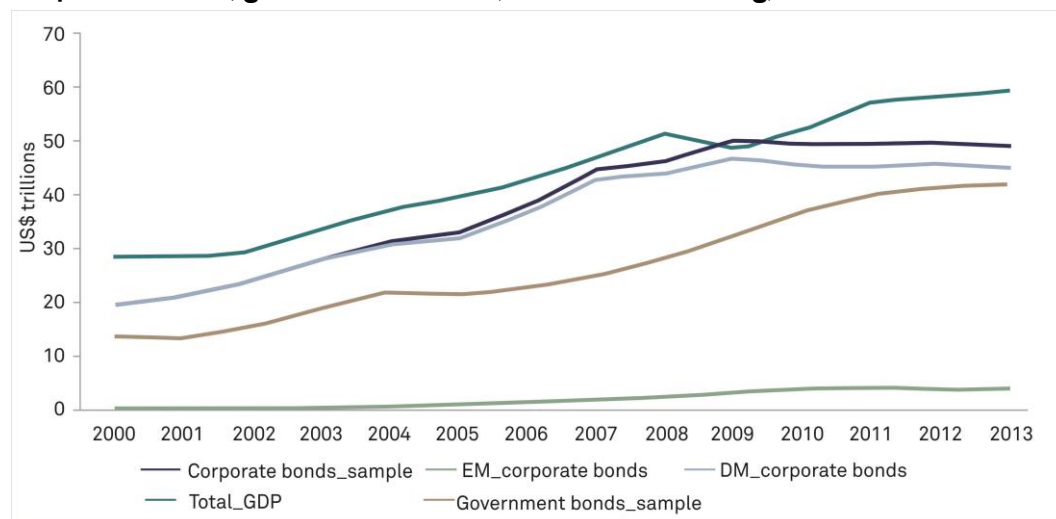
The bankruptcy code has proved effective in the US. In the UK, after 12 months of a case being filed for bankruptcy, there is either discharge with part of the assets being used to pay off debts, or, in situations where companies can be turned around, court-appointed administrators handle cases. The German insolvency law is applicable to both individuals and firms, with independent court-appointed insolvency practitioners helping in realising assets or reorganising the business.

The global scenario offers many a learning

This article is authored by APAS

A well-developed corporate bond market helps ensure financial stability and economic growth. The global corporate bond market has almost tripled in size since 2000 and has grown in terms of importance to the real economy. This is not restricted to the developed markets, but also relevant to the emerging markets, which have seen significant growth and market activity.

Corporate bonds, government bonds (amount outstanding) and GDP



Source: OICV-IOSCO report

Growth in this market has stabilised since the onset of the global financial crisis, and there has been a general flattening because of the deleveraging in the financial sector in the developed markets. However, in terms of importance to the real economy, the global corporate bond market continues to grow.

The above figure compares the total outstanding of corporate bonds from both financial and non-financial institutions. It reveals the size and growth of corporate bonds compared to GDP.

The largest corporate bond markets are in developed markets, but global concentration is declining and some emerging markets are catching up. In 2013, it was found that developed markets effectively accounted for about 92% of global corporate bond market size.

The top global markets for corporate bonds have been relative stable, led by the US, even though its share in the global market has been shrinking (51% in 2004, 49% in 2007 and 44% in 2013). Other interesting developments over years have been the performance of China, South Korea, Russia, Malaysia and Thailand, while growth in developed markets has not been significant.

Despite these significant developments in the emerging markets, there is a huge disparity in size between the larger and smaller markets. For example, the average outstanding among the top ten markets is \$2 billion, while that of smaller markets is \$18 billion.

The indicators to understand the strength of a bond market are the size of the outstanding and the depth of the market. The depth is defined as the outstanding size as a percentage of the country's GDP; this indicator also gives an understanding of the importance of the market in the economy.

Top countries by size

Ranking	2004	
	Country	US\$, bns
1	United States	15891.1
2	Japan	3504.9
3	Germany	2429
4	United Kingdom	2255
5	France	1340.8
6	Netherlands	1054
7	Italy	839.7
8	Australia	611.4
9	Canada	491.8
10	Denmark	457.5
11	Spain	448.8
12	China	336.8

Ranking	2007	
	Country	US\$, bns
1	United States	21492
2	United Kingdom	3670.3
3	Japan	3497.9
4	Germany	2940.4
5	France	2036.2
6	Netherlands	1657.2
7	Spain	1403.4
8	Italy	1249.4
9	Australia	1103.8
10	China	1060.9
11	Denmark	665.1
12	Canada	664.5

Ranking	2013	
	Country	US\$, bns
1	United States	21036.1
2	Japan	3670
3	United kingdom	3467.6
4	France	2396.7
5	Germany	2082.1
6	Netherlands	1826.7
7	Italy	1624.6
8	China	1572.4
9	Australia	1428.6
10	Spain	1365
11	South Korea	1142.7
12	Ireland	1119.3

Source: OICV-IOSCO report

The depth of global corporate bond markets averaged 57% of GDP in 2004, increasing to 64% in 2007 and then to 98% in 2013. On average, developed markets had the deepest bond markets, with an average depth of 169% in 2013. While the scenario is slightly different in the emerging markets, it has been improving significantly with the depth increasing from 12% in 2004 to 21% in 2007 and 24% in 2013. The outliers in the emerging markets have been Malaysia, Thailand and South Korea, where the bond market depth is more than 50%, while developed markets of Canada and Greece have a depth below 50%.

Top countries by market depth

Ranking	2004	
	Country	% of GDP
1	Luxembourg	307.10%
2	Denmark	186.90%
3	Netherlands	172.60%
4	United States	129.40%
5	United Kingdom	101.50%
6	Australia	93.30%
7	Germany	89%
8	Ireland	86.20%
9	Austria	81.30%
10	Japan	75.30%
11	Sweden	66.10%
12	France	65.10%

Ranking	2007	
	Country	% of GDP
1	Luxembourg	268%
2	Denmark	213.60%
3	Netherlands	211.50%
4	United States	148.40%
5	Ireland	143.90%
6	United Kingdom	128.40%
7	Australia	116.80%
8	Austria	101.20%
9	Spain	97.20%
10	Sweden	94.20%
11	Germany	88.30%
12	Japan	80.30%

Ranking	2013	
	Country	% of GDP
1	Luxembourg	1195.60%
2	Ireland	506.70%
3	Netherlands	228.20%
4	Denmark	209.80%
5	United Kingdom	139.30%
6	United States	125.80%
7	Sweden	111.80%
8	Spain	100.70%
9	Portugal	99.60%
10	Australia	96%
11	South Korea	95.40%
12	France	87.50%

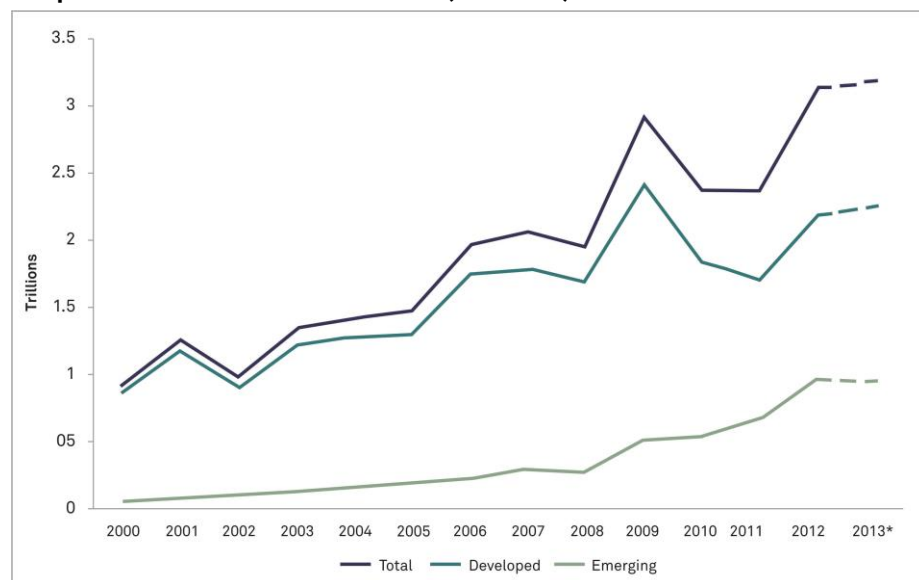
Source: OICV-IOSCO report

It is evident from the above figure that larger market size does not necessarily mean deeper market and vice versa.

Market access and issuance activity

Despite witnessing a dip in the bond market activity during 2009-10, activity has been increasing globally. The issuance volume provides a good indication of the activity in the primary market. Even though corporates generally issue bonds to meet financing needs and not periodically, a high level or an increasing number is a good indicator of market development.

Corporate bond issuance volume (\$ trillion)



Source: OICV-IOSCO report

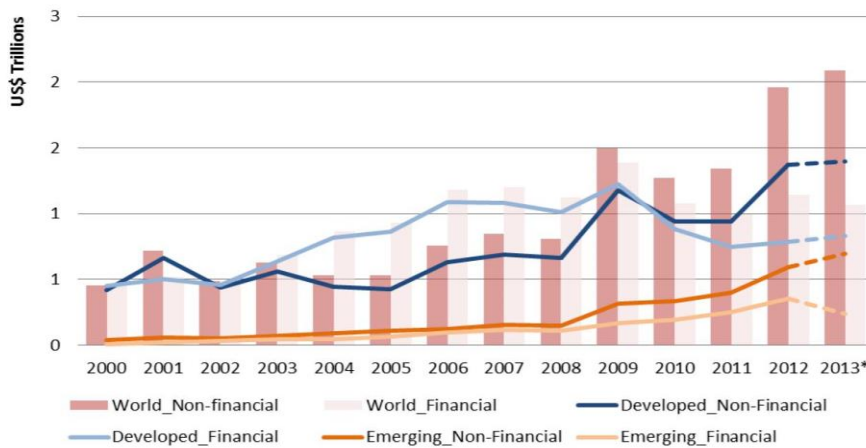
The above figure explains that while the issuance volume in 2000 was around \$0.9 trillion, it reached \$3.2 trillion in 2013. During the same period, the bond market activity was recorded for over 27 new economies, which were from the emerging markets. The total issuance rose from 54 countries in 2004 to 81 countries in 2013, indicating significant development.

This figure also indicates flattening of growth during the global financial crisis in the developed markets, while there has been a jump in activity and more volatility in the emerging markets. Globally, the issuance as a percentage of global share was just 5% in 2000 and 30% in 2013.

Issuer characteristics

A diverse issuer base, including non-financial and financial participants, is an important element of a well-developed corporate bond market. As the market provides a stable source of funding for non-financial firms, it is also an important source to financial issuers, as the funding helps them serve the economy better by providing services. The market statistics also show us that the issuance from non-financial companies has risen fast, while that the financial sector has been muted.

Issuance by non-financial companies compared with financials

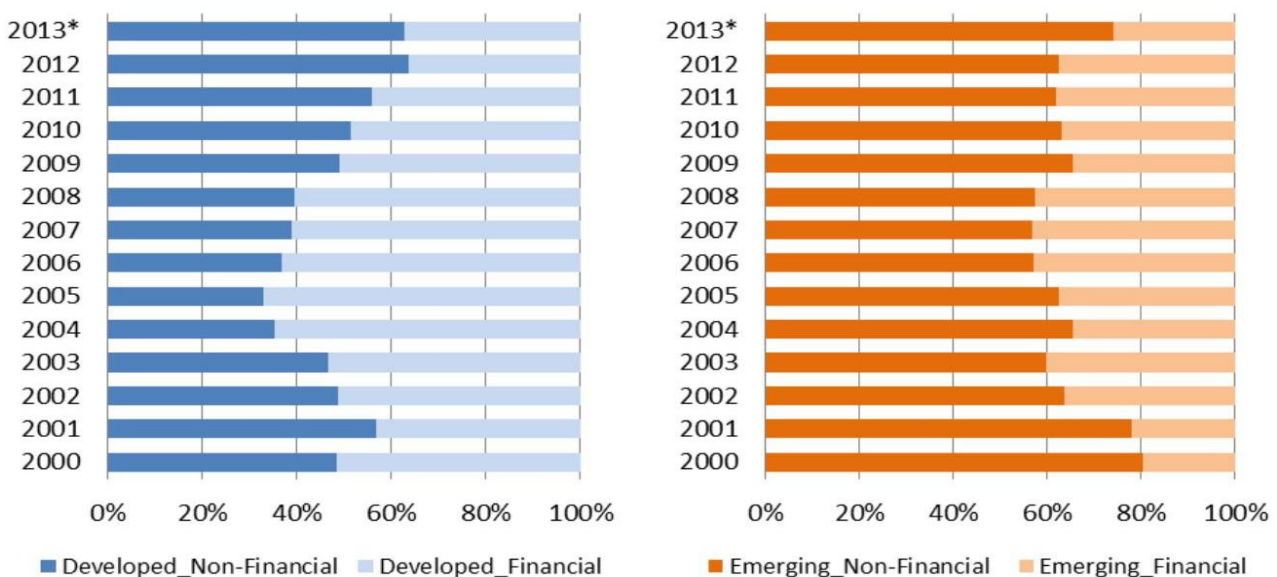


Source: OICV-IOSCO report

The figure indicates the level of issuance volume from both financial and non-financial issuers, which was 50:50. During 2007, the financial issuances were 59%. But during 2007 to 2013, non-financial issuance doubled from \$1.1 trillion in 2007 to \$2.1 trillion in 2013. This indicates the changing scenario in the markets in terms of issuer base.

While both financial and non-financial issuances have seen significant growth in the given period, financial issuers accounted for 20% of total issuance in the emerging markets in 2000. This increased to 43% in 2007 and issuance doubled to \$241 billion between 2007 and 2013. Non-financial players also grew at a faster pace to \$692 billion in 2013.

Issuance of developed and emerging markets



Source: OICV-IOSCO report

The above figures give the split between the financial and non-financial issuers in both the developed and emerging markets.

Secondary corporate bond markets

The secondary market allows investors to sell their existing holdings, bought either in the primary market or secondary market. An important attribute of the secondary market is the real time access to pricing that it provides investors. This assumes importance, given the poor liquidity of the bond market, where the probability of matching buyers and sellers in a specific bond is relatively low.

Hence, to provide this service, the secondary market has relied on the intermediation services of market makers, which are usually banks or broker-dealers that provide two-way pricing to clients in a range of corporate bonds, even if they do not hold that bond. To complete the delivery of sale, they will borrow securities via the repo market. Usually, market makers in a particular bond are the same banks that are involved in the issuance of the bond. Another key function of the secondary market is acting as a good guide for the issuer to balance the issuing price and interest rate. With a stable and liquid secondary market, it is easier to establish appropriate prices for new issues.

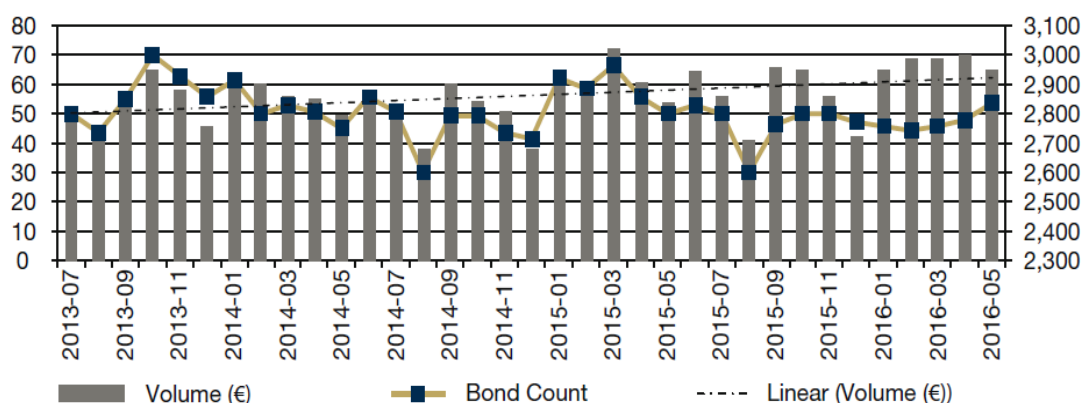
Measuring liquidity

Liquidity is a key aspect of the secondary bond market. It is broadly measured in terms of the ability to successfully complete buy or sell orders, when required in expected size without any significant impact on the market price. Though this definition is largely qualitative and is open to different interpretations. To measure liquidity better, we discuss some commonly used measures.

Trade volume

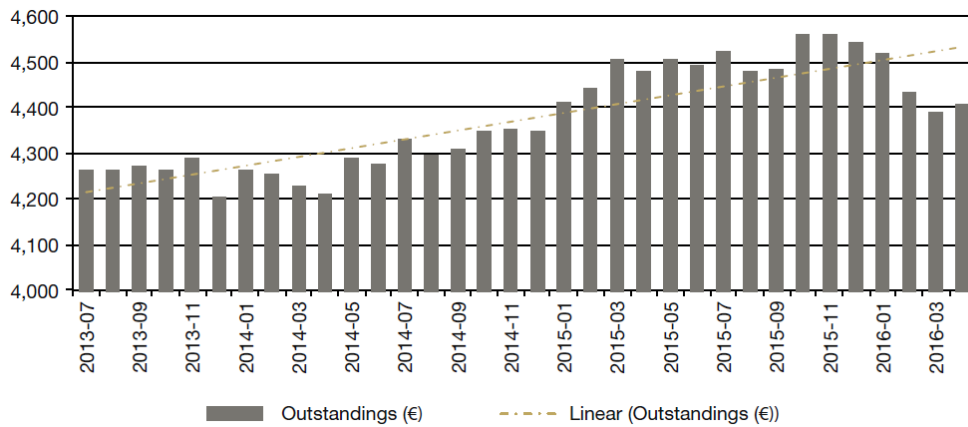
Trading volume is usually discussed in the context of measuring liquidity. It is seen in conjunction with the total outstanding debt, and the relation between the two is the turnover ratio. The figures below highlight the trade data of European IG corporate Bond Market and compare them with growth in the outstanding Euro IG corporate debt over the same period. We see that the trading volume is lagging in relative terms. Yet, volume is not totally considered as an indication of liquidity, as other factors such as investor behaviour drive it, and not just capacity.

Euro IG corporate bond volumes: July 2013 – May 2016 (Euro billions)



Source: OICV-IOSCO report

Eurozone Corporate Debt Outstanding July 2013 – April 2016 (Euro billion)



Source: OICV-IOSCO report

Bid-ask spread

The bid-ask spread is another important measure for gauging liquidity. It is observed that spreads have tightened since the global financial crisis.

The price at which the trades are executed are relative to the posted bid-ask spread. It is observed that transaction prices move away from indicative prices across all segments, suggesting impaired liquidity conditions.

Trade size

Trade size is also commonly used as an indicator of liquidity, as the indication of larger trade size is a healthy sign. It is observed that there has been a decline in trade sizes post-global financial crisis. Hence, a reduction in the average trade size indicates that investors are splitting orders into smaller trades to lessen prices. However, there is a contrasting argument that trade sizes may not be indicative of illiquidity, as the frequency volume has nearly doubled since the crisis.

Tax sops, easier disclosure norms can boost fare

This article is authored by APAS

Rigid taxation structures for income from bonds and disclosure norms for companies seeking to list bonds have all had a hand in throttling growth of the corporate bond market in India. At \$287 billion as of 2015, the cumulative capitalisation of the market appears minuscule compared with the \$1,413 billion equity market capitalisation.

Other avenues of debt markets have been easier to access in terms of both taxation and disclosure norms.

We take a look at the taxation structure for investors in the secondary market, the reasons for preference to institutional debt rather than issuing corporate bonds, suggested reforms to increase penetration of bond markets as a preferred class of investment for various classes of investors and finally the recommendations of the R H Patil committee which have been enacted.

Current taxation norms for investment in bonds for investors in secondary markets

For investors looking to invest in corporate bonds, important taxation norms are as follows:

- For listed bonds and debentures, long term capital gains are taxed at 10%. There is no benefit of indexation available for such securities
- For some assets, such as zero coupon bonds and select listed securities, investors have an option to select between two rates: Flat 10% without indexation or 20% with indexation. Investor can choose the method to get lower tax liability

Need for reforms

From the global experience, it has been widely acknowledged that favourable tax regulations often positively impact the development of financial markets in an economy. India's efforts to develop the corporate debt markets could enjoy a similar success story by replicating the liberal tax mechanism provided to the equity market. Tax reforms, particularly stamp duties, and a revamping of disclosure requirements for corporate public offers, could help develop the corporate bond markets.

As a step to explain the need for reforms in the corporate bond markets in India, we start with the discussions with the basics of debt markets, and reasons for preference to debt issued by the banks over issuance of corporate bonds:

Reasons for preference to loans from banks over issuance of bonds

Issuance of higher amounts of debts need approvals from the board members or board committees. However, private placement investments are not subject to the same scrutiny (or delay), again, giving banks an incentive to grant loans.

Absence of stamp duties from issuance of loans makes them desirable for tax sensitive borrowers.

Similarly, corporations tend to regard loans and bonds as interchangeable. This occurs to some extent in most markets. But in India there is a strong focus on managing or arbitraging microfeatures. The level and complexity

of stamp duty encourages the arbitrage-based approach to corporate finance so decisions are often tax-driven rather than strategy-driven. Concentrated efforts for reforming the stamp-duty structures across the states are being focused upon, as a part of recommendation of the R H Patil committee report.

Other factors that have a limiting impact on trade include (i) tax deducted at source—which complicates trades between tax-exempt and non-exempt entities; (ii) no single database of bonds; and (iii) no universal conventions for day count or interest calculation, for example.

Possible tax reforms to boost participation

a) For retail Investors

Currently, only infrastructure-related bonds qualify for tax-exemption for retail investors under Section 80C of Income Tax Act. The scope could be expanded to include corporate bonds related to other industries seeking long-tenure funding as well. Alternatively, a separate window like the one created for infrastructure bonds under section 80CCF could be created for corporate debt investments. Till the time Indian corporate debt markets are conducive to direct retail participation, such investments could be mandatorily through debt mutual funds (on the lines of tax exemptions to ELSS) with a 3 to 5-year lock-in period. This creates an alternate route for risk-averse retail investors, an alternative apart from bank fixed deposits.

b) For foreign investors

Currently, interest payments to FIIs have tax deduction at source at the rate of 5% in rupee denominated corporate bonds. The amendment was made in May, 2013, prior to which the tax rates stood as high as 20 per cent. It may be worthwhile to grant exemption to foreign investors from withholding tax, to reward their participation in corporate bonds. The trend till date suggests that FIIs have generally been partial toward investing in equities and government securities, both of which provide better liquidity. Hence such incentives might be necessary to make corporate bonds seem better as an investment option. This will not only improve non-resident participation in the domestic market but also create the way for increased offshore corporate bond issuances in the Indian bond market.

c) For all investors

Corporate bonds and debentures could be brought on level ground with equity as far as tax on long term capital gains is concerned. As per existing regulation, a long-term equity share (held for more than 1 year and on which Securities Transaction Tax (STT) is paid) is exempt from tax (section 10(38) of the Income Tax Act); however, the same provision is not applicable for corporate bonds. A similar provision for listed corporate debt securities will improve participation from all investors.

These reforms have been held back by the Centre on account of estimated loss of revenues from the above exemptions, in the bond markets. However, in the long-term these measures are bound to increase due to additional STT (due to increased turnover).

The distinction between a public offering and private placement of securities is specified under the Companies Act. Any offer or invitation made specifically to less than 50 investors is considered a private placement, while a more general invitation is considered a public offering. A substantial part of bond offerings are bought by institutional investors (limited in number), making the issuers find it attractive to choose private placement over

public issuance of bonds. This could be attributable to the lack of standardisation and transparency in the bonds market. The private placements are less opaque and subjected to statutory disclosure requirements that apply to them. Due to limited number of the institutional investors and likeliness to be repeat players in the private placement segment, aspects of mutual trust and reputation play a greater role than matters of disclosure mandate by statute or regulation.

Hence, it can be inferred that lack of standardisation, transparency and wider availability of shelf prospectus are major reasons for absence of liquidity in the secondary markets in the Indian corporate bond markets.

Other reforms that can help

Stamp duty

The stamp duty is a significant barrier to the development of both the corporate bond and securitisation markets. Stamp duties are typically 0.375% for debentures and, as they are strictly ad-valorem, there is no volume discount. The rate of duty varies from state to state). R H Patil committee report bring uniformity in the stamp duties across states and other such reforms suggest states waiving off the stamp duties from the bond issuance. However, any such reform is yet to materialise. Rates also vary with the nature of the issuer; and with the nature of the initial purchaser (for example, promissory notes bought by commercial and some other banks are subject to only 0.1% duty, compared with 0.5% if issued to other investors). Interest payments are taxable as income and capital gains are taxable. The Patil report recommends that there should be a uniform low rate across all states and that the maximum amount payable should be capped. Plans are being drawn up to address this but the timescale is unclear.

Disclosure for public offers of corporate bonds

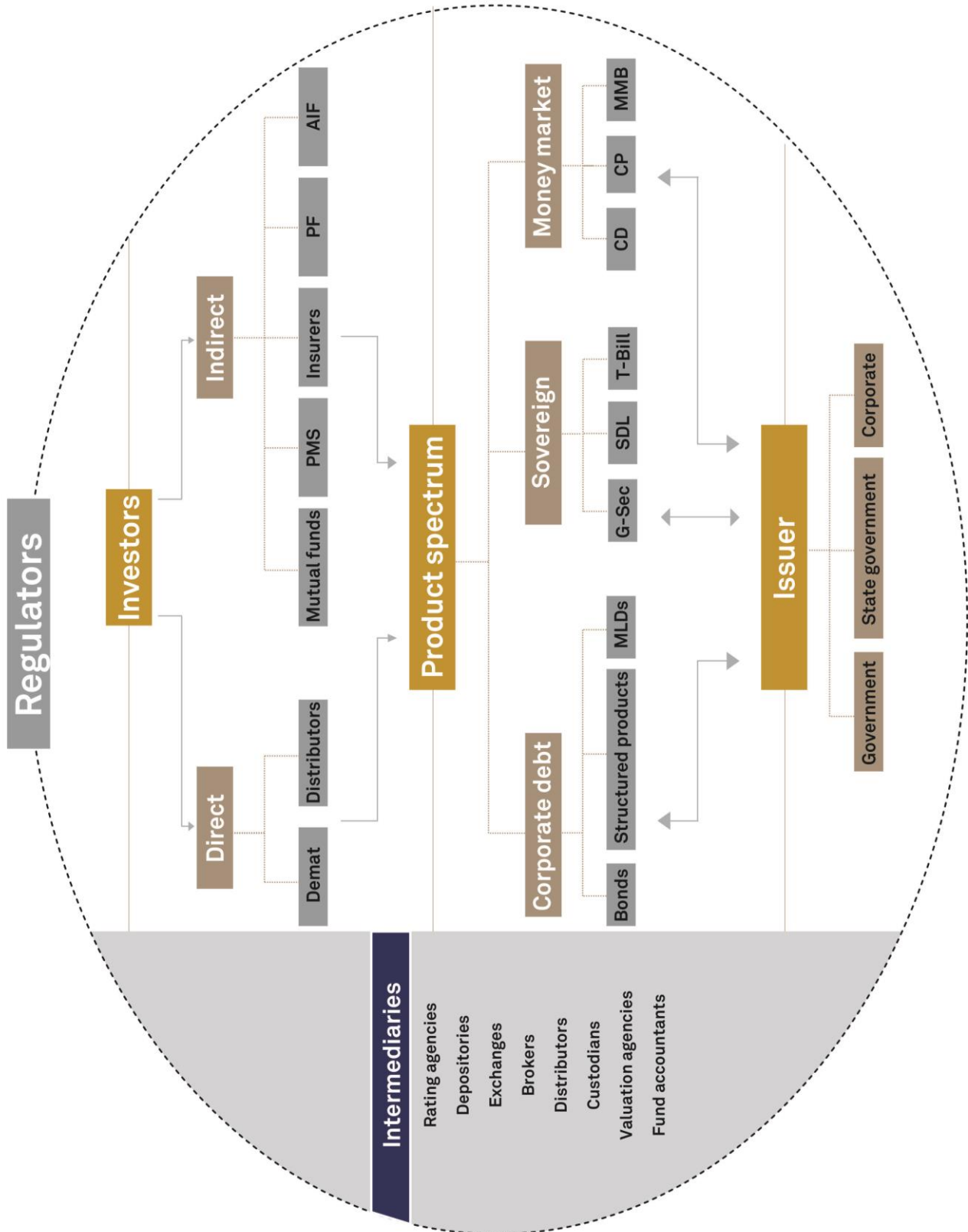
A kind of riskiness is perceived by the issuers in process of issuance of bonds. Existing regulations could be reformed to allow for disclosures that are appropriate for public issues into a largely professional market by entities that are already well-known to the investment community. Regulations could also be changed to allow techniques such as shelf registration. The public issue process is also unduly long to allow for postal submissions—a recent proposal by the RBI to allow online applications might help by shortening the time an issuer is on risk. If current SEBI proposals are implemented, they should address some of the burdensome nature of issuance by rationalizing disclosure requirements especially for companies already listed.

One of the ways, suggested for the bond market's development is encouraging securitisation. The stamp duty is a major barrier to the development of securitisation. India began securitisation early among Asian markets, with transactions going back to the early 1990s. However, the securitisation market has not yet developed. Volumes tend to be low and asset types limited. Volumes are mainly influenced by tax or regulatory arbitrage considerations rather than by underlying financial factors. The market is also subject to regulatory, legal, and tax uncertainties.

Recommendations of R H Patil Committee that have been implemented

Sr. No	Recommendation	Action taken
1	TDS (tax deductions at source) TDS rules similar to G-Secs TDS applicable to corporate bonds to be removed	Union Budget 2009 removed taxes on interest from corporate bonds.
2	Increasing the issuer base Simplify and reduce disclosure and listing requirements for private placements. Reduce the cost and time for public issues	A SEBI notification in May 2009 simplified the listing procedure and reduced disclosure requirements for listed entities (whether by way of public issue or a private placement), thereby reducing the cost and time for public issues.
3	Listing of Issues Abridge the disclosure requirements for listed entities; only incremental disclosures needed Stringent disclosure norms for unlisted entities Stringent action against promoters of firms not complying with listing agreement Role of debenture trustees to be strengthened Privately placed bonds listing to be made compulsory within 7 days of placement Mandatory guideline to credit the dematerialised account within 2 days from the date of allotment	A SEBI circular dated May 11, 2009, on Simplified Listing Agreement of Debt Securities provides for minimal incremental disclosures related to the debt security issuance for listed issuers. Entities with privately placed bonds or no prior issues are required to provide detailed disclosures. The Securities Contract Regulation Act (SCRA) has been amended empowering SEBI to take action against the promoters of firms' not complying with the listing agreement. SEBI has included these suggestions in its Disclosure and Investor Protection (DIP) guidelines. Circular informing the same for privately placed bonds was also issued.
4	Growing the investor base Retail participation to be encouraged through exchanges, and mutual funds investing in corporate bonds Separate FII investment limit in corporate bond market	SEBI has implemented an investor education program to address this issue. All FIIs and QFIs have been categorised as Foreign Portfolio Investors (FPI). FPIs are currently allowed a limit of \$30 billion in government securities and \$51 billion in corporate bonds.
5	Stamp duty on partly secured/ unsecured debt The stamp duty on partly secured, and unsecured debentures should be made uniform across states and be linked to the tenor of securities	Actions required: Rationalisation of stamp duties across all states.
6	Stamp duty on securitised debt Consensus across states to be evolved to develop affordable rates for stamp duty on securitised products	There is a need to rationalise the stamp duty across all states and the Ministry of Finance will need to work with State Governments on this. Currently the hindrance is the loss of revenue concerns from state governments.
7	Taxation Explicit tax pass for securitised special purpose vehicles (SPVs) and non-performing asset (NPA) securitisation for central government, similar to the SEBI registered venture capital funds Reduction in withholding tax (WHT) on interest earned from 20% to 5%	Securitised SPVs and NPA securitisation could benefit from a tax pass-through treatment and place them on par with SEBI recognised VC funds. This is being considered by Ministry of Finance. In May 2013 reduced the WHT rates to 5%

Debt market eco system

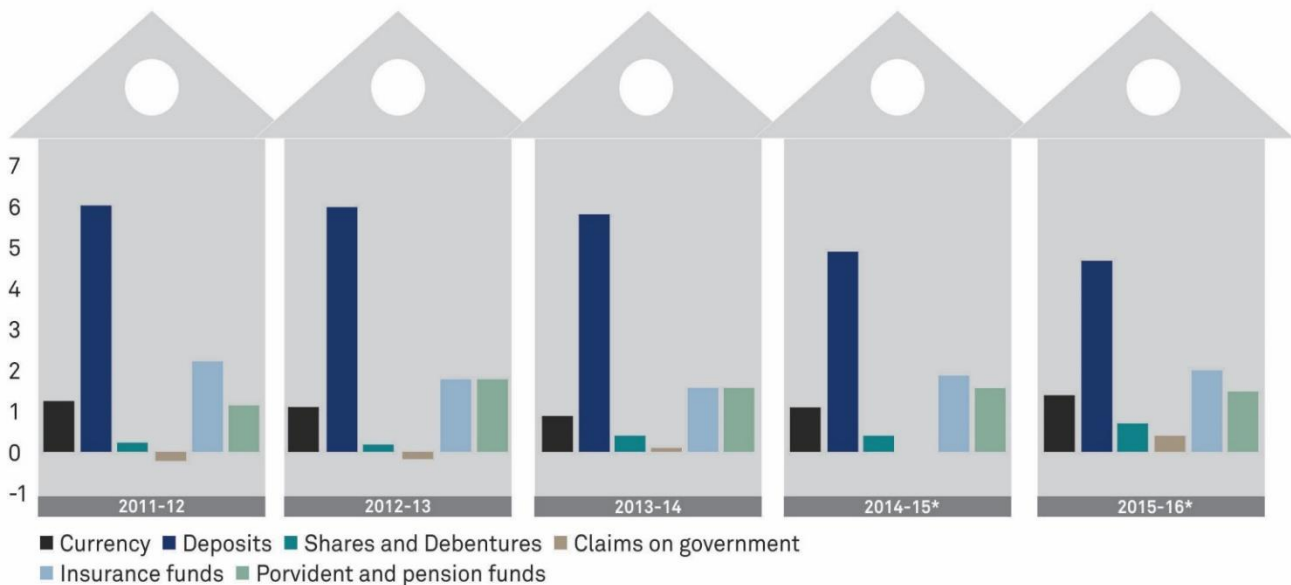


The four 'I's of the debt market

Investor goals

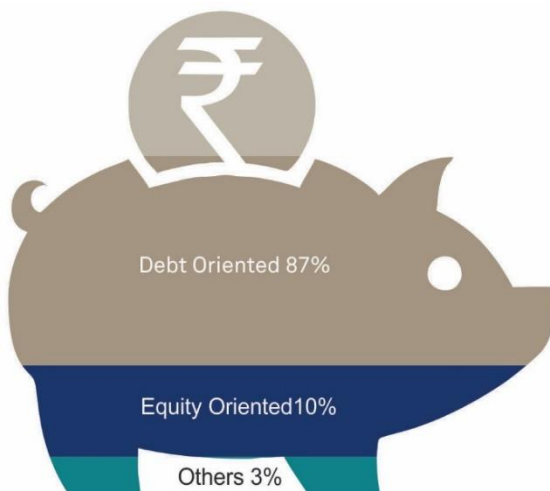
Debt is an important investment option for retail and institutional investors in India, notwithstanding the fact that the market is shallow compared with developed nations. The importance of debt investments can be assessed by the allocation of financial savings of the household sector – as reported by the Reserve Bank of India (RBI) every year – and the break-up of corporate investments in the domestic mutual fund industry. Nearly 44% of the investments by households were in bank fixed deposits while debt oriented mutual funds comprised 87% of the corporate investments.

Break-up of gross annual financial savings flow of the household sector



*Estimates; GNDI: Gross national disposable income. Source: CSO

Break-up of corporate investments in the domestic mutual fund industry






Note: Data as of December 2016. Source: AMFI

However, the investment goals of retail and institutional investors differ. In the case of retail investors, fixed-income products should be preferred by those with a conservative or moderate risk profile, with short-to-medium term goals in sight. These goals include vacation plans, investing for children’s education and income during the sunset years, among others.

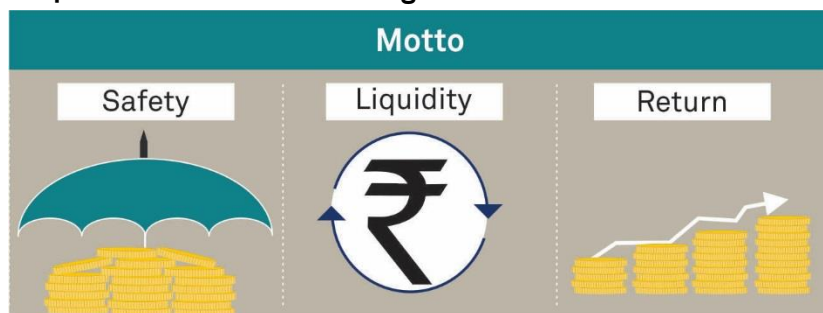
Another juncture where fixed-income products come into the fore is during the vesting periods of long-term goals, such as retirement planning. Individuals with long-term goals would be better off transferring their risky investments, such as equity, into less-risky debt products to reduce the negative impact of volatility in risky assets on their vesting corpus.

Fixed-income product preference

Goals / conservative or moderate risk	Near to goal
 Vacations	 Near to retirement
 Children education fees	 Near to long-term goals such as child's marriage, higher education, etc
 Sunset years	

On the other hand, corporates look at their debt investments as a part of treasury management to manage surplus cash and working capital requirement. For them, the key investment requirements are safety, liquidity and return (S-L-R), with the importance of these three varying across treasury portfolio managers.

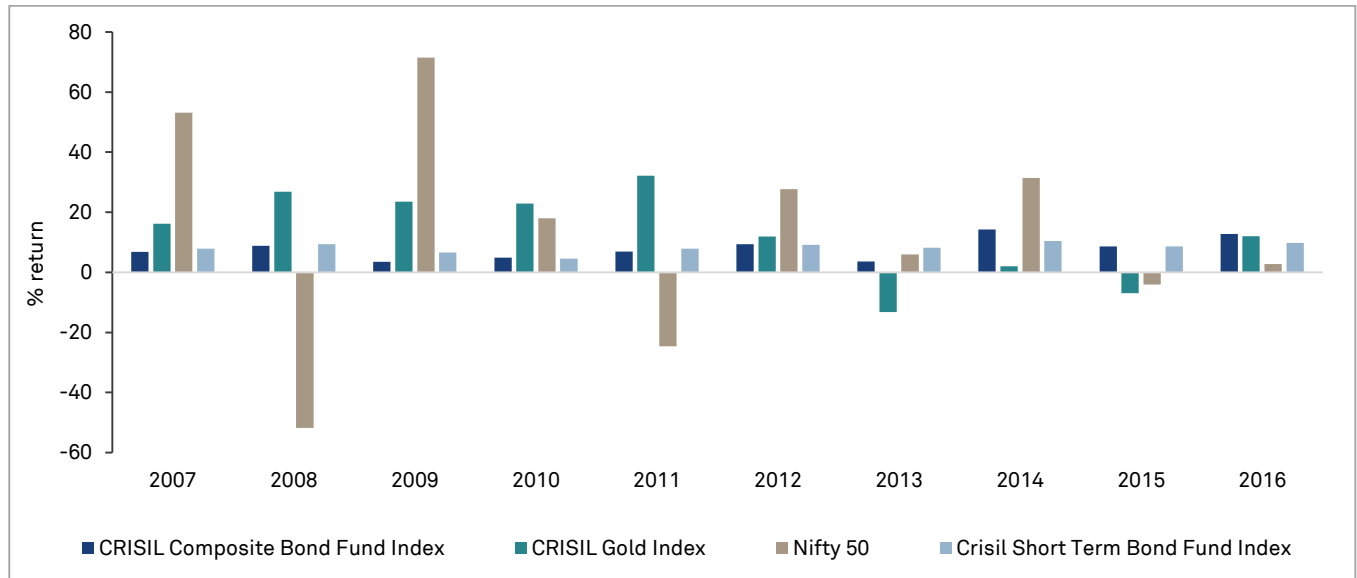
Corporates’ motto for investing in the debt market



Return expectations

Returns on fixed-income products tend to be stable compared with other risky asset classes, such as equity, as can be seen in the chart on calendar year returns below. While fixed income investments have given positive returns across the last 10 years, the risky asset classes, viz. gold and equity have also given negative returns, with the latter giving as low as -52% returns during the subprime crisis of 2008.

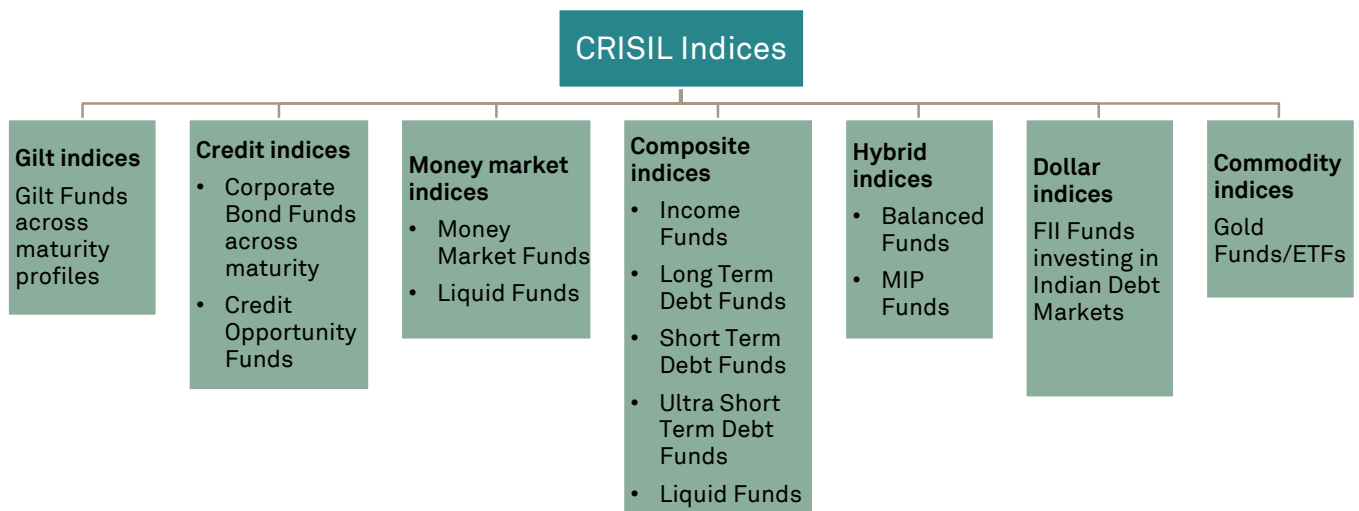
Calendar year returns of various asset classes



*As on December 31, 2016

While the above chart shows the performance of the standard fixed-income indices, there are a bevy of products in the fixed-income space. CRISIL Research has formulated various other fixed-income indices to give investors a one-point view of the performance of various products available in the debt market and to compare their performance.

CRISIL Fixed Income indices spectrum



Source: CRISIL Research

Performance of CRISIL’s gilt, credit and composite indices

Index		1 year	3 year	5 year	10 year	Since Inception	Inception Date
Gilt	CRISIL Long Term Gilt Index	15.92%	13.17%	10.43%	8.37%	7.78%	1-Oct-04
	CRISIL Medium Term Gilt Index	14.52%	12.46%	9.83%	7.98%	7.47%	1-Oct-04
	CRISIL Short Term Gilt Index	10.31%	9.46%	8.95%	8.12%	7.65%	1-Oct-04
Credit (AAA)	CRISIL AAA Long Term Bond Index	13.29%	12.14%	10.55%	9.93%	8.93%	31-Mar-02
	CRISIL AAA Medium Term Bond Index	11.21%	11.25%	10.39%	9.50%	10.95%	1-Nov-13
	CRISIL AAA Short Term Bond Index	9.20%	9.42%	9.40%	9.11%	8.19%	31-Mar-02
Credit (AA)	CRISIL AA Long Term Bond Index	11.90%	12.62%	11.17%	10.08%	9.51%	31-Mar-02
	CRISIL AA Medium Term Bond Index	12.18%	12.29%	11.11%	10.14%	11.98%	1-Nov-13
	CRISIL AA Short Term Bond Index	10.08%	10.10%	10.12%	10.09%	9.28%	31-Mar-02
Credit (A)	CRISIL A Long Term Bond Index	13.74%	12.92%	11.61%	11.39%	11.26%	31-Mar-02
	CRISIL A Short Term Bond Index	12.15%	12.45%	11.78%	11.36%	10.65%	31-Mar-02
Composite	CRISIL Composite Bond Fund Index	12.94%	11.93%	9.74%	7.99%	7.22%	31-Mar-02
	CRISIL Short Term Bond Fund Index	9.85%	9.65%	9.27%	8.29%	7.32%	31-Mar-02
	CRISIL Liquid Fund Index	7.50%	8.31%	8.50%	7.65%	6.81%	31-Mar-02

Source: CRISIL Research, Data as of XXXXX

It is clear from the above table that long-term funds have generally outperformed the short-term peers. Over years, the CRISIL Composite Bond Fund Index, which comprises government securities and AAA/AA-rated corporate bonds, has outperformed the CRISIL Liquid Fund Index, which tracks a portfolio of collateralised borrowing and lending obligations (CBLO), commercial paper and certificates of deposit (CDs).

Instruments

An equity investor becomes a part-owner of a company through voting rights and/or a claim on future profits. A debt investor, on the other hand, becomes a creditor to the company through a higher claim (compared with a shareholder) on the assets in the event of a bankruptcy.

Debt investors can opt for either direct instruments or indirect avenues, such as mutual funds, portfolio management services (PMS), insurance products and pension funds.

Direct route

In India, the direct route for debt investments has limited number of options such as tax-free, infrastructure and retail bonds, with the majority primarily providing tax benefit. This is due to the lack of knowledge (leading to limited demand) and limited supply of direct instruments. The key instruments available are:

1. Government securities

Debt issued by the Central and state governments are considered the safest with virtually zero credit risk. Hence, they are called risk-free instruments. These securities are eligible for maintaining a stipulated statutory liquidity ratio (SLR) by banks and, hence, are also known as SLR securities. These securities are also the most liquid in the debt market, and are traded on the NDS-OM (Negotiated Dealing System – Order Matching) platform as well as the voice/broker market; an active bid-ask mechanism is available for most of these instruments real time. The key advantages of investing in g-secs are zero credit risk, high liquidity and tax sops, as investors are not liable to pay any tax deducted at source (TDS) on interest payments from g-secs. The various instruments available are:

Instruments – sovereign securities

Type	Name	Tenor	Coupon type
Money market	Treasury bills (T-Bills)	Up to 1 year	NA
	Cash-management bills	Up to 1 year	NA
Long-term bonds	Government securities (g-secs), including oil bonds, fertiliser bonds, Inflation indexed bonds (IIBs)	Greater than 1 year	Fixed coupon, FRBs, with coupon paid semi-annually
	State-development loans (SDLs), including Ujwal DISCOM Assurance Yojana (UDAY) bonds	Greater than 1 year	Fixed coupon, FRBs, with coupon paid semi-annually

Source: CRISIL Research

2. Corporate bonds

These are issued by corporates, such as banks, public sector units (PSUs) and private companies. These instruments carry higher risk compared with sovereign securities, but provide higher return (coupon). The credit risk associated with these instruments can be measured by the external ratings on these instruments assigned by rating agencies; investment-grade securities are instruments carrying a rating between 'AAA' and 'BBB-', while securities below the investment grade are those with ratings between BB+ and D (D is default). These instruments are mostly traded in the voice/broker market, and trades are reported on exchanges. A small portion

of trades happen on the trading platforms of exchanges, but the volume should gradually pick up, as liquidity improves in these instruments. The various types of available instruments are:

Instruments – corporate securities

Type	Name	Tenor	Coupon type
Money market	Certificates of deposit (CDs)	Up to 1 year; FIs can issue CDs of up to 3 years of maturity	NA
	Commercial paper (CPs)	Up to 1 year	NA
Long term bonds	Corporate bonds, Pass through certificates (PTCs)	Usually greater than 1 year	Fixed-coupon, FRBs, ZCBs.

Source: CRISIL Research

3. Structured products

Structured products such as market-linked debentures are bonds that provide dual benefits of capital protection (in case of securities with principal protection) along with an option to participate in equities (wherein coupons are linked to the performance of the underlying equity, a basket of equities, indices or commodities such as gold). Bonds without principal protection are also available and carry higher risk. These structures are complex and require higher awareness about their mechanism.

Key features of these instruments

Key terms of the contract are provided in the information memorandum of bonds. Some of the key terms that are relevant to understand the payout and risks associated with bonds are allotment and cash-flow dates, redemptions, call/put options, maturity date, tax status and credit ratings.

- **Coupon:** It is the amount an investor receives via interest payments in a debt instrument. Coupons are usually denoted annually, but can be paid annually or in other frequencies such as semi-annual, quarterly or monthly. The interest is calculated and paid on the face value of the instrument, irrespective of its market price. Zero-coupon bonds do not carry any coupon, but returns are generated either through issuance at a discount to face value or by providing a premium on maturity. Similarly, some instruments accumulate coupon and pay them directly on maturity by compounding these instruments. In the case of a floating-rate coupon, the interest rate is adjusted as per the underlying rate.
- **Redemption:** Bonds pay principal payments on the redemption date. The last payout date is also called the final redemption date or maturity date. In case the bond pays principal in parts before maturity, such bonds are called amortising bonds or bonds with part redemption. Convertible bonds allow an investor to convert the bond in common stock (equity shares) instead of redeeming the bond for cash payment.
- **Call/put options:** Call/put options are the provisions that provide an option to the issuer/investor of these instruments to redeem in part/full on a pre-specified date and price before the maturity.
- **Trading parameters:** An investor needs to understand bond concepts, such as trade date, settlement date, yield, clean price, dirty price and accrued interest, to trade these instruments in the secondary market.
 - **Trade date:** The date when a counterparty trades the security.

- **Settlement date:** The actual date when the exchange of security and money happens. Usually trades are settled on a T+0 or T+1 basis. In case of multiple holidays, after the trade date, settlement happens on the next bank working date.
- **Yield:** Yield to maturity (YTM) is the discount rate at which the sum of all discounted future cash flows from the bond (coupons and principal) is equal to the price of the bond. The YTM is often given in terms of an annual percentage rate. In India, all securities are traded at an annualised rate, except for yields on sovereign securities, which trade at a semi-annualised rate.
- **Dirty price:** A dirty price is a bond pricing quote referring to the price of a coupon bond that includes the present value of all future cash flows, including interest accruing on the next coupon payment. Trade settlement happens on the dirty price, and it is the price an investor pays to acquire the bond.
- **Clean price:** A clean price is the price of a coupon bond not including any accrued interest. It is the discounted value of future cash flows, not including any interest accruing on the next coupon payment date. Immediately following each coupon payment, the clean price will equal the dirty price. The clean price is calculated by subtracting the accrued interest from the dirty price.
- **Accrued interest:** Accrued interest is a term used in accrual accounting that disregards cash flows and reports interest that has been earned but not collected. It is equal to interest for the period from the last interest payment date to settlement date.

A term sheet contains all the important terms and conditions associated with the bond like allotment date, coupon, redemptions, options, maturity, ratings, etc. A format of sample term sheet highlighting these is provided in the annexure.

Indirect route – Mutual funds, PMS, insurance products and pension funds

There are different types of fixed-income instruments, including government bonds, non-convertible debentures, tax-free bonds, and corporates, capital-gains bonds and infrastructure bonds.

It may be difficult for investors to keep a track of issuances, assess the risks and invest. Yet, there are indirect ways of participating and earning from these instruments through below products.

1. Mutual funds
2. PMS
3. Insurance products
4. Pension funds

Let us understand the ways to invest in each of the option and related charges.

1. Mutual funds

Domestic mutual funds offer debt funds, which invest in various instruments, such as government securities and money-market instruments. Investors looking for a steady income and capital preservation can park money in these funds. Professional management (the fund manager will make investment decisions and monitor the investments and performance based on the interest rate outlook), diversification and liquidity are other benefits.

Major categories of debt funds

Fund type	Feature
Long-term income funds	Portfolio maturity between three and 10 years (could be higher when interest rates are low)
Gilt funds	Portfolio with negligible credit risk, as they invest in g-secs
Fixed-maturity plans (FMPs)	Closed-end debt funds, where investments are held to maturity
Short-term income funds	Portfolio maturity ranges from one to three years
Ultra-short term debt funds	Portfolio maturity of less than one year
Liquid funds	Portfolio maturity of less than 60 days

Source: CRISIL Research

An exposure to debt funds enables investors to avail of the benefits from the underlying interest-rate scenario. For instance, in a high interest rate regime, short-maturity mutual funds, such as liquid funds, ultra-short term debt funds, fixed-maturity plans (FMPs) and short-term debt funds are good options. In a low interest rate scenario (similar to the current situation), long-term debt funds and gilts funds are ideal. The following table shows the performance variation of short- and long-term debt funds based on interest-rate movements in the underlying environment.

Market phase analysis – CRISIL-AMFI Debt Fund Performance Indices

Period	From Date	To Date	10 Year G-Sec Yields (%)		No of Years	Annualised Returns (%)				3 Year FD Rates as on From date (%)
			As on Start Date	As on end date		CRISIL - AMFI Debt Fund Performance Index	CRISIL - AMFI Income Fund Performance Index	CRISIL - AMFI Gilt Fund Performance Index	CRISIL - AMFI Short Term Debt Fund Performance Index	
Secular decline in yields in 2000-04	1-Apr-00	30-Apr-04	11.1	5.19	4.08	11.92	12.02	16.43	-	10.50
Flat or high interest rate period of 2004-08	1-May-04	31-Jul-08	5.19	9.54	4.25	4.54	4.20	3.25	6.42	5.38
Sharp correction in yields in 2008 [^]	1-Aug-08	31-Dec-08	9.54	5.32	0.42	14.08	19.18	25.71	5.13	7.88*
Flat or high interest rate period of 2008-14	1-Jan-09	30-Sep-14	5.32	8.69	5.75	6.54	5.73	3.48	7.90	9.88
Declining yields	1-Oct-14	30-Dec-16	8.66	6.62	2.25	10.29	11.50	13.51	9.63	8.78*

* 1 Year FD rate

[^] Absolute Returns

Red Cell – Highest return in the period. Source: CRISIL Research

Three-year (financial) return – CRISIL-AMFI Debt Fund Performance Indices

Period Ending	10 Year Yield (3 Year Trend)	3 Year Returns (%)				3 Year FD Rates (%)
		CRISIL - AMFI Debt Fund Performance Index	CRISIL - AMFI Income Fund Performance Index	CRISIL - AMFI Gilt Fund Performance Index	CRISIL - AMFI Short Term Debt Fund Performance Index	
31-Mar-03		13.12	13.18	18.09	–	10.50
31-Mar-04	▼	12.53	12.61	18.03	–	9.88
31-Mar-05		6.93	7.06	7.97	6.29	8.38
31-Mar-06		4.64	4.38	4.63	5.32	6.25
31-Mar-07	▲	3.54	3.02	2.32	5.54	5.38
31-Mar-08		6.03	6.14	5.53	7.09	6.00
31-Mar-09	▼	8.25	8.83	8.40	8.38	6.38
31-Mar-10		8.64	9.42	7.79	8.21	7.63
31-Mar-11		7.59	7.92	6.57	6.92	8.25
31-Mar-12	▲	6.90	6.78	4.46	6.29	8.38
31-Mar-13		8.12	8.23	6.97	8.17	7.00
31-Mar-14		8.28	7.62	5.96	9.10	8.50
31-Mar-15	▼	9.41	9.58	9.93	9.57	9.25
31-Mar-16		8.31	7.72	8.21	8.87	8.92

Source: CRISIL Research

Falling interest rates benefit long-term debt funds, including income funds (which invest the majority of corpus in long-tenor debt instruments issued by corporates) and gilt funds (which invest in bonds issued by the Central or state governments), as bond prices and interest rates move inversely. A fund's net asset value (NAV) - which replicates the cumulative price behaviour of the underlying securities - rises when interest rates decline.

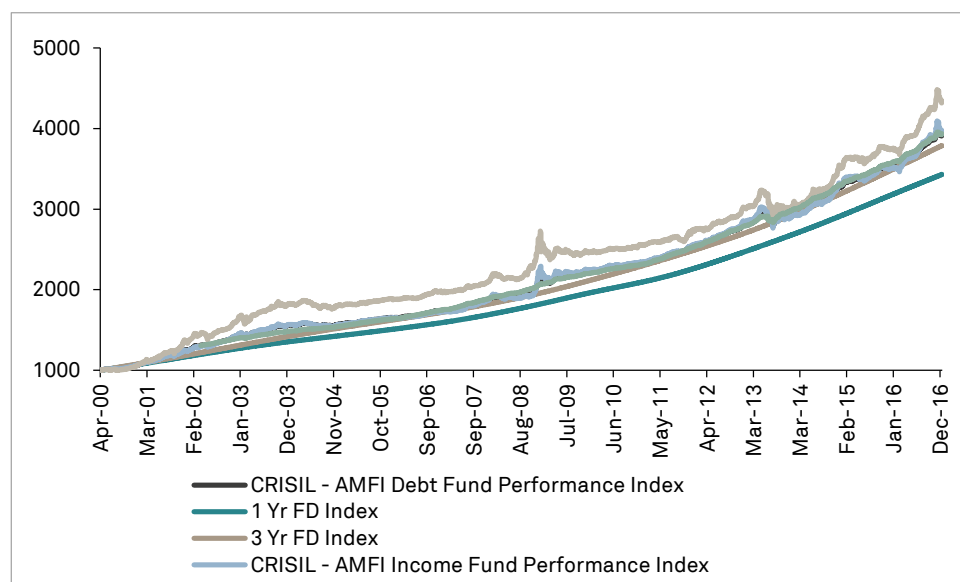
Debt funds also offer investors a facility to generate returns via indexation benefit and an opportunity to gain from the underlying interest rate scenario; this is something that fixed deposits do not offer. Indexation is a provision under the Income Tax Act, 1961, which allows tax payers to use inflation as a tool to reduce tax liability. If investments in debt funds are held for more than three years (see table).

Indexation benefit

Particulars	Funds	Bank FDs
Amount invested (Rs)	100,000	100,000
Return per annum	9%	9%
Redemption period	3 years	3 years
Returns (Rs) - A	27,000	27,000
Maturity amount (Rs)	127,000	127,000
Indexed cost*	121,000	NA
Taxable income	6,000	27,000
Tax rate	20.30%	30.90%^
Tax (Rs) - B	1,236	8,343
Post-tax return (Rs) (A-B)	25,764	18,657

*Assuming an inflation rate of 7% during the period; ^For the highest tax slab

Performance of CRISIL-AMFI Debt Fund Performance Indices

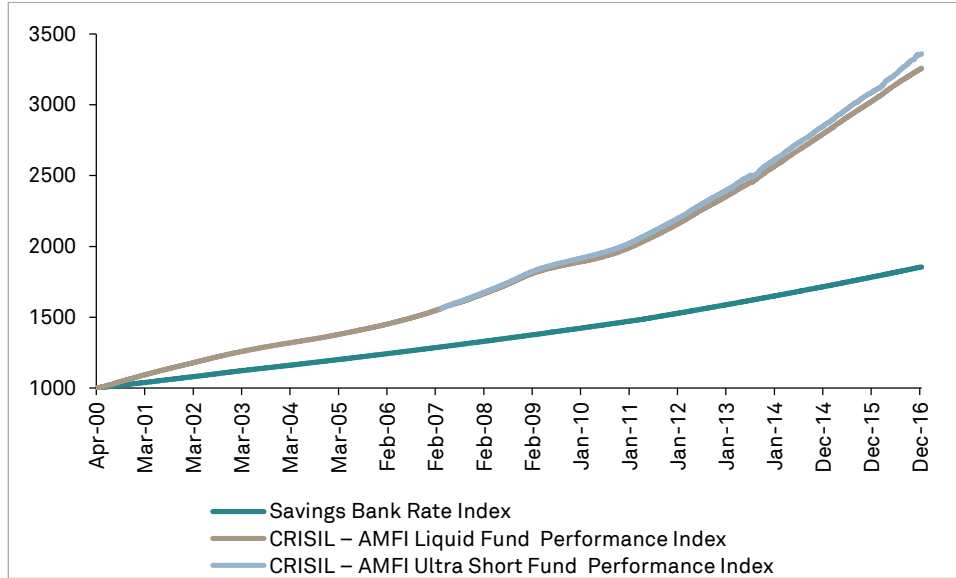


Index	1 Year (%)	3 Year (%)	5 Year (%)	7 Year (%)	10 Year (%)
CRISIL – AMFI Debt Fund Performance Index	11.01	10.22	9.25	8.49	8.46
CRISIL – AMFI Income Fund Performance Index	13.38	11.03	9.40	8.50	8.70
CRISIL – AMFI Gilt Fund Performance Index	16.09	12.86	10.06	8.41	8.19
CRISIL – AMFI Short Term Debt Fund Performance Index	10.08	9.70	9.33	8.62	8.48
1 Year FD Index	7.95	8.60	8.79	8.30	8.01
3 Year FD Index	8.64	8.99	8.85	8.67	8.25

Source: CRISIL Research

Meanwhile, investors with a very short investment horizon, say, of less than a year, can also look at money-market funds (liquid and ultra-short term debt funds) compared with parking the money in a savings bank account.

Performance of CRISIL-AMFI Liquid Fund Performance Indices



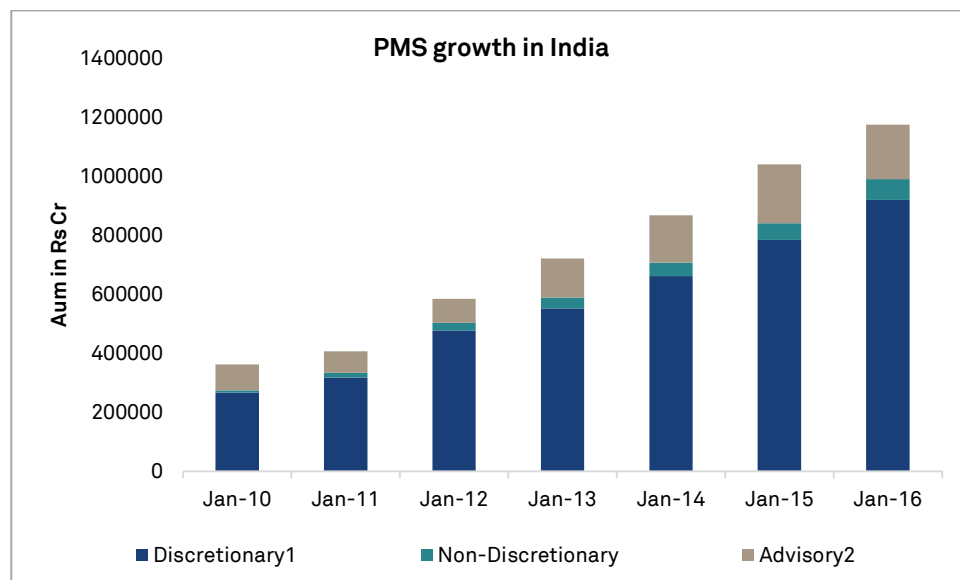
Index	1-year (%)	3-year (%)	5-year (%)	7-year (%)	10-year (%)
CRISIL – AMFI Liquid Fund Performance Index	7.61	8.33	8.67	8.11	7.83
CRISIL – AMFI Ultra Short Fund Performance Index	8.70	8.79	8.96	8.40	NA
Savings Bank Rate Index	4.00	4.00	4.00	3.91	3.78

Returns as on December 30, 2016; Returns for period greater than one year are annualised returns; * Inception date for CRISIL Ultra Short Fund Performance Index is April 1, 2007.

Source: CRISIL Research

2. PMS

Those willing to invest a high amount can opt for PMS offered by 236 providers in the country. These are the divisions of asset-management companies, stock brokers or wealth management firms. Such PMS offerings in the country handle assets worth Rs 11.75 lakh crore (as of December 2016).



1- Includes funds from EPFO/PFs

2- Value of Assets for which Advisory Services are being given

Source: SEBI

Each PMS provider can have a minimum investment limit of Rs 5 lakh as prescribed by the Securities and Exchange Board of India (SEBI). You can either choose to invest as per the fund manager's preference (discretionary PMS) or suggest investment options and/or time to invest to the portfolio manager, who executes the trades (non-discretionary PMS). There are a few portfolio managers, who run an advisory PMS, wherein the investor can purely seek investment advice and invest on his own.

The PMS provider would charge an entry or exit load apart from the asset-management fee, which could be a percentage of the assets invested, a flat fee and/or a profit-sharing fee. The investor would also need to bear the charges related to opening of the demat account, custodian fee and brokerage charges linked to the PMS account.

Insurance products

The insurance industry also provides investors with an opportunity to get exposure to debt instruments through life insurance plans, whose portfolios predominantly comprise corporate bonds, derivatives, government securities, infrastructure bonds, housing bonds and stocks. Their investments in debt can be both through traditional plans and debt options of unit-linked insurance plans (ULIPs). The lock-in period of an insurer's investments is higher compared with that of mutual funds. Here are the various options for those looking to park money in debt through life insurance products offered by 24 insurers currently:

Endowment plan

A traditional insurance plan that provides an insurance cover as well as offers return on maturity. Investors can plan their cash flows, as these endowment plans offer a guaranteed return net.

Money-back plan:

Money-back plans are similar to endowment plans and offer guaranteed returns to assist investors plan intermediate goals, such as accumulating for a down-payment towards a home loan, car purchase and education.

Unit-linked insurance plan

These plans primarily offer investments with a low proportion of insurance cover. The investor can opt to invest in equity (stocks) or fixed-income (debt) products or a combination through various fund options. Charges such as premium allocation, mortality and fund management are deducted from the units accumulated by the investor. Compared with debt mutual funds, liquidity is low and charges are higher.

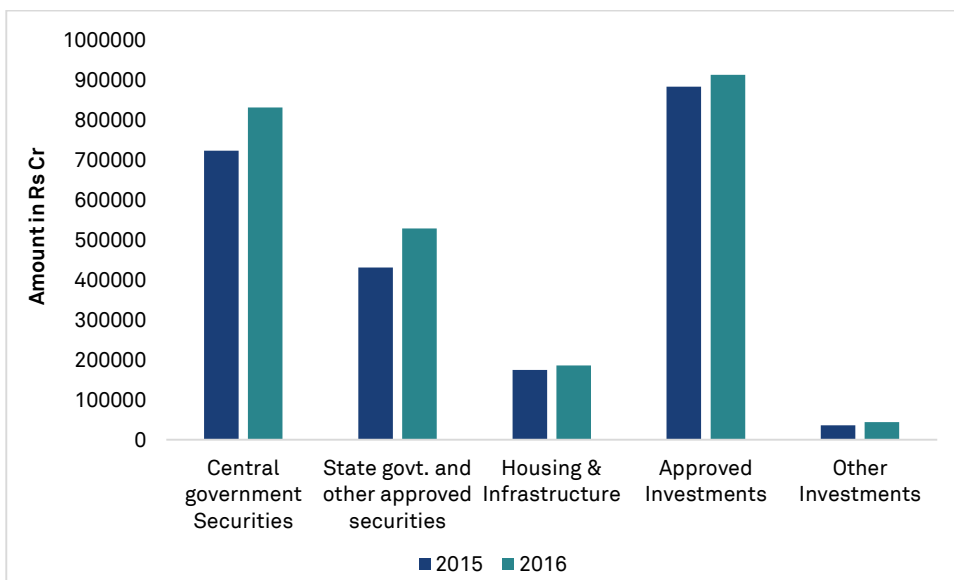
Annuity plan

Annuity plans help investors in receiving a regular pension based on the life expectancy to maintain the standard of living through the sunset years.

There are two types of annuities:

- **Deferred annuity** – One that accumulates money in installments during the early years of life, and the accumulated fund is used to buy an annuity later during retirement.
- **Immediate annuity** – One that purchases an annuity at retirement using an already accumulated corpus through different means to get a steady stream of income in the form of pension, which starts flowing in after the purchase.

Chart – Asset allocation of life insurance investments



Note: Includes ULIP investments, Approved investments include all securities approved by IRDAI for investment

Source: IRDAI annual report

Pension funds

Long-term investments in fixed income instruments can be made for retirement through pension funds. Though there are exceptions and partial withdrawals available, subject to conditions, these pension funds typically have a high lock-in of 15 years or up to retirement, which is pegged at 58-60 years currently.

Here are some of the major pension fund options available in India:

Employees' Provident Fund (EPF)

The Employees' Provident Fund is open to the organised workforce in India. It is managed by the Employees' Provident Fund Organisation. Members, along with employers, equally contribute to the provident fund, which returns 8.65% per annum in interest currently.

From August 2015, the fund in addition to its original asset allocation of debt investments has started investing in equity, with 5% of the corpus allocated to stocks, primarily exchange-traded funds.

As per the last count, the fund has a corpus worth Rs 8.5 lakh crore. A Universal Account Number (UAN) is allocated to the investors, whose contributions offer tax deduction of up to Rs 1.5 lakh and are tax free at redemption. However, the fund offers limited liquidity until the vesting age of 58 years.

Public Provident Fund (PPF)

While the EPF is open to the organised sector, the Public Provident Fund (PPF) is open to all, thus allowing investors to park their long-term savings with the product. The product offers an 8% interest rate (since October 2016) compounded annually. The invested amount enjoys a tax deduction at the time of investment and is tax free at maturity, which is 15 years from the account-opening date, extendable for 5 years at a time.

National Pension System (NPS)

NPS is a contribution-based retirement savings scheme administered by the Pension Fund Regulatory and Development Authority (PFRDA) and managed by professional fund managers who invest the corpus based on an individual's perceived risk-return profile (lifecycle investing approach) and provides benefits of hassle-free asset allocation, flexibility and tax efficiency. The government launched the scheme to enhance pension coverage for the informal sector and marked the government's shift from the defined benefit (DB) model to defined contribution (DC) model and is aimed to ease the fiscal pressure. The scheme also provides tax benefit for an investment of Rs 1.5 lakh under Section 80C and another Rs 50,000 under Section 80CCE.

Investors can select the following schemes to allocate assets to various asset classes:

- Scheme E (equity), which allows up to 75% equity participation;
- Scheme C (corporate debt), which invests only in high-quality corporate bonds; and
- Scheme G (government/gilt bonds), which invests only in government bonds.

Alternatively, one can opt for auto-allocation, wherein the proportion of equity declines 2% each year and that of debt investments increases as the investor ages.

Comparison between direct/indirect investments

	Direct	Indirect
Benefits	<ul style="list-style-type: none"> Investments as per investors research No management fees Transparency 	<ul style="list-style-type: none"> Professional management 1. Diversification of investments 2. Professional managers with experience 3. Deeper and faster access to information Liquidity Risk management framework in place Multiple products to suit investor goals Indexation benefits
Limitations	<ul style="list-style-type: none"> Limited options for investments Higher need for research for credit risk management Lower liquidity Higher risk of diversification, liquidity, credit, reinvestment 	<ul style="list-style-type: none"> Management fees No control on investments by fund managers

Risk evaluation

Debt investments are broadly subject to interest-rate, credit and reinvestment risks. The biggest risk is default risk, which is the failure of an issuer to pay principal or interest as per the predetermined terms. In case of a bankruptcy, bond holders, being creditors, have the first right on the assets of the issuer, when receiving payout during liquidation.

Secured bonds are backed by a specific collateral (or asset) of the issuer. If the issuer defaults, a secured bond investor has the first claim. Unsecured bonds do not have a claim to any specific collateral from the issuer. They normally offer a higher coupon due to the higher investment risk.

The following section details the risks associated with the fixed-income market.

Credit risk

Financial institutions have faced difficulties over the years for various reasons, but the major issue is directly related to lax credit standards. In other words, low credit standards create the risk of default on debt from a borrower failing to make required payments. This is called credit risk.

As financial markets become more dynamic and the economy continues to evolve and diversify, investors need to evolve the ways to assess credit risk. Ratings from credit rating agencies are a traditional way to measure this risk; these ratings are assigned keeping in mind the long-term credit view, based on a deliberate consultative approach.

A credit rating represents a rating agency's opinion on the likelihood of the rated debt obligation being repaid in full and on time. This opinion helps stakeholders comparatively assess investment options, and facilitates the issuer's access to funds. Intrinsically, a credit rating is the probability of **not** receiving interest and principal payments on time and in accordance with the terms of the rated instrument, by an investor in rated instruments or by a lender of a rated firm. This probability is reflected in the form of an easily understandable alphanumeric scale, with ratings such as AAA, AA and A.

Long-term ratings are assigned on a 20-point scale, from AAA to D, where AAA is the highest and D is lowest (default). All ratings lower than 'BBB-' are considered below investment grade. The rating is assigned on the basis of analysis of the business and financial risks associated with the rated firm, and an evaluation of management. Once a rating is assigned, rating agencies continuously monitor the credit quality of the rated instrument or firm—as reflected in periodic reaffirmations, upgrades, or downgrades. There are seven rating agencies in India currently - CRISIL, ICRA, CARE, Brickworks, India Ratings, SMERA and Infomeric.

Measuring credit risk

With the expansion in the role of credit ratings and credit scores, investors also want to estimate the value of an exposure in addition to risk. One of the techniques that institutions can use to accomplish this is a methodology that uses credit rating transition matrices. The transition matrix maps the transition rate, which indicates the number of instances when credit ratings have changed over a specified period.

Default and transition rates are key inputs for many quantitative risk-assessment models. Investors in rated instruments can manage their risk exposures effectively if they have access to reliable default and transition rates. Transition rates indicate the instances of a given rating migrating to other rating categories (see below table). As credit ratings drive bond yields, and therefore, their prices, transition rates are relevant for investors who do not intend to hold debt instruments to maturity, or need to mark their investments to market regularly.

CRISIL's average one-year transition rates for long-term ratings

Between 1998 and 2015									
Rating	Issuer months	CRISIL AAA	CRISIL AA	CRISIL A	CRISIL BBB	CRISIL BB	CRISIL B	CRISIL C	CRISIL D
CRISIL AAA	16565	97.31%	2.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CRISIL AA	36605	1.46%	93.32%	4.44%	0.53%	0.18%	0.03%	0.02%	0.03%
CRISIL A	47606	0.00%	3.13%	88.67%	5.58%	1.67%	0.13%	0.26%	0.56%
CRISIL BBB	101414	0.00%	0.04%	2.62%	88.59%	6.93%	0.46%	0.28%	1.09%
CRISIL BB	149114	0.00%	0.02%	0.01%	3.97%	87.47%	3.85%	0.52%	4.17%
CRISIL B	131122	0.00%	0.00%	0.01%	0.05%	7.49%	83.98%	0.52%	7.95%
CRISIL C	7034	0.00%	0.00%	0.00%	0.17%	1.58%	17.93%	59.72%	20.60%
Total	489460								

Source: CRISIL Ratings

The highlighted diagonal indicates the stability rates of various rating categories. Stability rates indicate the proportion of ratings that have remained unchanged over a given period. Between 1988 and 2015, around 93.3% of 'CRISIL AA' ratings remained in that category at the end of one year; 1.5% were upgraded to 'CRISIL AAA'; and 5.2% were downgraded.

Interest rate risk

A fundamental principle of bond investing is that market interest rates and bond prices generally move in opposite directions. Bonds tend to rise in value when interest rates fall, and they fall in value when interest rates rise. This phenomenon is known as interest rate risk. The fact that bonds are worth less when interest rates rise is explained by the fact that when interest rates decline, new bond issues come to market with lower yields than older securities, making those older, higher-yielding ones worth more. Hence, their prices go up.

The effect of coupon on interest-rate risk

Interest rate risk is common to all bonds. A bond's maturity and coupon rate generally affect how much its price will change as a result of changes in market interest rates. If two bonds offer different coupon rates while all of their other characteristics (e.g., maturity and credit quality) remain same, the bond with lower coupon rate will generally experience a greater decrease in value (higher interest rate risk) as market interest rates rise.

The effect of maturity on interest-rate risk

Maturity can also affect the interest rate risk. The longer a bond's maturity, the greater is its value impacted by changing interest rates. Therefore, bonds with longer maturities generally have higher interest rate risk than similar bonds with shorter maturities.

The seesaw effect between interest rates and bond prices applies to all bonds, even to those that are insured or guaranteed by the government or any other agency. When the agency guarantees a bond, it implies that it will make interest or principal payment on behalf of the issuer; however, by no means it implies that the market price of the bond will not change due to the change in the market yield.

Factors affecting interest rates

Various forces affect the level and direction of interest rates. If the economic growth picks up momentum, then the demand for money tends to go up, putting upward pressure on interest rates. So, interest rates typically climb when the economy grows, and fall during downturns.

Inflation is one of the most influential forces on interest rates and is defined as a rise in the general price level of goods and services in an economy over a period of time. When the price level rises, the purchasing power of the currency declines. To counter the adverse impact of higher Inflation, interest rates increase. So, rising inflation leads to higher interest rates (although, at some point, higher rates contribute to a rise in inflation), and moderating inflation leads to lower interest rates.

For a bond investor, there is an expectation of a guaranteed return. In that regard, every investor ought to have a clear investment plan based on appropriate personal considerations, goals and outlook. If the issuer files for bankruptcy or faces a rating downgrade, the quality of the underlying bond investment suffers. This is more apparent when all the investment is aggregated in a single issuer, exposing the investor to concentration risk.

Concentration risk

Concentration risk is the probability of loss from heavy exposure in a single asset. Excessive concentration in a particular asset class or a security can amplify losses when the market turns volatile. Usually the reason for concentration risk is that an investor may believe a particular investment or sector will outperform its peers or an index and makes a conscious decision to invest most of the money in a given asset.

Investors should aim to have a processes to identify, measure and monitor concentration risk. Overexposure to a single counterparty or a few counterparties in related clusters connected through common ownership/management is referred to as issuer concentration risk. If there is an exposure to counterparties in the same sector or a geography, it is also concentration risk.

Managing concentration risk

Diversification

Diversification means combining assets that are not correlated, i.e., do not move in lockstep together, by which the risks embedded in a portfolio are lowered and higher risk-adjusted returns can be achieved. This increases the probability that some of the investments will provide satisfactory returns, even if others are flat or losing value. Diversification can be done based on multiple asset classes and different sectors. A portfolio can also be diversified by issuer type, bond type or maturity.

Asset allocation limits

Setting a limit on exposure to different issuers and inclusion of different asset classes in the portfolio can help mitigate concentration risk. By this an investor reduces the risk of major losses that can result from overinvesting a single asset class, however resilient he/she might expect that class to be. The emphasis on asset-allocation limits is stressed by all regulatory bodies, such as the SEBI and IREDA, as they provide

guidelines for their regulated entities on investment limits to protect them from concentration risks. For instance, to provide investors with enhanced diversification benefits and put mutual funds in a better position to handle adverse credit events, the SEBI prescribes prudential limits for sectoral and group-level exposures.

Post-investment analysis

If an investor has an accumulated exposure in a given issuer, industry, geography or a segment, it is important to monitor the investment's performance in that segment. Inclusion of different asset classes and diversification are some of the ways, but investors also need to perform periodic reviews of holdings and make adjustments to ensure that it coincides with their investment objective. Setting up an organised goal to manage risk will help in paying attention to risk.

One way of monitoring is looking at the ratings and keeping a watch on rating moves (upgrade/downgrade/stable). Another way to track is to look at the strength and performance of the company by doing fundamental analysis and studying its key profitability ratios and future projections. Whatever be the method, post-investment risk management should always be on the radar screen, given the limited size of the portfolio.

Infrastructure

Strong infrastructure is key to development of financial markets. In debt markets, regulators, rating agencies and exchanges are the three major components providing the necessary guidelines for market participants.

Regulators

There are various regulators in the Indian financial sector associated with the sub-segments of insurance, banking and capital markets. They are independent but are influenced to a certain extent by the government. The major regulators are the Reserve Bank of India (RBI), SEBI, IRDAI and PFRDA.

Reserve Bank of India

The RBI is the apex monetary institution of India and is also the country's central bank. Established in 1935, it was initially privately owned but is now fully owned by the government of India. It regulates public and private sector banks, regional rural banks, cooperative banks and all types of non-banking financial companies. Its functions are:

- **Monetary authority** - Formulates, implements and monitors the monetary policy.
- **Regulator and supervisor** - Prescribes broad parameters for banking operations within which the banking and financial systems function. Maintains the public's confidence, protects depositors' interests and ensures that banks provide cost-effective banking services to clients.
- **Manager of foreign exchange** - To facilitate external trade and payments and promote orderly development and maintenance of the foreign exchange market in India.
- **Issuer of currency** - To give the public an adequate supply of good-quality currency notes and coins.
- **Banker to the government** - Performs merchant banking functions for the Central and state governments, and also acts as their banker.

Securities and Exchange Board of India

The SEBI was established in 1988 to regulate the securities markets. It protects the interests of investors and directs capital and money markets to work in the interests of the general public. Its functions are:

- Regulating the stock exchanges and any other securities markets;
- Prohibiting fraudulent and unfair trade practices;
- Promoting investor education and training of intermediaries; and
- Prohibiting insider trading.

Insurance Regulatory and Development Authority of India

The IRDAI is the insurance regulator of India. It keeps a check on the functioning of insurance companies, directing them to work in the public interest. Its mission is "to protect the interests of policyholders, to regulate, promote and ensure orderly growth of the insurance industry and for matters connected therewith or incidental thereto". Its functions are:

- Protecting the interests of policyholders in matters concerning assigning of policies, nomination by policyholders, insurable interest, settlement of insurance claims, surrender values of policies and other terms and conditions of contracts of insurance;
- Specifying requisite qualifications, code of conduct and practical training for intermediaries or insurance intermediaries and agents;
- Promoting efficiency in the conduct of the insurance business;
- Regulating investments of insurers; and
- Regulating the maintenance of solvency margins.

Rating agencies

A credit rating agency is an entity that assesses the ability and willingness of the issuer for timely payment of interest and principal on a debt Instrument through a credit rating. It is not a recommendation to buy, sell or hold. A rating only provides an additional input to the investor, who is required to make his own independent and objective analysis before arriving at a decision.

Rating agencies are regulated by the SEBI, but the regulator does not play a role in rating assessment. The rating is intended to be an independent, unbiased and professional opinion of the rating agency. Currently, there are seven rating agencies registered with the SEBI. Their functions are:

- Providing unbiased information of credit risk of issuers
- Evaluating risk and return parameters for investors to take informed decisions
- Helping in formulation of public policies for different kinds of institutional portfolios, as debt securities are rated by an independent agency
- Analysing issuer financials and industries to help investors gauge the risks associated with the issuer; and
- Analysing issuer's management

Exchanges

An exchange is a place where traders can exchange financial assets, such as stocks and bonds. It helps in facilitating trade between various market participants. The leading exchanges in India are National Stock Exchange (NSE), Bombay Stock Exchange (BSE) and Multi Commodity Exchange of India Ltd (MCX). The BSE's Sensex and NSE's Nifty indices help in gauging the performance of the Indian equity market.

The primary roles of exchanges are:

- Helping companies raise capital from the capital markets.
- Aiding investors in mobilising savings to more attracting avenues; equity remains one of the best-performing asset classes in the long run;
- Helping individual traders and corporates in hedging risks through derivatives trading;
- Structuring indices that act as a proxy to the overall economic performance; and
- Providing liquidity to the markets.

Intermediaries

Intermediaries play a pivotal role in the financial markets, especially in the debt market. They not only provide necessary support, but also act as enablers to investors in easing the investment process.

Custodians

A custodian is a bank or a financial institution that holds securities (mostly in electronic form), such as shares, bonds and mutual fund units, for investors. It eliminates the risk of theft or loss of securities and also protects the assets from any illegal activities of market participants.

A custodian needs to be registered with the SEBI, and there are 19 registered custodians currently. Mutual funds generally use custodians for safekeeping of securities and other assets that are acquired using the pooled funds of investors. However, a custodian is in no way involved in managing the funds. It may be noted that custodians are only clearing members and are not trading members; they help other trading members settle trades.

Both custodians and depositories perform the key function of safekeeping investor assets, but depositories additionally have the authority to transfer the legal ownership of an asset whenever a relevant transaction takes place.

The duties of a custodian include:

- Maintaining client accounts;
- Collecting benefits, such as dividends and rights from securities;
- Informing the client about issuer actions that affect clients; and
- Providing updates to clients on the investment status.

Depositories

A depository is an institution that facilitates investors in holding securities in dematerialised form. Similar to a bank, which holds investors' funds, a depository holds securities. It thus facilitates safeguard of securities held by the account holder. It also provides services for transferring of securities from one account to another based on the instructions of the account holder. Whenever a trade takes place, the ownership of securities is transferred by the depository. As a depository has all the details of the securities in the account, it plays an important role in several corporate actions, such as issuance of bonus, rights and dividends.

Currently, two depositories are registered with the SEBI: National Securities Depository Ltd (NSDL) and Central Depository Services India Ltd (CDSL).

Investors can open an account and avail of their services through a depository participant (DP), which acts as an interface between the investor and the depository. Public financial institutions, scheduled commercial banks, foreign banks operating in India with the approval of RBI, state financial corporations, custodians, stock brokers, clearing houses, NBFCs and registrar to an issue or share transfer agent which comply with requirements prescribed by SEBI can be registered as a DP.

The advantages of maintaining an account with a depository are:

- Immediate transfer of securities;
- Elimination of risk of fake securities, theft and bad delivery;
- Avoidance of stamp duty for transfer of securities; and
- Reduction in paperwork and transaction costs compared with physical certificates.

Brokers

A broker is an individual or a firm that executes buy or sell orders received from investors and traders. It ensures the best price is obtained for its clients. To complete these trades, the broker charges the customer a commission. Brokers are given a license by the SEBI and are members of the stock exchanges to participate in the securities market on behalf of investors and traders.

They are of two types: full-service brokers and discount brokers. Full-service brokers offer a variety of services to their clients, including research and advice on various investment products. But to avail of these services, investors are expected to pay higher commissions on their trades. Discount brokers, on the other hand, do not offer research or advice, and only settle trades for their clients. In return, they charge a lower commission compared with full-service brokers.

In addition to brokers, there are sub-brokers, who are not members of a stock exchange, but act as agents of the member-broker and assist investors and traders in buying and selling securities through the member-broker. However, even sub-brokers are required to obtain registration certificate, without which they are not allowed to deal in securities on behalf of clients.

Distributors

A distributor is an entity that serves as an underwriter for shares of mutual funds. The distributor is responsible for marketing and selling shares issued by fund-management companies. The distributor is responsible for creating awareness about funds among investors and gathering as much funds as possible for the fund-management companies. Some funds may partner with major banks or brokerage houses, so as to attract maximum exposure and explore direct selling opportunities.

Distributors earn commissions for selling the units of the fund to investors. Sometimes they may also charge investors for providing investment advice, but this would lead to a conflict of interest. As a result, to segregate sales by distributors from investment advice, the SEBI has said that fund distributors cannot give advice to the investors. However, it is expected of distributors to help investors understand the effectiveness of various fund schemes and compare them with other competitive investment products.

Valuation agencies

Valuation is the process of determining the current worth of an asset. Valuation of equity funds is easy, as the stocks that make up the fund are frequently traded, and an NAV is simply the total value of assets minus the expenses divided by the number of units. However, NAV calculation for fixed-income funds is more complex, and this is where valuation agencies play an important role. Currently, as per the guidelines set by the Association of Mutual Funds in India (AMFI), CRISIL and ICRA are allowed to offer valuation services to mutual funds.

Valuation agencies use certain methodologies to value thinly traded debt securities. Using the values obtained, they construct valuation matrices. Mutual fund houses use these matrices to determine the daily NAVs of their schemes. The debt securities for which valuation services are offered include government securities, state development loans, treasury bills, STRIPs, corporate bonds and money-market instruments.

Fund accountants

Fund accountants are responsible for accounting done for firms managing portfolios of investors, such as mutual funds, pension funds, hedge funds, exchange-traded funds and private equity funds. Investment funds are governed by a trust deed. As per the trust deed, there are three key parties related to fund management. These include trustee, fund administrator and investment manager. The fund accountant would be a part of the fund administrator team.

Fund accountants are responsible for daily accounting for funds, which avail of their services. The accounting services include calculation of daily NAVs, preparing weekly and monthly financial statements, income and expense reporting, as well as ensuring compliance with the schemes and SEBI regulations. In the fund management industry, some firms only manage funds, some only sell funds, while others perform both. Fund managers do not typically work with firms that only sell funds.

Fund accountants may be employed by financial organisations in fund management. Sometimes fund accounting is done by specialised independent firms, to which organisations in the fund management industry may outsource fund accounting services.

Prudent strategies for treasury management

Treasury management is an important corporate function. From being managers of working capital and financial risk, corporate treasurers have evolved into strategic business partners, acting in liaison with banks and providing advisory functions to companies with the sole motto of safety, liquidity and return. The high debt burden of corporates in recent times has shifted the focus on strategies to not only bring down debt, but also to enhance bond portfolio returns. We discuss the methods treasurers can employ to exploit the underlying debt market conditions and build wealth for stakeholders even during uncertainty.

Direct route

Treasury departments with the wherewithal can directly invest in debt instruments. The following table shows the suitability of each investment option.

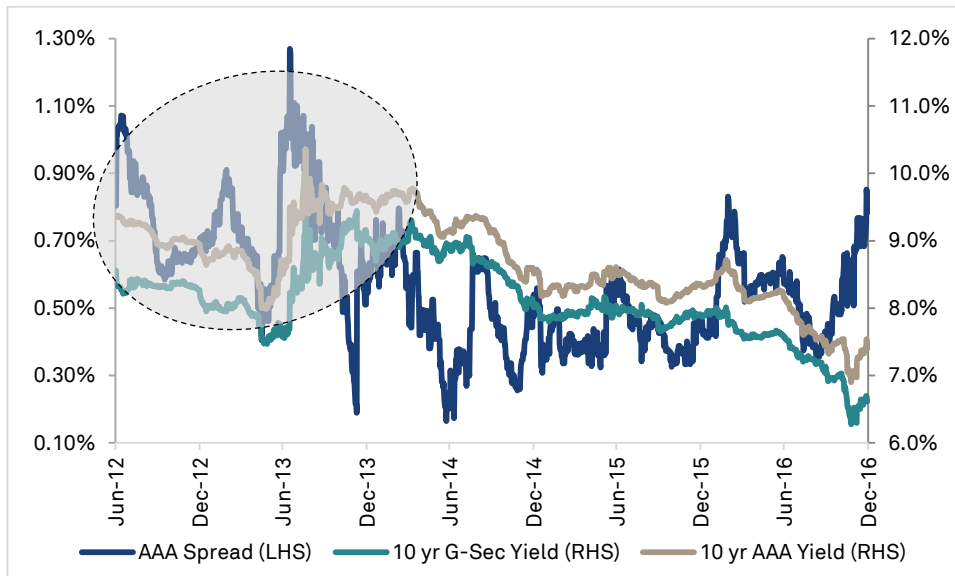
Investment options for treasurers

Investment options				
Sl. No.	Investment options	Instrument type	Investment horizon	Investment strategy
1	Money-market instruments	Certificates of deposit	1 month to 12 years	Hold until maturity or sell to meet liquidity requirement
		Commercial paper	1 month to 12 years	Hold until maturity or sell to meet liquidity requirement
2	Central and state government securities	Dated securities from the Central and state governments	Up to 1 year	Capital gains from a fall in interest rates. Investment should be based on a view on interest rates
3	Corporate bonds	AAA-rated	Up to 1 year	Capital gains from a fall in interest rates. Investment should be based on a view on interest rates

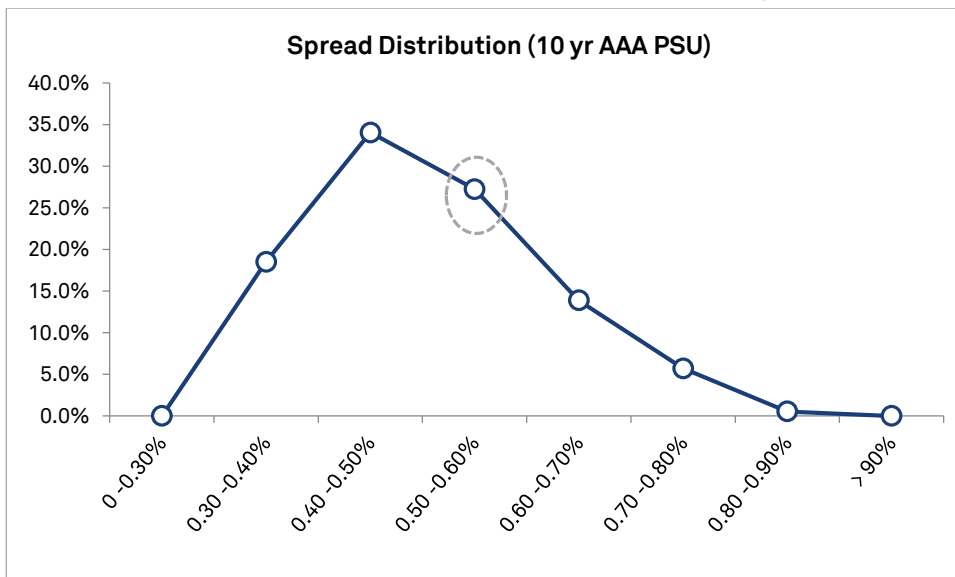
We look at three investment strategies:

- Spread analysis:** Treasury departments can sift through corporate bond spreads to assess the relative pricing of categories across maturities. The advantage of spread analysis is that it transcends timelines (low or high interest rates) across fixed-income options and helps capture the dynamics of the debt market. The assessment of current spreads versus the historical average facilitates apt investment decisions.

Yields and spreads over the past four years



Spread distribution of AAA-rated paper over the past four years to March 2016

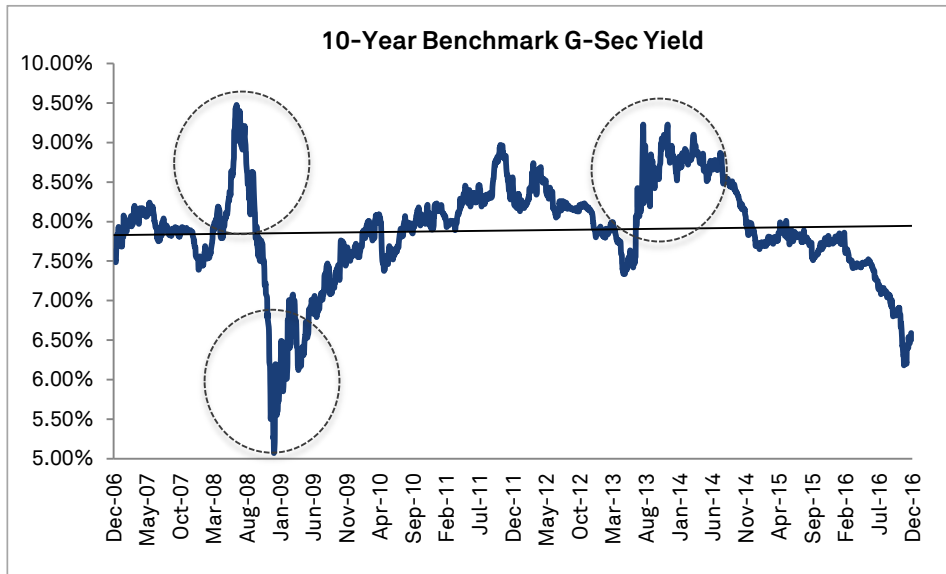


In the above chart, the peak represents the historical four-year average spread between AAA-rated paper and a comparable government security. The circle represents the spread in the fourth quarter of 2015-16. Since the spread is higher in Q4 compared with the historical average of 0.40-0.50%, an investment in AAA-rated paper is advisable.

- Investments made on interest rate movements:** This requires taking tactical duration calls based on the mean-reversion theory by looking at the underlying interest rate movement. Treasury managers will need to examine the prevalent market yields and compare them with the long-term average yield. Assuming that yields are mean-reverting and return to their long-term average, an investment in short-maturity paper is desired when the current yield is below the long-run average. Short-term securities have lower duration and will minimise portfolio losses due to price declines. When the current yield is above the long-run average, the market expects yields to fall in the future. In such a scenario, the bond

manger can increase the allocation to long-maturity paper (which carries higher duration) to maximise portfolio gains from the bond's price rise.

Government bond yields



- Laddering:** Portfolio managers can invest across bonds at different times with different maturities to minimise the reinvestment risk. The portfolio can be constructed in such a manner, where the cash flows (interest/maturity proceeds) are evenly distributed over the investment horizon, thus reducing the reinvestment risk at low interest rates and clubbing the cash flows.

Yield difference captured through laddering

Days when yields were low	Yield on this date	Yield through laddering strategy (one-year average yield from this date)	Impact on return on investments through laddering
	(A)	(B)	(B - A)
October 2003	4.96%	5.47%	0.52%
January 2, 2009	5.07%	6.85%	1.78%
May 24, 2013	7.34%	8.54%	1.20%

10 year benchmark G-sec yield is used for above analysis

Source: CRISIL Research

Mutual fund route

Most treasury departments may not have robust treasury investment functions, thus restricting their portfolio management skills. The departments can look at investments via debt mutual funds to bolster their debt portfolios. While mutual funds provide various options, investments should be linked to the motto of safety, liquidity and return.

Various mutual fund schemes

Investment options	Instrument type	Investment horizon	Investment strategy
Mutual funds	Liquid mutual funds/liquid exchange-traded funds	Up to 1 month	Daily liquidity
	Ultra-short term funds	1 to 3 months	Higher accrual with daily liquidity
	Short-term income funds	3 to 6 months	Entry with outlook on interest rates to decline and exit at an opportune time
	Long-term income funds	3 to 6 months	Entry with outlook on interest rates to decline and exit at an opportune time
	Gilt funds	3 to 6 months	Entry with outlook on interest rates to decline and exit at an opportune time
	Fixed-maturity plans / fixed-interval plans	More than 3 years	Better post-tax return with indexation benefit

Summing up

Treasury departments are an integral part of debt market institutional framework and offer an important function of liquidity management to ensure smooth functioning of a corporate. Applying some of the strategies outlined above can help them optimise portfolio returns, while keeping the focus on the motto of safety, liquidity and return. Of course, due diligence is important before choosing the best fit.

Regulatory/compliance framework needs to improve

This article is authored by APAS

Recent years have seen a slew of measures from the government and the Reserve Bank of India (RBI) to give the moribund corporate bond market a new lease of life. However, much more needs to be done, for the market to grow to its full potential. A look at the recent announcement reveals the issues.

Measures proposed in Budget 2016-17

The Union Budget 2016-17 proposed six measures for corporate bond market development:

- An electronic platform for private placement
- An electronic platform for corporate bond repurchase agreement (repo)
- A consolidated reporting platform
- Extension of foreign investment to unlisted debt and pass-through securities
- Encouragement by the RBI to bond financing by large borrowers
- Setting up of a credit enhancement fund by the LIC for infrastructure projects

However, these measures are neither new nor likely to have any significant impact.

Electronic platforms for issuance, trading, settlement and reporting were first recommended by the R H Patil Committee in 2005. The SEBI had mandated the listing of bond private placements in 2008, so there are no new unlisted bonds to allow foreign investment into. The securitisation market is languishing due to regulatory and taxation challenges, and just permitting foreign investments will not help revive it.

It would be difficult for the RBI to encourage bond financing by large borrowers. Large companies are already heavily leveraged. Loans to them form a large part of banks' stressed advances. Hence, such companies will not seek additional financing through bonds, as traded bonds reflect the credit quality of the borrower; also, companies and banks may not want this to become transparent. The domestic capital available for this market is limited.

It would also be difficult for LIC to set up a credit enhancement fund for infrastructure projects, as the insurer is being called into action to support everything from disinvestment to railways' capital expenditure. Pension fund investment mandates are biased towards government bonds. Banks can invest, but they would prefer to hold these bonds to maturity to avoid mark-to-market costs. This reduces secondary trading, investor participation and, therefore, new issuance.

The development of this market requires fundamental reforms in financial markets, public finance and regulatory governance.

- The basic market infrastructure needs to be put in place. Lack of regulatory action and inter-regulator coordination have been hampering this. For example, a platform for corporate bond repos, similar to collateralised borrowing and lending obligation, had been proposed by the SEBI, but was not approved by the RBI until recently.

- The government uses financial institutions as a captive investor pool for government bonds to finance its deficit. On top of that, there are governance problems among public sector banks and financial institutions. This constrains domestic financial development and crowds out private sector financing requirement.
- Foreign investment in local currency bonds is not favoured. There are capital controls, such as the \$50 billion investment limit and participation frictions, such as the ban on investment in less than three-year residual maturity instruments, which work against it.
- The thinking on integrated financial markets is still at a nascent stage in India. There is a need for a bond-currency-derivatives nexus, for which the required elements are either missing or under-developed. There is a lack of reliable and accurate benchmark yield curve, which makes it difficult to price corporate debt. Despite regulatory guidelines in place, there does not exist a repo market that enables secondary liquidity and a credit default swaps market, which allows credit risk to be traded. In terms of the derivatives markets, the interest rate market is in its early stages and the currency market is fraught with friction in the form of documentation requirements.
- Creditor rights is a big missing piece. Contract enforcement and judicial efficiency are areas that need significant improvement. The bill related to insolvency and bankruptcy, was recently passed by Parliament.

All these are structural reforms that require a long-term commitment. Even as work is underway on the Indian Financial Code, proposed by FSLRC, many more reforms such as dismantling of capital controls and comprehensive thinking on financial market architecture need to be implemented.

This will help in developing the corporate bond market in India.

Measures announced by the RBI

In August 2016, the Working Group on Development of Corporate Bond Market in India submitted its report with some recommendations. Based on that, the RBI announced a slew of measures for the corporate bond market, which will further market development, enhance participation, facilitate greater market liquidity and improve communication in the market.

- *PCE ceiling raised to 50%:* The aggregate partial credit enhancement (PCE) that may be provided by the financial system for a given bond issue has been increased from 20%-50% of the bond issue size, subject to the condition that PCE be provided by any single bank not exceeding 20% of the bond issue size and the extant exposure limits.
- *Brokers in repo corporate bonds:* Brokers have been authorised as market makers and have been allowed to participate in the corporate bond repo market. This measure is expected to meet their funding and securities requirement arising out of market-making activities.
- *Direct trade in corporate bonds for FPIs:* To facilitate direct trading in corporate bonds by FPIs in the OTC segment and on an electronic platform of a recognised stock exchange, it is now allowed for FPIs to transact in corporate bonds directly without involving brokers.
- *Corporate bonds for LAF:* Following emerging international practice, the RBI has allowed corporate bonds as eligible collateral for liquidity operations.

These measures are expected to give a boost to the Indian corporate bond market.

Status of recommendations by previous committees

There have been a number of reports by expert committees on development of corporate bond markets in India. Many of the recommendations have been implemented by the government and regulators. However, the success of these measures in achieving the intended outcomes has been varied. The impact of some measures is captured below:

Intended outcomes mostly achieved

- Setting up of reporting platform for post-trade transparency.
- Introduction of DvP in settlement of OTC trades in corporate bonds to eliminate settlement risk.
- Issue of long-term bonds by banks allowed with a minimum maturity of seven years to raise resources for lending to: (a) long-term projects in infrastructure sub-sectors; and (b) affordable housing. These bonds have been exempted from computation of net demand and time liabilities (NDTL) and are therefore not subjected to CRR/SLR requirements.
- The investment limit for foreign portfolio investors (FPIs) has been increased to INR 2,443.23 billion. The limit-allocation methodology has been rationalised and the withholding-tax rate has been reduced from 20% to 5%.
- FPIs have been permitted to invest only in corporate debt of at least three years of residual maturity.
- International financial institutions such as IFC were permitted to float rupee-linked bonds overseas to deepen the offshore rupee bond market, so that IFC and other investors can raise rupees to invest in India. This has facilitated the development of benchmark yield for long-term corporate bonds.
- The SEBI has allowed setting up of a dedicated debt segment on the exchanges.

Intended outcomes partially achieved

- Banks and PDs are allowed by the RBI to become members of stock exchanges to trade in corporate bonds.
- Investment norms for banks and PDs relaxed by the RBI to facilitate investment in corporate bonds.
- Final guidelines issued by the RBI for partial credit enhancements by banks to corporate bonds.
- Measures taken by the SEBI to encourage investor interest/participation in the corporate bond market in terms of liberalising the listing requirements, simplification of procedures and processes and simplified disclosure norms.
- Rationalisation of FPI regulations has been put in place by the SEBI for easier registration process and operating framework for overseas entities seeking to invest in Indian capital markets.

Intended outcomes not yet achieved

- Introduction of repo in corporate bonds to meet the funding requirement.
- Introduction of credit default swaps to facilitate hedging of credit risk by the holders of corporate bonds.
- Reissuance of bonds permitted by the SEBI

Compliance

The public issue of corporate bonds/NCDs is governed by the Companies Act, 2013, and the SEBI (Issue and listing of Debt Securities) Regulations, 2008 (SEBI Debt Regulations). NBFC issuers are also subject to compliance of regulations framed by the RBI.

Certain key aspects of the SEBI Debt Regulations are:

- The minimum base issue size of the public issue should be Rs. 100 crore.
- Option to retain the oversubscription money up to a maximum of 100% of the base issue size.
- Obtain in-principle approval for listing of its debt securities on the recognised stock exchanges, where the application of listing has been made.
- Create 100% security on assets for NCDs. NBFCs are permitted to issue unsecured NCDs having a maturity of more than five years and these shall be eligible as tier II capital.
- Minimum subscription of 75% of the base issue size, failing which, the amount procured will have to be repaid along with interest.
- Specific disclosures with regards to 'objects of the issue' are required to be made in the prospectus.
- Credit rating from at least one credit rating agency for the proposed public issue.
- Appoint a merchant banker and a SEBI registered debenture trustee.

Additional compliance requirements by NBFCs

In addition to the above, NBFCs are required to comply with the guidelines/regulations of the RBI, which require systemically important NBFCs to maintain capital to risk-weighted assets ratio (CRAR) of 15% and adhere to strict corporate governance requirements. Further, for all NBFCs, unsecured NCDs are considered as subordinate debt and qualify for tier II capital for the purpose of calculating CRAR. However, tier II capital can only be 50% of the tier I capital. Accordingly, issues of unsecured NCDs are restricted to that extent.

Some measures that need to be implemented

- *Awareness with retail investors:* An incentivised distribution channel can create awareness among retail investors on investment in corporate bonds, which shall help retail participation in the market.
- *Simplified stamp duty provisions:* There is inconsistency in stamp duty provisions in primary issuances and secondary market transactions. Clarity on this front and alignment with international practices will contribute towards deepening the market participation.
- *Taxation:* FIIs and QFIs are required to pay withholding tax on interest paid by Indian corporates, which acts as a deterrent.
- *Wider role and power to the debenture trustees (DTs):* A strengthened role of DTs with powers to enforce contracts and security kept in trust, shall help in enhancing the confidence of retail and institutional investors.
- *Other measures:* There are several other measures, namely, mechanism for credit enhancements by credit/liquid facilities, roll over or re-issue of debt securities with minimal legal requirements, extending policy and regulatory support, clarity on issue of partly paid NCDs, could help in developing the corporate bond market in India.

Other recommendations of the latest Working Group

Issuers

Reissuance

- The issuers coming out with frequent debt issues with the same tenor during a quarter may club them under the same umbrella ISIN, which, in turn, would increase the float in the market, thus enhancing its liquidity. These issuers may come out with a feasible maturity structure, wherein they can stagger the redemption amount across the year by amortising repayments. Necessary changes may be made in the issuance process of ISINs by depositories, namely NSDL and CDSL, to facilitate the same.
- Reissuances may not be treated as fresh issuances for the purpose of stamp duty.
- The corporate governance norms applicable to companies, which have listed only debt securities and not equity, may be reviewed to make them less onerous.

Standardisation of corporate bond issuance

As suggested by market participants, the SEBI may have a relook at the guidelines issued in October 2013, so as to clarify on day-count convention, shut period, basis for yield calculation, calculation of coupon interest and redemption with intervening holidays with illustrations. The date of payment may be specified as the date on a Mumbai business day, the day on which the RBI and money markets function.

Investors

In terms of RBI guidelines on credit default swaps, the credit exposure of a protection buyer shall be on the protection seller. In case of need for further clarification of doubts, if any, market participants may seek the confirmation of the respective regulators.

Infrastructure

Uniform valuation norms

A uniform valuation methodology available on a daily basis may be followed by all the regulated entities for valuation of their holdings of corporate bonds. All regulators may explore an acceptable mechanism for valuation including engaging the Financial Benchmarks India Pvt. Ltd. (FBIL) or credit rating agencies for the same with necessary safeguards and regulatory oversight.

Electronic trading platform

The penalty structure in place for default in delivery of debt securities/funds for trades subject to CCP clearing by the clearing houses of the stock exchanges may be reviewed in consultation with all the stakeholders with a view to prescribing a penalty, which is prudent yet reasonable. It is suggested that alternative mechanisms, such as borrowing through repo in corporate bonds, may also be explored for ensuring settlement.

Credit rating agencies

- CRAs may be mandated to strictly adhere to the regulatory norms with regard to timely disclosure of defaults on the stock exchanges and on their websites. They may also publish the credit rating transition

matrix more frequently. CRAs may take up membership of credit information companies to access relevant credit information.

- Banks may be encouraged to submit loan overdue information to CICs on a weekly basis to start with. RBI may consider whether CRAs may be allowed access to Central Repository of Information on Large Credits (CRILC) database based on legal feasibility and other relevant factors.

Instruments

Credit Default Swaps (CDS)

Amendments may be carried out in the RBI Act, 1934, to provide full clarity on the legal position relating to netting of OTC derivative contracts. Pending amendments to the RBI Act or other enabling legal framework, based on expert legal opinion, possibility of permitting netting keeping in view the existing legal provisions and banking practices may be explored expeditiously.

Bond index

A corporate bond index may be introduced by the stock exchanges/other entities.

Views from industry experts



Nimish S Shah,
Head of investments (research and products),
SBI Exclusif (Wealth Management Department)

On the benefits of debt market

The debt market can help investors protect capital and ensure a fixed regular income from their investments. For those looking at retirement planning, debt plays an important role in generating regular income post retirement; they should pay close attention to taxation and costs.

On various options and instruments

There are various investment options in the debt market, such as fixed deposits, bonds, non-convertible debentures, debt mutual funds and public provident fund. Before investing in any product, an investor should analyse interest rates, tenure, liquidity and credit quality of each investment option.

On the distributors' role

Distributors can play a pivotal role by explaining investors the virtues of asset allocation and why debt allocation makes sense in client portfolios. Based on a client's financial plan and need for liquidity, distributors should be able to offer well-researched investment options. Distributors can add a lot of value by providing an optimal mix along with better post-tax return, depending on investors underlying needs.

On the way forward

We think awareness and penetration have come a long way in the debt market, but there is still a lot of scope, as investors look at financial assets rather than physical assets. With markets moving towards lower distribution fee and advisory model, distributors should evolve and a lot more investment options with low costs should be offered to investors.

On the current market conditions

At this juncture, where the Reserve Bank of India has changed from an accommodative to neutral stance. Interest rates are expected to move further lower, as banks pass on the rate cuts. We feel the yield curve is likely to steepen, given the comfortable liquidity and potential government buybacks in 2017-18.



Sumit Shukla,
chief executive officer,
HDFC Pension Management Company Ltd

On the debt market

The Indian debt market in India is primarily a wholesale market, with the majority of participation from institutions. Retail participation in the debt market is mostly seen in primary issuances (lower-ticket bond issuances and tax-free bonds by government entities). Retail participation comes through institutions, such as mutual funds, insurance companies, pension funds and banks. The reason for this indirect participation is the high minimum threshold investment required in case of corporate debentures. The market also lacks enough liquidity to let retail investors participate directly.

On various instruments available for retirement

Debt products provide stable and consistent growth potential over the long term, as returns are not as volatile as in equities. The various instruments available are central and state government securities, debentures issued by government entities and private companies.

On options available for individuals to invest via institutions/small corporates

Investing through institutions is a better bet for retail investors, due to diversification. Secondly, the liquidity risk of a retail investor is also taken care of by the institution. Finally, fund managers possess the expertise and edge in understanding various instruments and keep a watch on the latest developments that can impact investments; they take timely corrective actions that mitigate any investment risk.

On types of instruments opted by pension funds

Pension funds in India are allowed to invest in securities issued by central and state governments as well as debentures. These funds measure various predefined risk parameters and take informed decisions to invest in high-quality debt instruments.

On capital protection of subscriber money by pension funds

The debt market provides various avenues for pension funds to offer capital protection to subscribers. Even though assets held by pension funds are marked to market, they bear the market risk. However, the extent of movement in debt is relatively lesser than in equity and, to a very great extent, the volatility is compensated with fixed cash inflow in the form of interest/coupon receipts. This ensures that the capital of subscribers is protected and generates a minimal return every year.

On advantages of pension fund versus retirement planning products

Traditional retirement planning instruments provide protection against adverse interest rate movements. Debt market instruments offer the maximum upside when interest rates fall. In the Indian context, where interest rates are expected to move down in future, these instruments offer the best opportunity to investors. These instruments are beneficial from a taxation standpoint

On the key parameters an investor should evaluate while choosing a pension fund

Investing retirement funds is equivalent to establishing a long-term relationship with any entity. The retirement funds are invested over long term, and hence the decision to select a pension fund is a crucial one. An individual investor should judge a pension fund based on the below parameters:

- Background of the sponsor and its longevity;
- Experience of the fund house in asset management;
- Historical investment returns of the fund across asset classes;
- Assets managed by the fund and growth;
- Experience of the fund manager; and
- Value-add services.



Vinit Kumar,
Sr. Vice President,
Balance Sheet Management Unit (BMU), Edelweiss

On the debt market depth

While there has been significant progress from the infrastructure standpoint, including clearing and settlement, and from the point of view of disclosures, the debt market remains focused on g-secs and is concentrated largely with institutions. While yields on the classic products such as FDs give a comparable return, retail participation has been constrained in terms of the sheer logistics, such as opening demat accounts. So retail participation is mostly driven by MFs. Compared with equity, the cost of leverage is very high for retail debt investors. Moreover, the lack of penetration by intermediaries and low awareness also hinders retail participation.

On how investors can use the debt market to meet their goals

There are various principal-protected instruments that can offer significantly higher return to investors, while debt funds provide a fixed return. However, the retail participation can also be fostered indirectly through insurance policies and government savings schemes, which, by virtue of their mandate, are required to invest largely in debt.

On how investors can benefit from debt instruments versus traditional products

It is essentially a risk versus return trade-off. Depending on risk appetite, an investor can take a credit view by buying lower-rated/higher-yielding corporate paper to enhance portfolio return. However, this has to be weighed with a better understanding of the inherent risk factors. As markets deepen, investors may even extend this approach and look at hedging, say, home loans or take a rate view through interest-rate futures.

On investing in the debt market directly or through institutions/small corporates

For retail investors, the advantage through mutual funds is that risk is diversified for the same level of participation. In effect, trading advantage through the asset-management company and efficient taxation provide a better option to enhance returns; these are not possible for an individual investor.

On the measures taken by debt issuers to increase market awareness

It is mostly about education. From the issuers' standpoint, recent regulations restricting access to bank finance would force them to approach the bond market, and this is critical to have greater disintermediation in the market. Regulators, such as the RBI and SEBI, and FIMMDA are doing a fair amount of work in building participation. The RBI, based on the recommendations of a Working Group set up under the aegis of FSDC-SC, is taking certain steps in developing the corporate bond market. Information is key to this market and awareness is currently low; once the electronic auction platform is introduced and the ecosystem for primary debt offers in corporate bonds is built, the market would go a long way.

Annexures

Annexure 1 – Some interesting corporate debt markets

Germany

Germany's bond market is reasonably well-developed. The majority of participants are institutions, such as pension funds, insurers and banks. Individual investor holdings of bonds comprise 10-15% of total financial holdings.

An important feature of the German corporate bond market is that most bonds are listed, but a significant proportion of trading occurs over the counter (OTC). In such cases, listing is preferred to enable institutions, which are restricted to invest in unlisted bonds, not to facilitate trade through exchanges.

There are several trading platforms, such as EuroMTS and Eurex Bonds, in the European market that provide efficient trading solutions to all OTC trades. MTS Group is the first wholesale electronic market in the euro area that has promoted the integration of the euro-denominated bond market by broadening a range of securities traded and services offered and by extending its platform to other European countries. Eurex Bonds provides participants with an electronic platform for OTC wholesale trading in European bonds, ensuring higher liquidity and greater transparency for all market participants.

SME bonds

Since inception in 2010, Germany's SME bond market has witnessed 26 corporate defaults and four selective defaults, impacting 34 corporate bonds with a total debt volume of EUR 1 bn out of a total invested volume of around EUR 7 bn. This translates into a default rate of 17% by number of issues and 15% by volume. The interest-rate spreads ranges between 5% and 7%.

The likelihood of further corporate and bond defaults remains high, especially given the size of refinancing requirement of issuers with a volume of EUR 1.4bn in 2017 and a current peak of EUR 2.1bn to be refinanced in 2018. With the increase in credit spreads for very low-rated issuers over the past 12 months, it requires to be seen if all issuers can succeed in refinancing, which is likely to become even more difficult for lower-rated entities.

Reasons for the high default rate

- **Half of defaults are related to structural issues:** Almost half of issuer defaults and more than half of bond volume are related to sector-specific developments in the renewable energy market – an industry that has been distressed since 2009. Component or equipment suppliers in the solar and wind industry, such as 3W Power S.A., Rena GmbH and SIAG Schaaf Industrie AG, have been exposed to severe pricing pressures, resulting in corporate defaults. Moreover, project developers in the renewable energy industry, such as CarpeVigo AG and BKN Biostrom AG, face regulatory changes, which have jeopardised their business models.
- **Serious fraud allegations:** While the remaining half of corporate or bond defaults are linked to other corporate or industry developments, there have been serious fraud allegations against some defaulted issuers regarding misrepresentation of financial accounts (e.g., MIFA Mitteldeutsche Fahrradwerke AG or Penell GmbH) and embezzlement (getgoods.de AG).

- **Bond market as a lender of last resort:** The credit quality of many issuers was already weak at the time of issuance. For some entities, the issuance of an SME bond was the last resort to receive external financing, as banks had rejected financing requests. Moreover, many issuers did not use proceeds from bond issues as a substitute for a bank loan, but as a substitute for mezzanine or equity capital to finance risky investment projects, or to avoid short-term bankruptcy.
- **Retail market with limited creditor protection from covenants:** In hindsight, a high proportion of retail investors in the German SME bond market, who were impressed by high coupons and seemingly safe issue offered by issuers with an established brand, overlooked the accompanying risks of such investments. Institutional investors – which had invested in SME bonds to a limited extent (10-20% of invested debt volume) – had traditionally avoided such risky debt instruments. Creditors' protection through meaningful covenant structures, such as financial covenants, were not established in the early stages of the market. Such covenant structures that are usually requested by professional institutional investors, and are a standard in other high-yield bond markets or in conventional loan contracts, were largely ignored. However, such covenants could have protected creditors against risky developments as well as from misuse of and bad investment decisions with proceeds from debt instruments.

Often the SME bond market was seen as the last resort of financing for weaker debt issuers. This was further accelerated by the expansive monetary policy of the European Central Bank, catalysing the provision of capital through private placements or the traditional banking system.

The average credit rating assigned at issuance indicated a low investment grade or high non-investment grade credit quality of the segment, while the actual default rate suggests an average credit quality of mid sub-investment grade in this market.

Lessons learnt

- **Market participants are adjusting to the new SME bond world:** Given the loss of confidence in the bond market segment, it will take time to regain credibility and for the market's maturity to evolve. Market participants have adjusted to these circumstances, either by amending investment behaviour or taking appropriate measures.
- **Investors and debt advisors turn more selective:** Investors have become increasingly selective. Many planned bond issues were cancelled either during the conception stage of a new bond issue or due to the lack of investor demand. Investors are conducting more thorough reviews on their investments, recognising the need for an in-depth credit analysis of an international standard, even if this results in ratings well below the investment-grade threshold.
- Successful new issues or tap issues tend to come from:
 - comparably large issuers;
 - returning issuers, which have convinced the market with improving financial results; and
 - issuers from sectors, such as real estate, with less industry-inherent credit risks.
 - Finally, recent successful bond placements are characterised by stronger creditor protection.
- **Stronger creditor protection through covenants and asset pledges:** The market has matured considerably in terms of creditor protection. The introduction of meaningful covenants – which have been an exception rather than rule in the early stages of the market – is becoming the norm for new bond issues.

This can be seen in the comprehensive covenant packages comprising a full range of common covenants, such as negative pledge, pari passu, cross default, change of control clauses or payout or (dis)investment restrictions. Financial covenants ensuring adherence to important debt protection measures, such as leverage or interest coverage, are still an exception in less than 10% of all outstanding bonds. Nevertheless, such financial covenants can be observed in the newer bond issues rather than issues seen in the early stages of the market.

There is also a more frequent provision of recoverable assets as collateral. One third of all new bond issues in 2014 and 2015 had provided collateral against only 20% of bond issues in the earlier years. Such pledges in the form of real estate, inventory, brand rights, power plants or shares in other companies can be seen as measures designed to secure a successful placement of the bond issue, but which also put pressure on management of the issuers to protect the company's asset base or brand value.

- **Issuers – change of financing with other financing instruments:** Issuers have opted for different financing alternatives to avoid the stressed market sentiment in public SME bonds. In particular, privately placed bonds with institutional investors have been favoured by midsized issuers, such as Grand City Properties S.A., HELMA Eigenheimbau AG and Semper idem Underberg GmbH. The same trend has been seen in tap issues of existing public SME bonds (such as Metalcorp B.V. or Adler Real Estate) that directly address institutional investors.
- **Rating agencies – adaption of rating approaches:** Rating agencies focused on small and midsized corporates have reacted accordingly by amending their rating approaches and methodologies towards a more forward-looking view. In the early phases of the market, corporates were rated based predominantly on balance-sheet ratios of past financial years, amended rating methodologies incorporate important cash flow and liquidity-based indicators. Such financial metrics focus on the future development of the rated entities, reflecting financial risks in a more accurate and realistic fashion.
- **Sector's rating migration from BB+ to B+ on average:** In conjunction with the adjusted rating approach, the amended rating perspective is reflected in the rating migration after the assignment of an initial rating. There is a strong tendency to rating adjustments with an average of 3 notches down, with the average credit rating in the sector now standing at B+.
- **Exchanges – best-practices guide and stricter listing requirements:** Bond exchanges have launched measures to steer against the battered image of the market segment. While 'Deutsche Börse' has published a best-practices guide, giving advice to issuers and intermediaries on bond listings, the specialised bond exchange, 'Mittelstandsbörse Düsseldorf', has restructured its bond segment. The latter sharpened its listing requirements regarding transparency with the timely publication of interim reports and key financial metrics. Such guidance is equivalent to soft law to provide orientation and a more standardised approach; it may protect the segment from additional bond issues from issuers that are too weak or not yet mature enough to enter the capital markets.

Outlook

Although successful issuance volume of German SME bonds dropped significantly in 2014 and 2015, the market will likely overcome these birth pangs. However, it may take time for a complete recovery of investor confidence.

With the execution of measures listed above, the market will regain its importance and provide an improved credit protection to investors looking for high yields.

South Korea

The bond market in the Republic of Korea is one of the largest markets in Asia. Various reforms have led to its rapid development, including gradual market liberalisation. All fixed-income instruments are available to foreign investors.

Bonds in the Republic of Korea can be classified into two main types: government and corporate. Securitisation has become an important financing tool, since it was first used to restructure banks' non-performing loans following the 1997-98 Asian financial crisis. Collateralised bond obligations and collateralised debt obligations accounted for the bulk of securitised transactions. The market has since expanded to include securitisation of residential mortgages, credit card receivables, future trade receivables, and various types of leases and loans.

In the local currency corporate bond market, outstanding bonds grew 0.8% QoQ and 3% YoY to KRW 1220.8 trillion at the end of September 2016, fuelled by relatively fast growth in financial debentures.

Instruments

Debt instruments include issues from both the government and corporates. A repo market was established in 2002. Short selling of bonds is allowed, provided they are backed by a guarantee. Futures and options contracts were also introduced in 1999 and 2002, respectively.

Corporate bonds include special public bonds issued by state-owned entities, financial debentures other than those issued by Korea Development Bank, and other corporate issues, which may be guaranteed or non-guaranteed. Most corporate bonds are non-guaranteed with a three-year maturity.

Corporate issues also include asset-backed securities, which may be in the form of mortgage-backed securities, collateralised debt obligations and asset-backed securities.

Mortgage-backed securities are issued by the Korea Housing Finance Corporation. The Korea Asset Management Corporation and the Korea Deposit Insurance Corporation also issue asset-backed securities to recapitalise troubled financial institutions.

Asset-backed securities issued by financial institutions and non-financial private companies include securities backed by credit card receivables, future trade receivables, and various types of leases and loans. Cross-border asset-backed securities (asset-backed securities issued in foreign currencies) are also an emerging type of securitisation.

Participants

Several participants are involved in the bond market, including:

- Issuers from both the government and corporate sectors
- Investors consisting of financial institutions, and asset-pooling industries

- Intermediaries involving securities companies, investment houses, and dealers
- Rating agencies
- Market associations

Regulatory agencies

The Ministry of Strategy and Finance is responsible for policies involving medium- to long-term economic and social development, including taxation, finance, national treasury and state-owned properties. MOSF's responsibilities also include foreign exchange and debt and external economic cooperation.

The Korea Financial Investment Association (KOFIA) was formed as a result of the merger of Korea Securities Dealers Association, the Asset Management Association of Korea and the Korea Futures Association. KOFIA comprises securities companies, investment advisors and futures firms. It aims to strengthen the global competitiveness of the financial investment industry.

Korea Exchange is responsible for the operation of the stock market, KOSDAQ, and the futures market.

The Korea Securities Depository is the country's sole central securities depository.

The Bank of Korea (BOK) determines and monitors currency exchange controls and administers securities payments systems. BOK also manages the issuance and redemption of treasury and foreign exchange equalisation fund bonds.

The Korea National Tax Service oversees all taxation affairs.

Policy initiatives and reforms

- **Securities Class Action Suit Law:** The Securities Class Action Suit Law became effective on January 1, 2005. Under the law, class-action suits can be initiated for unfair trading involving the use of inside information and market manipulation. Companies can also be open to a class action for deliberate falsification of financial statements and disclosure violations.
- **Financial Supervisory Regulation Rationalisation Plan:** The Financial Supervisory Commission (FSC) announced in December 2003 a set of initiatives to streamline and rationalise the regulatory framework of the Financial Supervisory Service (FSS). The plan contains 123 initiatives that emphasise the deregulation of businesses, increase transparency in capital markets, bolster self-regulation and deregulate foreign financial service providers. Specifically, the initiatives were to:
 - Raise the ceiling on privately placed bond holdings for investment of trust funds, and repeal the ceiling on privately placed bond holdings for mutual funds
 - Expand the range of firms eligible to issue commercial papers and engage in asset securitisations as originators
 - Enhance the effectiveness of short-sale regulations by incorporating these into the Securities and Exchange Act
 - Enhance regulatory equity between domestic and foreign market participants, and address the concerns of foreign financial institutions

- **Financial Market Stabilisation Plan:** The Korea Securities and Futures Exchange Consolidation Bill was passed in January 2004. The Bill is the legal framework for the merger of the Korea Stock Exchange, Korea Futures Exchange, and the KOSDAQ Stock Market to establish an integrated and demutualised exchange. In January 2005, the Korea Exchange (KRX), was incorporated, a consolidation of the three spot and futures exchanges. The establishment of the KRX was part of the Financial Market Stabilisation Plan under Korea's Economic Policy Direction for 2004. Other policy reforms in the Plan include outlining the legal procedures and responsibilities for electronic financial transactions.
- **Foreign Exchange Liberalisation Plan:** On May 19, 2006, the government announced it was accelerating foreign exchange liberalisation to attract investment capital for new infrastructure, and to promote foreign exchange market development. The plan was completed in 2009. The first phase of the two-phase programme was in 2006-2007.

The plan aimed to:

- Internationalise the currency Won
- Liberalise foreign exchange transactions, including Korean overseas investments
- Accelerate development of the foreign exchange market
- **Consolidation of securities and capital market laws:** The Financial Investment Services and Capital Markets Act became effective on February 4, 2009. Major changes in this new legislation include:
 - *Financial services deregulation:* The removal of restrictions strictly separating securities, futures, asset management, trust services, and other financial services businesses (excluding banking) to integrate their financial services business
 - *Broadening the scope of financial investment products:* The meaning and scope of financial investments and products offered reversed from the previous system of enumerating what is allowed to a system, defining what is illegal
 - *Deregulation of indirect investment:* Those restrictions were removed, that recognised only trust investments (in the form of beneficiary certificates), corporate-type investment companies (mutual funds), and private equity funds as indirect investment vehicles. Thus, other entities recognised under the Commercial Code could be included as indirect investment vehicles

Vietnam

Vietnam first started issuing bonds in 2005. From 2006, issuing of convertible bonds also started. This progress was marked consistent with the introduction of electronic bidding system on government bonds in 2012 and started its operations at the Hanoi exchange. The efforts were backed by the government through an agenda to develop the bond market to an extent, to deepen the bond market to 38% of the GDP by 2020.

The journey hasn't been smooth though. Vietnam started with its bonds outstanding accounting for less than 1% of GDP at the start of 2000s. Currently, the percentage stands at 20%. As of June 2016, the bonds outstanding comprised government bonds (74%), government-guaranteed bonds (21%), central bank bonds (1%) and corporate bonds (4%).

The government is ramping up efforts to increase investments from insurance companies and pension funds in sovereign bonds. The corporate bond market in Vietnam is at an early stage of development. The number of

issues remained at 19 at end-June 2016, with most of them placed privately. The perception of Vietnam's bond market can be seen from the improvement in the ratings. Fitch upgraded Vietnam's credit rating from 'B+' to 'BB-'. Moody's also upgraded Vietnam's rating from 'B2' to 'B1'.

The government has decreased the issuance of bonds with shorter maturities. As a result, the share of government bonds by maturity was accounted for by 40% for 'less than three years', 10% for 'over three years to less than five years', 10% for 'over five years to less than 10 years', and 10% for 'longer than 10 years'. Compared with end-2013, the share of 'less than three years' decreased 30% while that of 'longer than 10 years' increased 10%. The average maturity of government bonds increased from 2.8 years at the end of 2013 to five years at the end of June 2016.

However, about 80% of bonds are still held by banks, which prefer government bonds with shorter maturities, and it is expected that the government's efforts to solicit the investors of insurance and pension funds to expand their share and thereby lengthening of government bond maturities will continue. Reports predict that the banks' share can decrease to around 50%, if all of the government's borrowing from the Vietnam Social Security is turned to bonds.

Unlike India, Vietnam does not have an independent professional rating agency and most of the rating work may be carried out by the foreign rating agencies. However, on account of high development of the bond markets, the government is taking initiatives to develop its own rating agency and improve the market infrastructure. Thus, Vietnam signifies a story of proper congruence of the regulator, government and corporates' efforts in the development of bond market.

Annexure 2 – Steps that can draw investors

There is significant potential to expand the number of investors and their contribution to bond markets. The key steps that can be taken to address this are:

- Investor awareness:** This is one of the most difficult areas to handle. Communicating the benefits and risks associated with investment in debt, through direct or indirect channels, requires sustained efforts from policymakers and market participants. Interestingly, debt products are easier to explain than equity as in most cases the return (coupon) can be stated upfront. This may, however, not apply to products offered through indirect channels such as mutual funds because they are marked to market. Absolute-return products can be an option to mitigate this issue. Simple and timely communication to investors on issues such as suitability of the product, impact of risks and return expectations would help investors relate to the product better.
- Development of new products:** It is equally important to develop new products that are likely to meet varied investor needs such as known investment horizon and assured returns. Structured products that incorporate these features can be an attractive option for investors. Fixed income ETFs can also be popularised as they have emerged as a preferred vehicle for investment globally. The US has observed close to 20% growth on CAGR basis in the assets of ETFs over the 10 years ended 2014. Fixed-income ETFs contribute close to 15% to the overall US ETF market of \$2 trillion (as reported by ICI Factbook 2015). ETFs have inherent advantages like low cost, tax efficient, higher transparency, high liquidity and low ticket size.
- Taxation:** This is a crucial influencer of investor decision. Compared with equity products, debt products are currently less tax-efficient. And within debt products, mutual funds and insurance plans are relatively more tax-efficient than direct investments. Tax incentives have, in the past, helped channel savings to financial assets such as insurance, retirement products, equity-linked savings schemes and infrastructure bonds. A tax sop also has a positive psychological impact as investors recognise it as a de facto product from the government.

Globally, tax sops have been a successful medium to incentivise transition of wealth to investment products. For instance, in the US, the introduction of pre-tax, defined-contribution 401(k) retirement plans in 1978 propelled growth in the mutual fund industry and, consequently, its capital markets. Chile, on the other hand, mandated its population to place its wealth with institutional investors; this has been credited with being instrumental to the country's corporate bond market development.

- Increase share of organised sector employment:** Increase in share of organised sector employment will help bring in a larger section of working population under the ambit of retirement products such as Employees Provident Fund and the National Pension System. Additionally, mandatory contribution to pension can be an option for consideration. Chile had mandated the population in 1980s to place their wealth with institutional investors. The said change is considered instrumental in countries corporate bond market development. The assets of Pension funds increased to almost 54% of GDP in 2000 as compared to negligible amount in 1980.
- Increase role of financial intermediation:** Intermediation is key to the success of financial products. Different segments of intermediaries spanning the organised sector, such as banks, national distributors, and unorganised agents/ advisors need to be appropriately incentivised to reach out to the large investor base.

- ***Increase contribution of foreign investors:*** In addition to the retail investor base, steps to increase the contribution of foreign investors can be continued. Mechanisms for foreign portfolio investors (FPI) to manage foreign exchange risk, encouraging their access to derivatives markets and enhancing usage of debt investments as collateral or such other use can be considered. Favourable tax laws, inclusion in key emerging market indices, strong laws and policy to settle disputes will also attract more FPI investments.

Annexure 3 – Sample term sheet

Security Name	Name of the bond which includes (Issuer Name, Coupon and maturity year) e.g. 8.70% XXX 2015.
Issuer	
Type of Instrument	Secured or Unsecured
Seniority	Senior or Subordinated.
Mode of Issue	Private placement/Public issue
Eligible Investors	
Listing (including name of stock Exchange(s) where it will be listed and timeline for listing)	
Rating of the Instrument	_by_Ltd.
Issue Size	
Option to retain oversubscription (Amount)	
Objects of the Issue	The proceeds of the proposed issue shall be clearly earmarked for a defined project or a set of projects; The project(s) shall be financially viable project(s), i.e., should be able to generate a stream of revenue which should be sufficient to finance Operational & Maintenance cost
Details of the utilization of the Proceeds	
Coupon Rate	
Taxable/Tax free	
Step Up/Step Down Coupon Rate	
Coupon Payment Frequency	
Coupon payment dates	Dates on which coupon will be paid
Coupon Type	Fixed, floating or other coupon structure
Coupon Reset Process (including rates, spread, effective date, interest rate cap and floor etc).	
Day Count Basis	Actual/ Actual
Interest on Application Money	
Tenor	Months from the Deemed from the date of Allotment
Redemption Date	Dates on which Principal will be paid
Redemption Amount	
Redemption Premium /Discount	
Issue Price	The price at which bond is issued
Discount at which security is issued and the effective yield as a result of such discount.	
Put option Date	
Put option Price	
Call Option Date	
Call Option Price	
Put Notification Time	Timelines by which the investor need to intimate Issuer before exercising the put option.

Call Notification Time	Timelines by which the Issuer need to intimate investor before exercising the call option.
Face Value	
Minimum Application and in multiples of _Debt Securities thereafter	
Issue Timing Issue Opening Date Issue Closing date Pay-in Date Deemed Date of Allotment	
Issuance mode of the Instrument	Rs. 10 lakh per instrument for Demat only (for private placement)
Trading mode of the Instrument	Demat only (for private placement)
Settlement mode of the Instrument	
Depository	
Business Day Convention	
Record Date	15 days prior to each Coupon Payment date / Redemption date.
Security (where applicable) (Including description, type of security, type of charge, likely date of creation of security, minimum security cover, revaluation, replacement of security).	
Transaction Documents	
Conditions Precedent to Disbursement	
Condition Subsequent to Disbursement	
Events of Default	
Provisions related to Cross Default Clause	
Role and Responsibilities of Debenture Trustee	
Governing Law and Jurisdiction	

Notes:

Any change in Coupon Rate, along with events which lead to the change if there is any change in Coupon Rate pursuant to any event including elapse of certain time period or downgrade in rating, then such new Coupon Rate and events which lead to such change should be disclosed

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