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National E-Summit on Corporate Bond Market

Positive Response of Corporate Bond Market to the Recent Challenges

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Overview

Globally, the bond markets are regarded as the largest and deepest source of capital for companies. In India, the real sector consisting of NBFCs has a very small dependence on bonds, thereby making it heavily reliant on bank and shadow bank credit. The policy direction of taking India to a USD 5 trillion economy by 2024-25 will need a substantial part of corporate resources to come from the bond market.

There have been several committees and reports pertaining to bond markets in India in the past, such as HR Khan Committee report, 2016 and SEBI standing committee – Corporate Bonds and Securitisation Advisory Committee (COBOSAC).

According to RBI data, corporate bond issuances between March and June touched a record INR 2,46,700 crore. Of this, corporates – all types of companies barring NBFCs, HFCs and financial institutions – alone raised INR 1,11,787 crore or over 45% of the total issuances. NBFCs raised INR 78,964 crore or 32%. Much of this increased activity is also due to RBI's robust liquidity enhancement measures, which include providing liquidity for targeted instruments. This even allowed for secondary market trading in and primary market issuance of lower rated instruments from smaller NBFCs and MFIs. Secondary market trading in the corporate bond market during March-May averaged around INR 2 lakh crore every month, a level not seen since 2008.

India's corporate bond market's penetration, or outstanding corporate bonds as a percentage of GDP, is abysmally low, at around 17%, compared to USA and many of its emerging market peers, like Brazil and Turkey.

Countries	Corporate bonds to GDP ratio (%)
US	123.47
China	18.86
Japan	14.57
South Korea	74.3
Singapore	34.02
Malaysia	44.5
India	17.16
Brazil	99.05
Turkey	142.06

The three features that distinguish Indian market from the world are

- predominance of financial sector
- predominance of private placement market
- very significant share of mutual funds and insurance companies as bond investors

The corporate bond market turnover rate in India of 59.86% is much better than several of its global peers like South Korea (42.38%), Malaysia (15.04%), China (11.52%), but is behind USA (68.56%). However, non-standard market practices, continue to haunt the investors in the secondary corporate bond market.

The corporate bond issuances in India during FY 2019 stood at USD 92.43 billion as against USD 86.30 billion in FY 2018, reporting a growth of 7.1%.

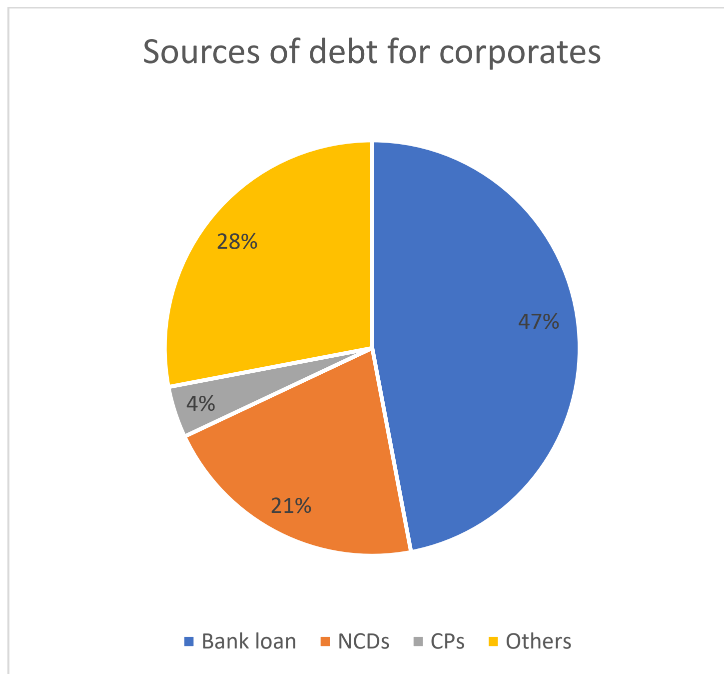
Over the decade from FY 2009 to FY 2019, the bond market issuances grew at a CAGR of 13.98%.

The domestic corporate bond market has done fairly well, fueled by higher demand as a larger share of financial savings get channeled into the capital market and favourable supply conditions have emerged because of mounting pressure of NPAs at banks.

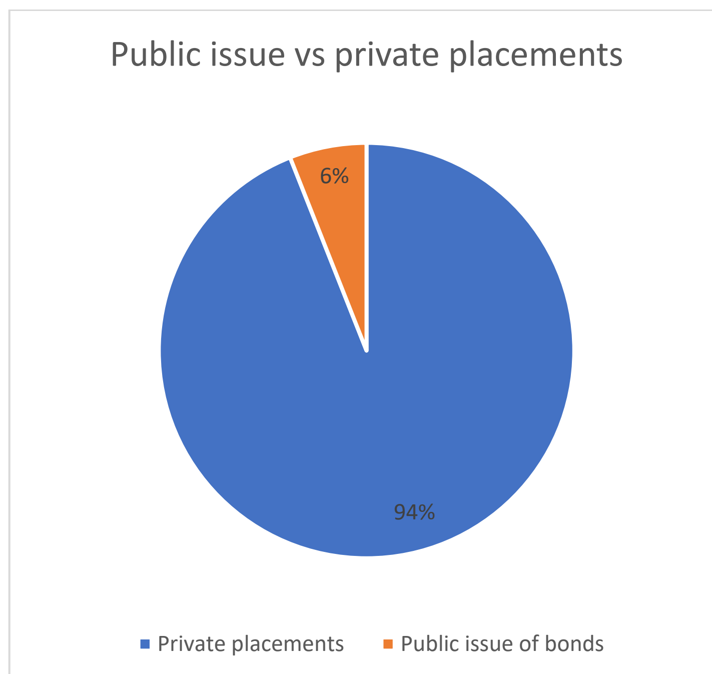
Successful implementation of the Insolvency and Bankruptcy Code (IBC), the RBI's large borrower framework for enhancing credit supply, the SEBI's bond market push for large borrowers and increasing acceptability of innovation and complexity by investors should lead to more diverse issuers, which would engender a deeper market.

If India is to see rapid economic growth over the long term, which is an absolute social necessity, the corporate bond market will have to play a pivotal role as a funding source.

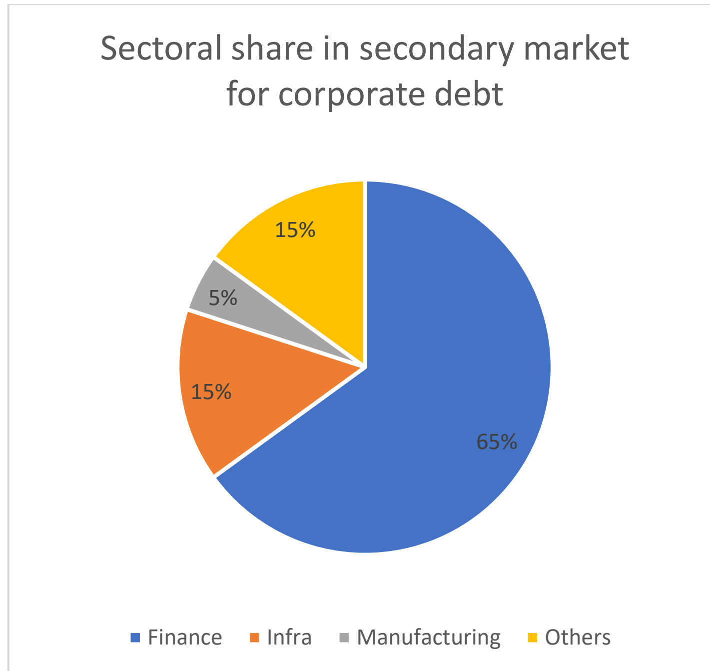
Corporate Bond Market – Snapshot



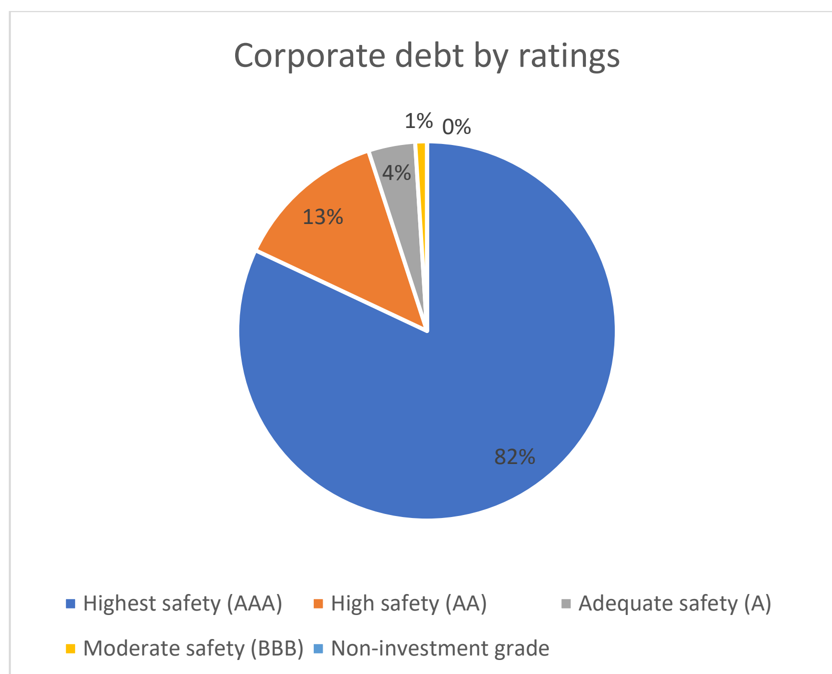
Heavy dependency on bank borrowing



Private placements preferred



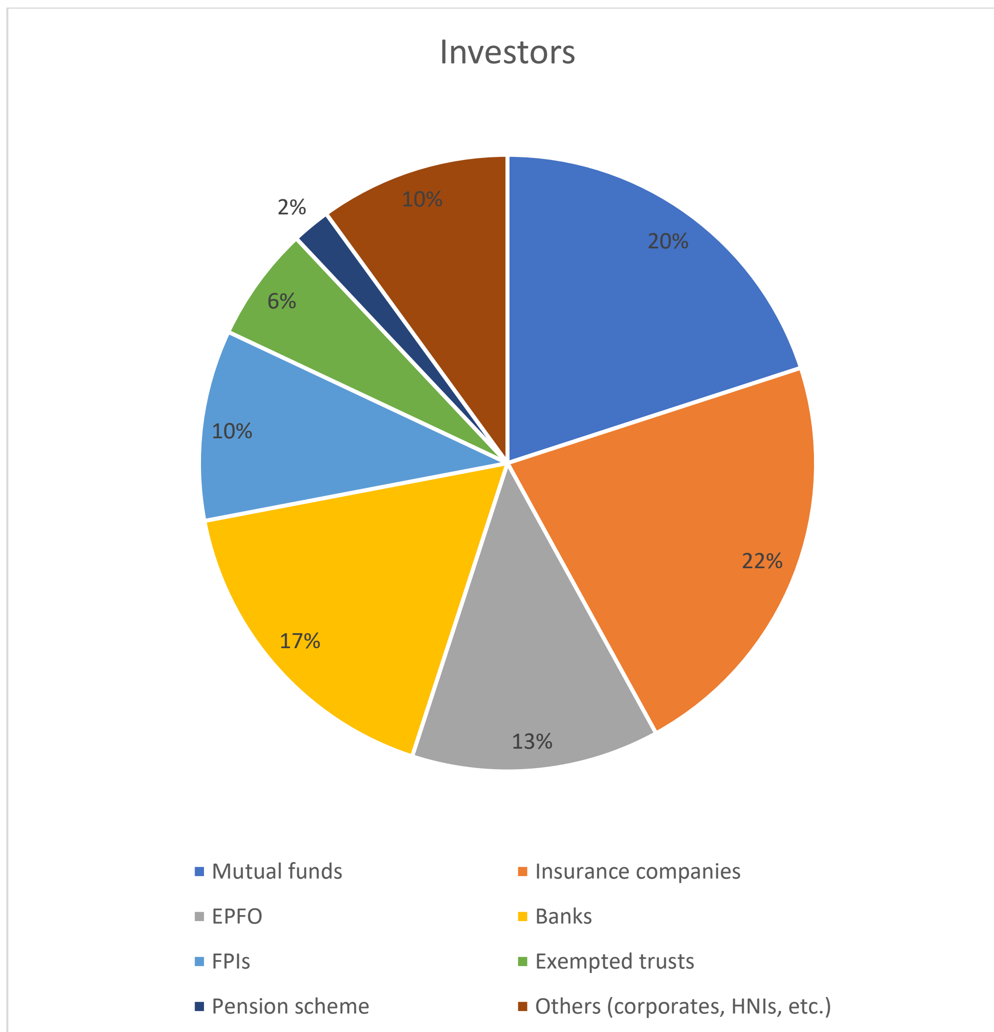
Financial services sector enjoys major share



Dominance of high rated bonds

Investor classes in the Indian corporate bond market

Currently, the Indian market has a dearth of investors. Most significant classes of investors are the insurance companies and mutual funds, representing approximately 42% of the total investments. Banks are the next best class of investors, in terms of share, with approximately 17%. Besides them, the approximate share of NPS schemes and EPF is 15%. FPIs and other categories of investors sum up the remaining part of the pie with 26%.



Bankruptcy reforms boosting investor confidence

Bankruptcy reforms have led to material growth in corporate bond markets in many countries. Effective implementation of the IBC in India can lead to more investors gravitating towards lower rated bonds. IBC is speeding up bad loan resolutions.

Corporate bonds to GDP ratio nearly doubles 5 years after bankruptcy reforms

Country	Year of bankruptcy reforms	5-year average corporate bonds to GDP ratio (%)	
		Pre-reforms	Post-reforms
UK	2002	68.4	106.8
Brazil	2005	12.7	26.3
China	2007	18.8	33.4
Russia	2009	8.1	13.1
India	2016	13.4	Effect to be seen

The advent of IBC has been opportune, given that the recovery channels prior to it failed to realise their potential. Much of NPAs have already been referred to the NCLT. The timelines and recovery of these assets will determine investor confidence and risk appetite for papers below AA category.

Creating a Vibrant Economy in India

The two important pillars of financial sector are bond market and equity market. Corporates rely on various sources of financing and funds are raised either in the form of debt or equity or hybrid instruments. Although, banks and equity markets are the dominant sources of financing and has experienced tremendous growth in past few decades, a well-developed and active corporate bond market provides an alternative source of finance for the long term needs of the public and private sector firms. Development of a vibrant market for long-term debt is crucial for meeting the financing requirements of private business, and especially so in the context of the physical infrastructure needs of a rapidly modernizing economy. However, despite various initiatives taken in the past, the growth of the corporate bond market in India still remains far from satisfactory.

Also, in order to enable these corporates to avoid balance sheet mismatches and foreign currency exposures, a need of local currency bond market arises. It could also provide institutional investors such as insurance companies and pension funds with quality long term financial assets, helping them in matching their assets and liabilities and diversification of risks. Bonds are less risky than equity and therefore it is expected to get priority over equity market, at least for the risk-averse investors. Therefore, the less risky debt market is anticipated to be developed before the development takes place in the equity market. But, in India, equity market has developed significantly, and the corporate debt market is still at the nascent stage, however, it has shown growth over past few years which can be seen from the below table:

Year/Month	BSE		NSE	
	No. of trades	Traded value (INR Crores)	No. of trades	Traded value (INR Crores)
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
2015-16	16900	207652	53223	814756
2016-17	24372	292154	64123	1178509
2017-18	29198	475998	62205	1322100
2018-19	41687	593626	63463	1242315
2019-20	53494	705787	74463	1359020
Apr 20 – Aug 20	27420	341227	30734	622195

Table 1: Trading in the Corporate Debt Market (Source: SEBI)

Reasons Behind Inadequate Growth of Bond Market in India

It is very important for the growth of an economy to address the factors causing insufficient growth of bond market.

Unpopularity of Debt Financing among the Corporates

Significant supply and demand are prerequisite for efficient bond market. Sufficient supply can be ensured by enhancing issuer base. Unlike corporates in developed economies who prefer to bond market for their financing needs, corporates in India prefer banks. Inefficient market might be the primary reason behind this.

Convenience of Banks to Provide Loans to Corporates

In general, bond financing is expected to be easier to obtain than financing from banks. However, Indian banks generally find it convenient to give loans to corporates instead of investing in their bonds. The provisioning norms in respect for loans are easier to adopt than adopting the mark-to-market norms in case of investment in corporate bonds. Similarly, the corporates also prefer to go for bank loans than raising funds from the bond market.

Popularity of Private Placements

Private placements in India are popular and dominated by Financial institutions, PSUs and banks. This route is popular because of its operational flexibility and ease, which significantly affect the growth of bond market.

Insufficient Supply & Lack of Variety

Corporate bonds are usually rated before they come to the market (whether the bond is publicly issued or privately placed). The liquidity in the market for corporate bonds is skewed towards higher investment grade bonds, and there is practically no volume in lower grades. Investors in India are restricted to invest in any sub-investment grade corporates, due to these restrictions' availability of bonds in the Indian market is very less as compared to other developed markets. Any issuer trying to raise debt in the market with an issue that has rating of non-investment grade faces problem. The lack of liquidity has been a big challenge for the new entrants in raising funds. All these have created a vicious circle in the development of the corporate bond market.

Insufficient Demand in Domestic Market and Restriction for Foreign Investors

Foreign Institutional Investors (FIIs) invests in equities as well as debts in emerging markets. Therefore, they help in growth of those segments provided the markets are efficient.

Presence of FIIs in any segment of the financial market of an economy makes a significant difference for the growth of that segment. Although India's equity market is top ranked and FIIs invest heavily in the segment, bond market is not one of their favorites for investments.

Lack of Committed Market Makers

Market makers like Primary dealers (PDs) play a significant role in developing the market at nascent stage. They can provide required support and exit options to the investors. In

Government securities market, banks and PDs play a big role as market maker with reasonable success. However, holding high amount of stock of corporate bond is extremely risky; hence there is a need for high incentive to the party whichever is designated to do this role. It may be added that only in January 2013, SEBI has approved merchant bankers, issuers through brokers or any other entity to act as market maker. But without any incentive for them, it is doubtful whether this initiative would succeed.

Illiquidity in Govt. Debt Market

Government debt market in India is quite big in case of primary segment, however, the secondary market for the public debt issues in India is very thin. This has made the secondary Govt. debt market very illiquid.

Apart from the above discussed factors, Improper Pricing, Clearing and Settlement System, risk averting investors and lack of hedging instrument, stringent norms and higher transaction cost (Stamp Duty) are also reasons behind insufficient growth of the bond market.

The Need for Growing Bond Market

There are various types of bonds in the Indian market such as Government bonds which are issued directly by the government of India, the so called G-Sec, Borrowing by state governments, Tax free bonds which are issued directly by quasi-sovereign companies allow market expansion for investors, Corporate bonds, Banks and other financial institutions bonds, Tax-savings bonds which are issued directly by the government of India, they provide investors with tax rebates, in addition the normal rate of interest, Tax-saving infrastructure bonds which are issued directly by infrastructure companies approved by the government, they offer tax rebates along with a decent rate of interest.

Corporate debt to GDP ratio in India stood at a just 17 per cent in June 2017 as compared to 123 per cent in the US and 19 per cent in the case of China. This reflects a complex interplay of a host of demand and supply side factors overtime. First, investors' base is narrow. The demand for corporate bond as an investment is mostly confined to institutional investors with retail investors accounting for only 3 per cent of the outstanding issuances. Even among institutional investors including the buy and hold category, demand for corporate bonds is constrained by prudential norms for investment for the insurance companies and mutual funds. During 2016-17, the Central and State Government securities constituted almost half of the total investment of the life insurance companies and 36 per cent of the investment by the general, health and re-insurance companies. In contrast, investment in other securities constituted less than 5 per cent of total investment of these companies (IRDAI, 2016-17). Foreign investors, who could have played a critical role in broadening and deepening the corporate debt market in India were constrained by investment limits. In recent years, however, the investment limit for FPIs in the corporate bond has been enhanced along with a reduction in the withholding tax though FIIs are not fully utilizing the enhanced limits due to limited liquidity in the market. Further, banks prefer loans to bonds, as loans can be carried to their balance sheets without being marked to market.

On the supply side, the large corporates can raise debt from the overseas markets, the cost of which, even after adjusting for hedging cost, tends to be lower than the cost of borrowing through the domestic market-based sources.

The need for well-developed corporate bond market can be explained from the viewpoint of investors, borrowers, and also of the whole economy. Investors in corporate bond consists of Institutional investors (Domestic and Foreign), and Retail investors (Domestic and Foreign). On the other hand, borrower or the bond issuer would be the corporate bodies expected to get their projects financed. At the end, the growth of an economy, depends on the developments of each segment of its financial sector in general, and of corporate bond market in particular.

Financial needs: Corporate bond market can serve financial needs and help bring significant economic benefits and minimizes cost of intermediation between issuers and investors. It promotes diversification in allocation of funds in the economy to the most productive uses. It also eases the pressure from public funding by growing private sector. Regular and fair access to the bond market for the corporates would boost economic growth. As the corporates grows, it will create a strong foundation for employment which in turn would contribute to the enlargement of middle class and help reduce the wealth gap.

Advantages to companies

Stable funding at low cost: Companies get secure and stable funding for their growth and value creation. The cost of funding from the bond market is lesser than equity and bank loans. This will improve efficiency of use of capital, maximizing 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. Therefore, bond market eases stress from banks to lend to big corporates for a longer tenor. It will also offer flexible funding for businesses needs and development. Also, bonds have fixed term which is determined by the corporates and hence enables them to match 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. 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 mechanism for SMEs to grow into international markets.

Transparency in governance: To raise funds in the bond market, information demanded by investors encourages corporates 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 rate than bank loans at least for a less credit worthy borrowers. At the same time, this cost effectiveness between loan and bond route is meaningful only when the corporate bond market is well developed with complete standardization.

Foreign exchange risk: Corporates which are raising funds offshore and dealing in foreign currency, become vulnerable to abrupt changes in offshore interest rates. The volatility in currency market and devaluation of Indian rupee squeezes corporates' profits. Lowering the level of borrowing from foreign markets would insulate domestic market from currency and liquidity volatility. Bond market would block a channel through which external shocks can be passed to the domestic market. Integrated regional market for local currency bonds can address the issue of critical mass in local debt market.

Advantages to investors

Secure and predictable cash flows: Corporate bonds provide investors a stable and secure form of investment with regular income. Bonds offers potentially higher returns than banks, predictable investment income and assist in efficient investment of savings. Investors would prefer to invest in debt market than equity market because of more committed periodic payments in case of debt 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 tenor, 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 tenor in nature, it is 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 current scenario when banks are under severe pressure of stressed assets, inadequate capital requirements to comply with Basel III norms and hence have tightened their lending, the developed bond market comes to the rescue of an economy and acts as a cornerstone for keeping the economy going, by providing an alternative of 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 the purpose of bringing investors and borrowers together and maximize the benefits for both and achieve greater economic goals. Easing investment restrictions would help broaden investor base which could ultimately function as a shock absorber.

Infrastructure Financing: The government plans for massive infrastructural developments which play a significant role in the growth of an economy are long term in nature, have huge investments and involve several risks. Therefore, as discussed earlier, it is very difficult for banks to finance such projects. But the growth in infrastructure is essential to keep the pace in growth of an economy. Therefore, it is very important also for an economy to have a well-developed corporate bond market, in order to maintain a reasonable growth.

Above all, there is a strong need for a well-developed corporate bond market for the growth of an economy. The growth of an economy depends on the development of its real and financial sector, which are interlinked. Cheaper and easier financing to the corporate will lead to the increase in efficiency in production and output and in turn will lead the economy as well to achieve significant growth.

Next generation reforms to grow Indian Corporate bond market

While significant progress was made in the field of equity markets, other segments of financial markets are weak. The bond and currency markets are characterized by illiquidity and inefficiency. The COVID-19 crisis is an urgent reminder that India is at a turning point: it needs to take decisive reform steps to get the economy back on a stronger growth track. Even before the onset of the pandemic, India's growth had been slowing down due to structural issues; the COVID-19 crisis has put a chill on GDP globally as well as in India.

The good news is that there is no dearth of opportunity. There are some opportunities available in the post-pandemic era and India might be able to achieve them. The three potential growth boosters, that have the potential to generate USD 2.5 trillion of economic value and 30% of the nonfarm jobs in 2030, are a stepped-up global role in both manufacturing and services, an efficient and competitive foundation for economic growth, and new ways of living and working that create value.

India's firms would play a critical role in achieving these goals. Thousands of midsized, dynamic companies that could grow to become large and several small companies that could become midsized and therefore increase in GDP. To enable these opportunities, the central and state governments would need to adopt a pro-growth reform agenda in product markets of critical sectors like manufacturing and construction, agriculture, retail, and others, and in factor markets like capital, labour, land, and power.

To ensure availability of sufficient capital, financial reforms will also be needed; the estimate of the total requirement in 2030 is at about USD 2.4 trillion, with small and midsize companies alone needing access to more than USD 800 billion. Achieving these goals will not be possible without well-developed bond market.

The lack of a long-term corporate bond market hampers the ability of firms to finance large scale infrastructure projects. Corporate bond market in India is characterized by a shallow investor base. The demand for corporate bond as an investment option is mainly confined to institutional investors. Even among institutional investors, the demand is constrained by

prudential norms. Foreign investors who could have played a role in deepening the bond market are constrained by investment limits.

A key weakness of the present financial system is the lack of a well-developed Bond Currency-Derivatives nexus. The Bond-Currency-Derivatives (BCD) Nexus is the interlinked set of markets on government bonds, corporate bonds, and currencies. The domestic bond markets are linked to the global markets through currency spot and derivatives market. When a foreign investor buys a rupee-denominated bond, she would need a currency derivatives market to hedge the foreign currency exposure. There may be interest rate derivatives also at play, as the foreign investor may not like to take the risk that interest rates will go up. In India, from a regulatory standpoint, each of these markets are treated separately. Expert committees have highlighted the deficiencies in the present set-up and made out a case for linking the bond-currency-derivatives markets and for these markets to be linked to other financial markets such as the equity markets.

It is well recognized in economic literature that efficient and developed financial markets can lead to increased economic growth by improving the efficiency of allocation and utilization of savings in the economy. Better functioning financial systems ease the external financing constraints that impede firm and industrial expansion. There is a strong and positive link between the functioning of the financial system and long-run economic growth. Specifically, financial systems facilitate the trading, hedging, diversifying, and pooling of risk. In addition, they better allocate resources, monitor managers and exert corporate control, mobilize savings, and facilitate the exchange of goods and services.

India's high growth can be sustained by improving infrastructure and expanding the manufacturing base, and a developed corporate bond market can make both the tasks easier.

In India, while the banks still command a sizable presence in the economy, corporate sector is taking recourse to the overseas markets for raising equity, debt and loans. An underdeveloped corporate bond market can abet this trend, thereby increasing the external sector vulnerability. Fortunately, the presence of a big private sector, deregulated interest rates, well developed government securities market, highly developed clearing and settlement system, credible rating agencies, and supporting regulatory structure bode well for the development of the corporate bond market in India.

Corporate bond enhances the risk pooling and risk sharing opportunities for investors and borrowers. Co-existence of domestic bond market and banking system can help economy and provide an alternative for the other. The capital flows to the country through External Commercial Borrowings (ECBs), while helping the country fund the current account deficits and corporate raise resources at a lower cost, could also become a source of transmission of severe external shocks to the domestic economy. Therefore, need of strong and well-functioning corporate bond market arises.

There is a need to make structural reforms in the areas of bankruptcy codes, legal contract enforcement, corporate governance and investor protection for the development of corporate bond market in India. Transparency and efficient price discovery process play prime role in the development of corporate bond market. Additionally, the quality of available

information on defaults on corporate bond market has actually worsened in recent years and calls for strengthening the creditors' rights for the development of India's corporate bond market.

Indian corporate bond market also sees high number of issues every year. In one single year, there were more than two thousand primary issues, indicating the arrival of more than two thousand new corporate bonds in the market. This huge number makes it very difficult for any corporate bond to remain liquid. The solution to this problem lies in promoting reissuance of the same bonds. However, bunching of issues can create large liability on a particular redemption date, thereby creating asset-liability mapping problems for the corporate. To avoid this situation, back-to-back underwriting arrangement can be made available for ensuring that the large redemptions do not create problems. It is also being argued to involve PSUs and large corporates with significant amount of outstanding bonds in devising a suitable scheme of consolidation of their issues.

In corporate bond market in India, the debenture trustees (DTs) are not very effective. DTs only come to the picture at the time of issuance of bonds to ensure that the property charged with the bonds is available and adequate, free from encumbrance; then again at the time of maturity when the property becomes free. The creation of the pool of assets charged with the bonds is not fast in India. The role of DTs can be enhanced by giving them the power of enforcement of contracts. Similarly, they can be made to do investor compliance by disclosing the details of the changing financial conditions of the issuer to the investors. SEBI has recently asked the credit rating agencies (CRAs) to share with the DTs all relevant information about the ratings assigned by them for debt securities and about the issuers of such instruments. With this, a two-way information sharing arrangement between the CRAs and DTs has been put in place. CRAs are now required to inform the DTs if companies issuing debentures do not share information for monitoring of credit quality. DTs are also expected to provide information to CRAs on whether the assets backing the bonds are free of encumbrance and adequate to cover the liability.

There was absence of order-matching platform for corporate bonds, like the NDS-OM platform in G-sec market. The platforms available in the exchanges were just being used for reporting of OTC trades in the secondary market. The creation of a new platform that meets the changed expectation of the market participants was felt. The new platform bringing additional liquidity is not certain, but it is likely to generate positive externalities like any other infrastructure and help in making the secondary market of corporate bonds more transparent and robust. Subsequently, all these may bring in liquidity. Generally, participation of institutional players generates liquidity. In January 2013, SEBI permitted the exchanges for setting up of two separate debt segment platforms, one for institutional players and the other for retail investors; which would offer screen based trading with facilities of order matching, request for quote and negotiated trade.

The presence of credit enhancements mechanism can promote the primary issuance of corporate bonds. Credit enhancements mechanism assumes that borrower will honor the obligation by inclusion of third-party guarantee and additional collateral. This mechanism enhances credit rating and lowers the interest rates on the debt. This is a new concept in

Indian corporate bond market. However, it may be added that credit enhancement by banks in any form is not in the best interest of the economy, as it will transfer the risks to the balance sheet of banks. The ultimate objective of reduction of risk in the banks' balance sheet by developing the corporate bond market will not be met. Incidentally, some financial institutions have shown interest in doing credit enhancement recently. The recent hike in investment limit in credit enhanced bond for FIIs is a step in the right direction.

In India, development banks were gradually converted into universal banks, based on the recommendations of the Report of the Working Group on the Development Financial Institutions (DFIs) (RBI 2004). In this milieu, developing the corporate bond market assumes crucial importance for India, especially in the context of channeling funding to long term infrastructure, the requirement of which has been estimated at around USD 4.5 trillion with cumulative infrastructure investment gap of USD 526 billion till 2040 (Economic Survey 2017-18).

The growth of the private corporate sector's resource mobilization through the debt market has largely tracked growth of bank credit to industry. This is possibly due to the fact that more than 80 per cent of the total credit issued by banks to the industrial sector are to large firms, which also raise resources from the debt market.

The mutual funds (MF) industry has played an important role in the development of corporate bond market in India by catalyzing innovation, price discovery, liquidity and transparent bond valuation. Further, MFs have also played a crucial role in promoting secondary market trading of corporate bond since all other categories of investors generally hold the bonds till maturity. Assets under management (AUM) of short term debt funds, which are the largest investors in the corporate debt segment, have increased at a rapid pace with corporate bonds and CPs accounting for close to 77 per cent of total funds deployed. Investment in government securities (G-secs) accounted for only 6 per cent of their total funds by contrast.

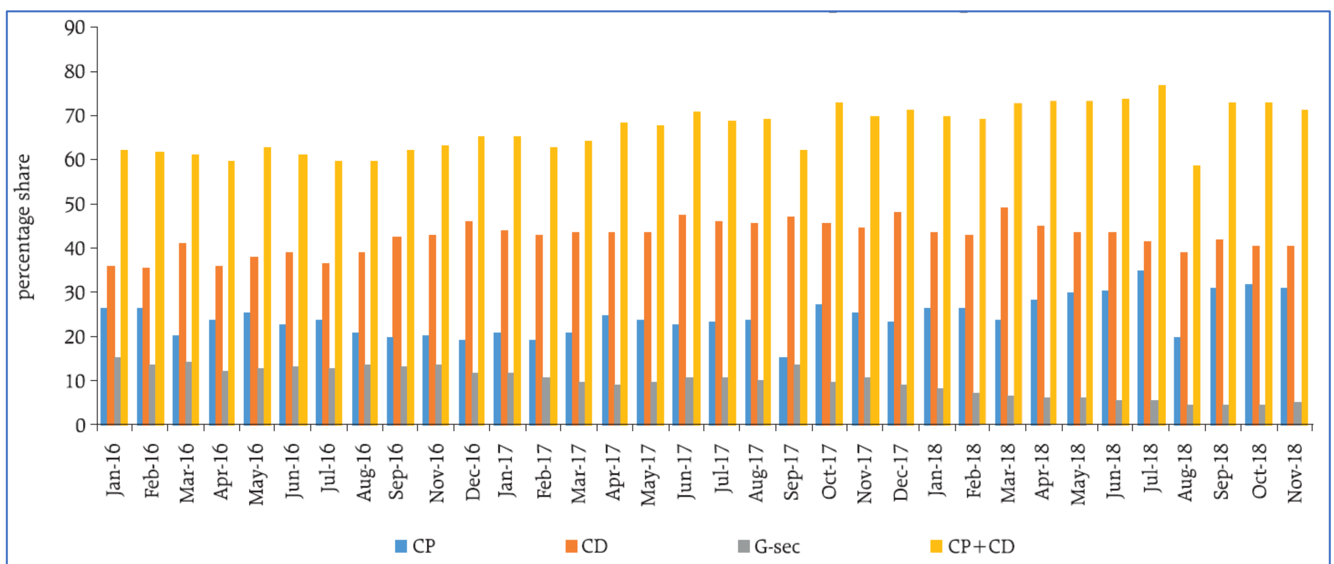


Table 2: Debt mutual funds' investment in Commercial paper and Corporate debt (Source: SEBI)

To structurally bridge the demand-supply gap, we need a big step-up in investor awareness, better coordination across the ecosystem, continuation of regulatory reforms, and introduction of new instruments and hedging mechanisms.

The development of corporate bond market has been a priority in the policy hierarchy for the last few years. As part of reforms for the financial markets, especially the bond market, the government has proposed increasing the investment limit for FPIs in corporate bonds, opening certain government securities for non-resident investors and launching a new debt exchange traded fund (ETF) comprising primarily of government securities. The government also proposed that the limit for FPIs' purchases of corporate bonds, currently capped at 9% of outstanding stock, would be increased to 15% of the outstanding stock.

The government proposed to float a new debt ETF consisting primarily of government securities. The Bharat Bond ETF, introduced in December, raised more than INR 12,000 crore, against its issue size of INR 7,000 crore. Bharat Bond ETF invests in AAA rated bonds issued by public sector companies. In addition, the government also proposed opening specified categories of government debt securities for non-resident investors.

Post Pandemic Likely Scenario

Covid-19 had an immediate impact on businesses from all the sectors. The primary reason was the lockdown which was imposed by several countries to control the spread of virus. Some of the businesses have thrived, but the majority have been adversely affected. While the damage caused by the pandemic isn't confined to select pockets of businesses, it's clear that some have suffered the most and continue to suffer – with aviation, retail, hospitality, financial services, real estate and automotive some of the hardest hit.

On the other hand, some sectors like technology, healthcare and pharmaceuticals have flourished. It is difficult to quantify precisely how much global capital markets will be affected by the pandemic. Structured finance and capital markets encompass a variety of asset types that have been directly affected by the outbreak.

The RBI's loan moratorium policy which allowed borrowers to not pay EMI for few months provided relief to retail borrowers as the nationwide lockdown severely impacted the income generation capability of large number of borrowers. This made the investors vary of investing in fresh securitization transactions given the possible deterioration in the loan repaying capability of retail borrowers.

According to the investment information firm ICRA, the securitization volumes declined substantially in Q1 FY21 to INR 7,500 crore from INR 50,300 crore in Q1 FY20. It is primarily due to disruptions caused by the Covid-19 pandemic. Further, the funding requirements for non-banking finance companies and housing finance companies also declined during this quarter due to lower demand from the borrowers and the increased focus on collections rather than disbursements. However, securitization volumes saw increased in the month of June.

The overall supply of corporate bonds, which was around INR 27.4 trillion at the end of 2017-18, could double to INR 55-60 trillion by the end of 2022-23. The growth would mainly be driven by higher capital expenditure funding requirements for infrastructure projects, issuances by non-banking financial companies (NBFCs) and housing finance companies (HFCs), and a regulatory push for large companies to raise incremental funds from the bond market.

For the infrastructure sector, it is estimated that the sector would need INR 55.2 trillion in capex funding over the next five years. This includes roads, power (generation, transmission and distribution), railways, irrigation, and urban infrastructure. To fund this capex requirement, around 30 per cent of the requirement could be raised from the bond market, as issuances from the sector are expected to rise by INR 8-9 trillion by 2022-23.

Non-infrastructure companies in steel, cement, oil and gas upstream and auto segments would require around INR 10 trillion in capex funding, and it is estimated that such companies would add over INR 2.5-3.5 trillion in additional issuances over the next five years.

NBFCs and HFCs could require additional capital of INR 30-33 trillion over the next five years to continue meeting their capital requirements and sustaining their present high growth model. Around INR 13-15 trillion will be raised by NBFCs/HFCs in the next five years from the corporate bond market.

However, without adequate reforms, regulatory push, government initiatives and an expansion of the debt market to introduce new instruments like credit default swaps (CDS), there is likely to be a demand gap of INR 3-4 trillion, says a report by CRISIL. The demand for corporate banks will rise to over INR 53 trillion, primarily led by investments from retirement funds, insurance companies, mutual funds, foreign portfolio investors and others, and banks.

From constituting 16 per cent of GDP as of today, the substantial growth expected over the next five years would increase the corporate bond market’s contribution to 20 per cent of GDP by 2022-23.

As and when the situation improves and economic normalcy returns, there would be surge in demand from retail borrowers for vehicle financing, home loans, business loan, etc. One of the options for financial institutions to fulfill such increase in demand is to raise funds through long term bonds. Therefore, it is expected that corporate bond market will again see momentum post pandemic.

Legal and Regulatory Framework

For issuances of corporate bonds

Major legal and regulatory hurdles

The regulators governing the regulatory framework on issuance are multiple.

The basic norms for issuance of NCDs on private placements by a financial entity, have apparently become very stringent.

- The investors in bonds have to be pre-identified.
- The money raised by subscription cannot be used until return of allotment has been filed.
- Issue of short-term debentures, up to a duration of 12 months, is subject to specific directions of the RBI in terms of Section 45W of the RBI Act.

Since bonds are mostly secured, there are rules about security creation, both under the Companies Act 2013 and under SEBI ILDS Regulations.

For debenture trustees, while the Companies Act 2013 requires the same in limited instances, ILDS Regulations seem to require trustees in case of every listed issue.

For investment in corporate bonds

Major classes of investors

The regulatory framework from an investor’s point of view is specific to the type of investor and mainly applies to investments in general and not specifically targeted at investment in bonds. Guidelines in respect of investments by NBFCs are also generic and not specific to investment in bonds. In light of the growing interest of foreign investors to invest in bonds in India, several FPIs have been registered with SEBI. Mutual funds are an important investment vehicle in India. Banks’ investments in bonds more often may be a case of a credit substitute. The employee benefit funds are also heavily regulated, with specific guidelines on investments by provident funds and pension funds.

India has witnessed substantial investment by insurance companies as well. However, these are mainly focused towards AT1 and AAA corporate papers.

In respect of trusts, they may make investments as per the relevant trust deed. However, the provisions of the Trust Act come into picture in case the trust deed does not specify the modes of investment.

Investments by foreign venture capital investors are guided by the FVCI Regulations. Alternate investment funds have general and specific investment conditions laid down in the AIF Regulations.

Major issues w.r.t. investments in corporate bonds

The present state of the bond market in India is that of confusion mixed with concerns. The concerns are largely the credit issues due to some major defaults in financial and non-financial sector and generally depressed scenario of capital formation. Consequently, there has not been much of incremental investments in the real sector. From a regulatory front, there is substantial risk aversion as there have been probes and supervisory queries where mutual funds or other institutional investors had invested in debt that suffered a substantial rating downgrade.

These concerns may be temporal and may get resolved as things turn back to normal. However, this occasion may be used to carry out overhauls in the regulatory regime.

In addition, there is a need to create risk mitigation institutions and instruments and increase the liquidity in the system.

Recent recommendations by the SEBI on corporate bonds and their current status

HR Khan Committee Recommendations

Recommendations Proposed	Implementation Status
Issuers	
Reissuance • Issuers coming out with debt issues with the same tenor during a quarter may club them under the same umbrella ISIN. • Reissuances may not be treated as fresh issuances for stamp duty. • The corporate governance norms applicable to debt listed companies may be reviewed to make them less onerous.	Implemented
Standardisation of corporate bond issuance SEBI to reconsider the guidelines issued in October 2013 so as to clarify various issues with respect to day count convention	Implemented
Investors	
FPI investment in corporate bonds • Necessary amendments may be made in FEMA/SEBI regulations to allow investment by FPIs in unlisted debt securities and PTCs issued by securitisation SPVs/SPDEs • Amendments in both FEMA notification and SEBI guidelines to facilitate direct trading in corporate bonds by FPIs in the OTC segment and on an electronic platform of a recognised stock exchange, subject to certain safeguards, without involving brokers	Implemented

Infrastructure	
Electronic book for private placement of bonds	
The electronic book mechanism for private placement of debt securities, currently mandatory for issuances of over INR 500 crore, may be extended to all primary market issuances.	Implemented
Uniform valuation norms	
Regulated entities like banks, PDs, in addition to brokers, may be encouraged by the regulators to act as market makers in corporate bond market, subject to appropriate risk management framework.	Not Implemented
Credit rating agencies	
• CRAs be mandated to strictly adhere to the regulatory norms with regard to timely disclosure of defaults on the stock exchanges, own website and publish the credit rating transition matrix frequently.	Implemented
• Banks be encouraged to submit loan overdue information to CICs on a weekly basis to start with.	Not Implemented
Integrated trade repository	
As announced in the Union Budget 2016-17, a centralized database for corporate bonds, covering both primary and secondary market segments, may be established expeditiously in two phases, for secondary market trades by end August 2016 and for both primary and secondary market by end October 2016.	Not Implemented
Instruments	
Bond index Corporate bond index may be introduced	Implemented
Stamp duty **Rationalisation of stamp duty** The stamp duty on debentures should be made uniform across states and be linked to the tenor of securities within an overall cap. Re-issuance of the same security should be included for the purpose of the cap.	Implemented

Investor protection **Revamp Bankruptcy Act and SARFAESI Act** Issues such as early notification of the rules, development of insolvency professionals, tribunal/court infrastructure and information utilities and quick redressal of the transitional problems may be addressed with priority.	Implemented
Incentives **Credit enhancements of bonds** During the initial phase the upper limit for PCE by the banking system as a whole may be enhanced to a higher limit with no single bank having exposure of more than 20 per cent of the bond issue size by end August 2016.	Implemented
A separate regulatory framework may be formulated for providing credit enhancement of corporate bonds by NBFCs engaged in such activities. Necessary guidelines, in this regard, may be issued by end August 2016.	Implemented
Encouraging corporates to tap capital market Large corporates with borrowings from the banking system above a cut-off level may be required to tap the market for a portion of their working capital and term loan needs.	Implemented

Regulatory changes proposed by SEBI – Company Law Committee Report 2016

Recommendations Proposed	Implementation Status
The definition of a 'listed company' under Section 2(52) of the Companies Act 2013 should be amended to exclude certain classes of companies (including debt listed companies), listing such classes of securities, as may be prescribed by the Central Government in consultation with SEBI. If a private company lists debt securities such as non-convertible debentures, bonds, etc. on any recognised stock exchange after duly complying with the necessary formalities, such a company would fall under the definition of a 'listed company'. The Company Law Committee has suggested this change to relieve the debt listed companies from the stringent compliances that a Listed Company has to adhere to.	Yet to be Implemented
Definition of debentures to exclude instruments covered under Chapter III D of the RBI Act, 1934 in the term 'debenture' as defined in Section 2 (30) of the Companies Act, 2013. In addition, an exception may also be made for deposits accepted by banking companies, and flexibility be given to CG to carve out other instruments from the definition, as may be required.	Implemented
Since NCDs are pure borrowings and did not form part of equity capital, the proviso to Rule 14(2)(a) may be amended to prescribe that the relevant BR under Section 179(3)(c) would be adequate in case the offer under Section 42 is for debentures up to the borrowing limits permissible for Board under section 180(1)(c) of the Act.	Implemented

Changes proposed by SEBI in Board Meetings from April 1, 2017 onwards

Recommendations Proposed	Implementation Status
26/4/2017 Framework for consolidation and re-issuance of debt securities issued under the SEBI (Issue and Listing of Debt Securities) Regulations, 2008	Implemented
Amendments to the SEBI (Debenture Trustee) Regulations, 1993 for examining the 'Challenges in performing the obligations and duties as Debenture Trustees to protect the interests of the debenture holders'	Implemented
18/9/2018 Review the requirement of 1% security deposit for public issue of debt securities, NCRPS and SDI	Implemented
Framework for Enhanced Market Borrowings by Large Corporates pursuant to proposal by Government of India, in the Union Budget for 2018-19	Implemented
1/3/2019 To review the regulatory norms for Mutual Funds for valuation of money market and debt securities and to introduce guidelines for Mutual Funds on valuation of money market and debt securities which are rated below investment grade	Implemented
21/9/2019 To amend SEBI (Mutual Funds) Regulations, 1996, governing prudential norms for Mutual Fund schemes for investment in debt and money market instruments and valuation of money market and debt securities by Mutual Funds	Implemented
20/11/2019 Disclosures by listed entities of defaults on payment of interest/repayment of principal amount on loans from banks/financial institutions, debt securities, etc.	Implemented

Budget recommendations with respect to corporate bonds and their current status

Budget announcements and implementation

Budget Announcement	Implementation Status
2018 Corporate bonds rated 'BBB' or equivalent are investment grade. In India, most regulators permit bonds with the 'AA' rating only as eligible for investment. It is now time to move from 'AA' to 'A' grade ratings. The government and concerned regulators will take necessary action.	Implemented
2019 To deepen the Corporate tri-party repo market in Corporate Debt securities, Government will work with regulators RBI/SEBI to enable stock exchanges to allow AA rated bonds as collaterals.	Not Implemented

Global Scenario

Introduction

Corporate bond markets can be considered an important ingredient in economic growth, financial stability, and economic recovery, particularly in the wake of the crisis. They provide a key capital funding flow to firms allowing them to expand, innovate, offer employment, and provide the goods and services societies demand.

What are Corporate Bonds? Corporate bonds have been defined to include all bonds except those issued by national and local governments, and supranational organizations. Corporate bonds also include those which are issued by either financial and non-financial institutions. The corporate bond market is also broadly classified in to two parts:

a) Primary markets: Cash or capital is borrowed by issuers and lent by bond purchasers,
b) Secondary markets: Bonds are traded amongst market participants and investors.

Corporate bonds may be secured or unsecured and can be of various types such as vanilla, zero coupon, payment in kind, sukuk, CoCos and structured.

Primarily, corporate bonds are used to raise capital to invest in business activities, refinancing existing debt and balance portfolios. From an investor perspective, corporate bonds can be invested in individually, as a part of a bond fund or used to underpin structured products as way to diversify counterparty risk. Generally, direct investors in corporate bonds are institutions and both institutional and retail investors choose to invest through bond funds. An investor in bonds has the options to hold the instrument till maturity and receive yield payments or trade them on the secondary market.

A well-developed corporate bond market can be considered an important element in enduring financial stability and economic growth. The global corporate bond markets have almost tripled in size since 2000 and in terms of their importance to the real economy. This growth is not just restricted to the developed markets but also in the emerging markets, where there has been in significant growth and activity.

It is also important to note that the growth in this market has stabilized with onset of the crisis and there has been a general flattening owing to the deleveraging in the financial sector in the developed markets. However, in terms of the real economy the global corporate bond market continues to grow.

Key Highlights

- Despite the COVID-19-driven global recession deepening in the second quarter, global bond issuance soared to an all-time high, led by U.S. corporations.
- The economic recovery slated to begin in the third quarter of 2020 will likely be a long, slow process. Some central banks and governments have expanded their initial support, but it is unclear when more normal functioning of economic and financial relationships will resume.
- Based on these factors, we believe global bond issuance will increase by 6% in 2020.
- While issuance volumes so far in 2020 rose at a faster pace in both Greater China and Latin America than at the same point in 2019, recent evidence points to investors being more selective, which may ultimately curb issuance growth in the second half of this year.
- Extended growth in corporate bond borrowing. Since 2008, the annual global issuance of corporate bonds has averaged USD 1.8 trillion. This is double the annual average between 2000 and 2007. As a reaction to successive increases in interest rates, announcements of a less accommodative monetary policy and fears over slowing growth, corporate bond issuance declined significantly during the second half of 2018. However, when major central banks announced in early 2019 that they were ready to reintroduce or adjust their accommodative policies, the issuing of corporate bonds rebounded pushing the total amount issued in 2019 to the equivalent amount they borrowed in the previous record year 2016 at USD 2.1 trillion.
- Long-lasting decline in overall bond quality. In every year since 2010, around 20% of the total amount of all bond issues has been non-investment grade and in 2019 the portion reached 25%. This is the longest period since 1980 that the portion of non-investment grade issuance has remained so high, indicating that default rates in a future downturn are likely to be higher than in previous credit cycles. Importantly in 2019, the portion of BBB rated bonds – the lowest quality of bonds that enjoy investment grade status – accounted for 51% of all investment grade issuance. During the period 2000-2007, the portion was just 39%.
- Lower quality bonds now dominate. In December 2019, the global outstanding amount of non-financial corporate bonds reached USD 13.5 trillion. In real terms, this is more than twice the amount outstanding in December 2008. Large issuance of BBB rated bonds, non-investment grade bonds and bonds from emerging market corporations since 2008 has resulted in a situation where lower credit quality bonds have come to dominate the global outstanding stock. In 2019, only 30% of the global outstanding stock of non-financial corporate bonds were rated A or above and issued by companies from advanced economies. In addition, for emerging market issuers and non-investment grade and unrated bonds issued by companies from advanced markets, the total payback or refinancing requirements within the next three years is USD 2.5 trillion, equivalent to 41% of their total outstanding amount.

- Longer maturities and increased price sensitivity. In the last five years, the average length of maturity for investment grade bonds at the date of issue has been 12.4 years compared to 9.4 years in the early 2000s. In 2019, the average maturity of investment grade bonds was about 13 years. As longer maturities are associated with higher price sensitivity to changes in interest rates, the combination of longer maturities and declining credit quality has made bond markets more sensitive to changes in monetary policy.
- The use of rating-based investments, passive management and corporate bond ownership. The portfolio allocation of all major bondholders, such as pension funds, insurance corporations and investment funds is influenced by external credit ratings. This influence is either through regulations that use rating grades as a reference for establishing quantitative limits and capital requirements or through self-imposed rating-based investment strategies that are reflected in their investment mandates and policies. For example, corporate bond holdings by exchange traded funds (ETFs) who typically use passive rating-based strategies increased 13-fold from USD 32 billion in 2008 to USD 420 billion in 2018. Interestingly also, non-financial companies have become significant owners of corporate bonds. Between 2009 and 2018, the combined value of corporate bond holdings by 25 large non-financial US companies tripled from USD 119 billion to USD 356 billion. The company with the largest portfolio alone held USD 124 billion in corporate debt securities. This equals the combined holdings of the world's 6 largest corporate bond ETFs.
- Within-rating leverage ratios have increased. Today, the median firm in each investment grade rating has higher leverage ratios compared to a decade ago. At the same time, influenced by unprecedented low interest rates since 2008, their ability to cover their current interest obligations has improved. If interest rates start to increase or an economic downturn leads to lower earnings, interest coverage and profitability ratios may deteriorate rather rapidly, limiting their ability to offset the high leverage. In such a scenario, the rating mechanics that allowed increased leverage would result in pressure towards higher overall downgrade ratios.
- Issuer quality and rating stability. The significant increase of BBB rated bonds and the declining frequency of downgrades relative to upgrades in recent years, may suggest that credit rating agencies are mindful of downgrading BBB issuers due to their special status just above the non-investment grade category. The one-year 1-notch downgrade probability is lowest for bonds rated BBB-, which is also the lowest rating notch before crossing the line to non-investment grade. It may also reflect that companies with BBB status pay extra close attention to their rating metrics in order to maintain their rating status and borrowing costs. If rating agencies were to be extra cautious to re-rate bonds that are in the vicinity of the investment / non-investment grade frontier, one might expect that the upgrade probability is lowest for the BB+ category. However, for all the three major credit rating agencies the probability of a 1-notch upgrade within a year is either highest or third highest for BB+ rated issuers.

- Sell-offs and financial stability concerns. While the growing stock of the BBB rated bonds has allowed investors to seek higher yields, their choice of portfolio allocation is typically influenced by regulations and defined by rating-based investment mandates. Given these limitations, together with a concentration of outstanding bonds just above the demarcation line between investment and non-investment grade, extensive downgrades of BBB rated bonds to non-investment grade status may lead to substantial sell-offs that put corporate bond markets in general under stress, giving rise to financial stability concerns.

Following the return to a more expansionary monetary policy by major central banks in 2019, the world's non-financial companies have borrowed an additional USD 2.1 trillion in the form of corporate bonds. This is equivalent to the previous record year 2016 and a clear reversal of the nascent decrease in corporate bond issuance in 2018. Adding the 2019 bond issues to the unprecedented use of corporate bonds since 2008 means that the outstanding stock of non-financial corporate bonds has reached yet another all-time high of USD 13.5 trillion.

Trends in corporate bond issuance by non-financial companies

Figure 1 presents the total amount of debt raised by non-financial companies in the form of corporate bonds in each year between 2000 and 2019. As seen in Panel A, there was a significant and lasting increase around the time of the 2008 financial crisis. Between 2008 and 2019, the average global issuance annually was USD 1.8 trillion, which is double the average annual amount of USD 879 billion between 2000 and 2007.

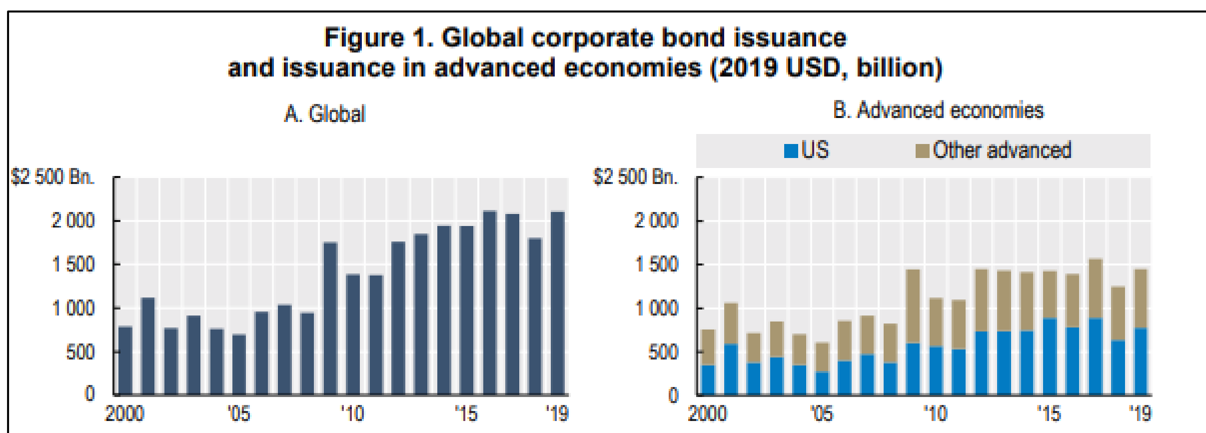


Figure 1. Global corporate bond issuance and issuance in advanced economies (2019 USD, billion)

Panel B of Figure 1 shows corporate bond issuance by companies in the United States and other advanced economies. In line with the global trend, issuance in advanced economies decreased in the second half of 2018, resulting in the lowest annual issuance since the 2011 European debt crisis. However, in 2019, issuance bounced back and in advanced economies,

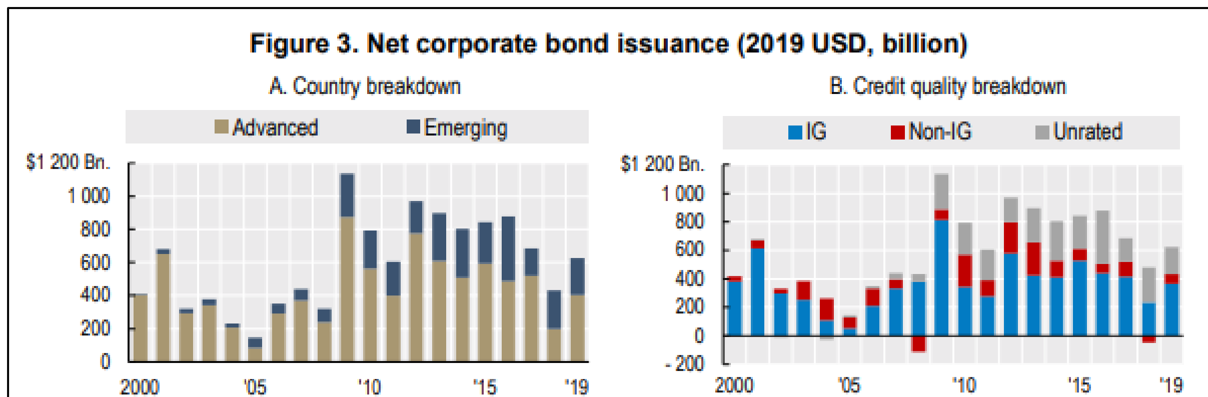
it almost reached the 2017 record. This drop and reversal pattern is similar for the United States and other advanced economies. Taking a longer term perspective, the average annual issuance of corporate bonds by non-financial companies in advanced economies grew by 63% from USD 808 billion during the 2000-2007 period to USD 1.3 trillion during the 2008-2019 period.

The decline in corporate bond issuance during the second half of 2018 can be linked to the successive rise in interest rates, coupled with investor fears over slowing growth and less accommodative monetary policy. By the end of 2018, the US Federal Reserve had raised interest rates for the ninth time since December 2015 and had already initiated its balance sheet normalisation programme (Federal Reserve, 2017 and 2018). Likewise, in August 2018, the Bank of England increased interest rates for the first time since the crisis and in December 2018, the ECB ended its net purchases under the asset purchase programme (BoE, 2018; ECB, 2018). However, this changed in the first month of 2019 when both the US Federal Reserve and the ECB expressed their readiness to reintroduce or adjust their accommodative strategies in light of future economic and financial conditions (Federal Reserve, 2019a and 2019b; ECB, 2019a). Similarly, the Bank of England adjusted its growth forecasts significantly downward, which lowered the expectations of future interest rate increases (BoE, 2019a). The Bank of Japan also confirmed its intention to maintain the existing and extremely low levels of interest rates for an extended period (BoJ, 2019a). With such reassurances, corporate bond issuance quickly rebounded pushing the total amount in the first six months of 2019 above that of the same period in 2018. In July 2019, US Federal Reserve cut interest rates for the first time since 2008. Two more rate cuts followed in September and October (Federal Reserve 2019c, 2019d, 2019e). Similarly, in September 2019, the ECB lowered interest rates and announced its plan to restart net purchases under its asset purchase programme at a monthly pace of EUR 20 billion starting from November 2019 (ECB, 2019b). Furthermore, in October 2019, the Bank of Japan stated its willingness to cut interest rates if deemed necessary to achieve the inflation target (BoJ, 2019b). In November 2019, the Bank of England followed suit and signalled that it will be ready to adjust its monetary policy to reinforce the expected recovery in economic growth and inflation (BoE, 2019b). Following these developments, full year issuance of non-financial corporate bonds in 2019 in advanced economies climbed above the average post-financial crisis level to USD 1.4 trillion.

In order to understand how annual issuing activity affects the outstanding stock of corporate bond debt, it is necessary to calculate gross issuance minus the total amount of corporate bonds matured or retired in any given year. This is done in Figure 3 with respect to country groups as well as credit quality. Panel A shows positive net issuances of corporate bonds every year since 2000, which continuously have added to the outstanding stock. In addition to a period of successive increases in interest rates and expectations of a return to a less accommodating monetary policy mentioned above, the decline in net corporate bond issuance in 2017 and 2018 may partly be attributable to the US tax reform, which lowered the corporate tax rate and unlocked overseas cash holdings of US companies through a reduction

in the cost of repatriating foreign earnings. As a consequence, both the need to borrow and the tax advantage of borrowing declined for US companies. In 2018, global net issuance reached its lowest level since 2008.

Panel B shows that the 2018 decline affected the net issuance of both investment grade and non-investment grade bonds. As a matter of fact, in 2018 the net issuance of non-investment grade bonds was actually negative for the first time since 2008. This all changed in 2019, which saw an increase in the net issuance for both non-investment and investment grade bonds when net issuance by companies in advanced economies reached USD 401 billion. This was more than twice the net amount issued in 2018. Net issuance of investment grade bonds increased from USD 235 billion in 2018 to USD 366 billion in 2019 and that of non-investment grade bonds turned from negative to positive. However, net issuance of companies in emerging market economies and that of unrated companies remained weak and decreased compared to 2018.



Global Corporate Debt Is 76% Investment Grade

By dollar amount of rated debt, 76% of global corporate debt is rated investment grade (rated 'BBB-' and higher), even though only about 50.1% of issuers are rated investment grade. By contrast, even though 49.9% of global corporate issuers are rated speculative grade, the proportion of corporate debt globally that is rated speculative grade is just 24%. Speculative-grade issuers tend to be smaller, with lower revenue and lower debt outstanding, even as they have higher leverage than investment-grade issuers.

With central banks broadly adopting accommodative monetary policies over the past decade and investors reaching for yield, debt has increasingly pooled within the lowest category of investment grade and the highest category within speculative grade. Within investment grade, the 'BBB' rating category is the largest, accounting for $7.56 trillion in debt. Within speculative-grade, the 'BB' category, which is the highest rating category within speculative grade, is the largest, with $2.38 trillion.

Global Corporate Debt Amounts by Rating Category

Rating	Debt amount (bil. $)			Debt amount (%)		
	Financial	Nonfinancial	Total	Financial	Nonfinancial	Total
AAA	837.9	72.5	910.4	4.1	0.4	4.4
AA	982.4	708.7	1,691.1	4.8	3.4	8.2
A	2,728.4	2,841.9	5,570.3	13.2	13.8	27.0
BBB	2,235.6	5,327.6	7,563.1	10.8	25.8	36.7
BB	439.3	1,938.3	2,377.6	2.1	9.4	11.5
B	134.3	1,903.4	2,037.7	0.7	9.2	9.9
CCC/Below	13.9	453.7	467.6	0.1	2.2	2.3
Investment grade	6,784.2	8,950.6	15,734.8	32.9	43.4	76.3
Speculative grade	587.5	4,295.4	4,883.0	2.8	20.8	23.7
Total	**7,371.7**	**13,246.0**	**20,617.8**	**35.8**	**64.2**	**100.0**

By region, U.S.-based issuers (including issuers from the tax havens of Bermuda and the Cayman Islands) account for the largest share of rated debt globally, with $10.2 trillion. The U.S. has the highest proportion of speculative-grade rated debt (nearly 30%) and the lowest proportion of financial services debt (at 24%). In part, this reflects the highly developed capital markets in the U.S. and its high degree of banking disintermediation.

Global Corporate Rated Debt Amounts by Region

Region	Debt amount (bil. $)			Debt amount (%)		
	Investment grade	Speculative grade	Total	Investment grade	Speculative grade	Total
U.S.	7,200.6	2,991.3	10,191.9	35	15	49
Nonfinancial	5,002.5	2,731.5	7,734.1	24	13	38
Financial	2,198.1	259.8	2,457.9	11	1	12
Europe	5,995.0	1,243.8	7,238.7	29	6	35
Nonfinancial	2,653.4	1,017.3	3,670.7	13	5	18
Financial	3,341.6	226.5	3,568.0	16	1	17
Other developed	1,600.8	303.1	1,903.9	8	1	9
Nonfinancial	660.4	280.0	940.4	3	1	5
Financial	940.4	23.1	963.6	5	0	5
Emerging markets	938.4	344.8	1,283.2	5	2	6.2
Nonfinancial	634.3	266.6	900.9	3	1	4
Financial	304.2	78.2	382.3	1	0	2
Totals						
Nonfinancial	8,950.6	4,295.4	13,246.0	43	21	64
Financial	6,784.2	587.5	7,371.7	33	3	36
Grand total	**15,734.8**	**4,883.0**	**20,617.8**	**76**	**24**	**100**

By country, the U.S., U.K., France, and Germany each have rated corporate debt that surpasses the $1 trillion mark. Together, these countries account for 66% of the total rated debt. Among these, the U.S.-based companies account for the largest share of corporate rated debt, with $9.9 trillion in rated debt (excluding debt from tax havens). The U.K. follows, with $1.5 trillion, France, with $1.28 trillion, and Germany, with $1.07 trillion (see table 3).

Rated Global Corporate Debt by Country and Rating Grade

(Bil. $)	Non-financials		Financials		Total		Grand total
	Investment grade	Speculative grade	Investment grade	Speculative grade	Investment grade	Speculative grade	
U.S.	4860.5	2588.7	2172.0	251.8	7,032.5	2,840.5	9,873.0
U.K.	614.8	264.1	523.1	77.5	1,137.9	341.6	1,479.5
France	500.8	115.9	647.8	13.5	1,148.6	129.3	1,277.9
Germany	520.4	108.0	428.5	16.4	948.8	124.4	1,073.3
Canada	310.3	223.1	317.2	6.5	627.5	229.7	857.2
Netherlands	136.8	147.2	454.1	10.4	590.9	157.7	748.6
Australia	130.8	19.9	360.0	1.3	490.8	21.2	512.0
Japan	205.9	23.7	263.1	15.2	469.1	38.9	508.0
Spain	127.1	39.1	279.9	21.4	407.0	60.5	467.5
Switzerland	135.2	22.5	202.3	20.7	337.4	43.2	380.6
Italy	118.8	67.4	110.0	39.7	228.7	107.1	335.9
China	128.8	16.8	149.7	10.1	278.5	27.0	305.5
Others	1160.6	658.9	876.4	102.9	2,037.0	761.8	2,798.8

Emerging market corporate debt accounts for only 6.2% of rated debt globally, with $1.28 trillion. However, a considerable share of the region's overall outstanding debt is unrated. We expect this share of rated emerging market debt to continue to grow as capital markets in the region grow and develop.

Among nonfinancial companies, the largest and most capital-intensive sectors often have the highest amounts of debt outstanding in the market. The utilities, telecommunications, and consumer products sectors lead with the highest debt amounts, at $1.9 trillion, $1.4 trillion, and $1.3 trillion, respectively.

Global Corporate Debt Amounts by Rating Grade and Sector

Sector	Investment grade	Speculative grade	Total
(Bil. $)			
Financials	**6,784.2**	**587.5**	**7,371.7**
Financial Institutions	6,012.5	513.0	6,525.5
Insurance	771.7	74.5	846.2
Non-financials	**8,950.6**	**4,295.4**	**13,246.0**
Aerospace and defence	157.2	74.1	231.3
Automotive	461.1	217.7	678.8
Capital goods	425.4	158.2	583.5
Consumer products	853.3	413.4	1,266.6
CP&ES	357.5	246.9	604.3
Diversified	23.5	1.9	25.4
FP&BM	130.8	99.8	230.6
Health care	762.0	451.1	1,213.1
High technology	672.0	343.9	1,015.9
Homebuilders/real estate co.	444.1	135.5	579.6
Media and entertainment	353.9	625.9	979.8
Metals, mining, and steel	196.0	112.0	308.0
Oil and gas	678.0	356.5	1,034.6
Retail/restaurants	413.2	215.4	628.7
Telecommunications	931.9	480.4	1,412.3
Transportation	464.0	125.4	589.5
Utility	1,626.7	237.3	1,864.0
Total	**15,734.8**	**4,883.0**	**20,617.8**

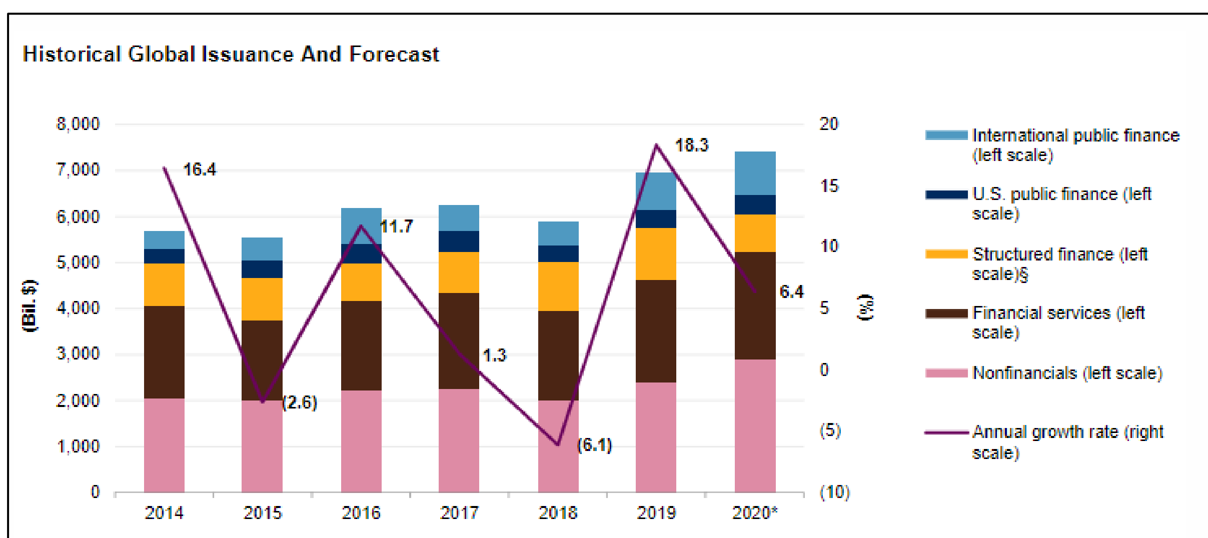
The sectors with the most investment-grade nonfinancial debt are utilities ($1.6 trillion), telecommunications ($931.9 billion), and consumer products ($853.3 billion). The nonfinancial corporate sectors with the largest amounts of speculative-grade debt are media and entertainment ($625.9 billion), telecommunications ($480.4 billion), and health care ($451.1 billion).

Among financial services issuers, $6.8 trillion (92% of total debt) is in investment grade, and most of this debt is from financial institutions, such as banks and brokerages.

The largest corporate bond markets are located primarily in developed markets, however global concentration is reducing and some emerging markets are catching up.

The top global markets for corporate bonds have been relative stable, the leader among the list is the US even though its share in the global market has been reducing. Other interesting developments over the years has been the performance of China, South Korea, Russia, Malaysia, and Thailand. While the growth by other developed markets has not been significant.

Despite these significant developments by the emerging markets, there is a large disparity in size between the larger and smaller markets, for example the average amount outstanding for the top ten markets is $2 billion while for the smaller markets are $18 billion. Good indicators for understanding the bond markets in countries are based on the size of the outstanding market and the depth of the market. The depth of the market is defined as the outstanding size as a percentage of its GDP. This indicator also gives an understanding of the importance of the market in the economy.



Global Issuance Summary and Forecast						
(Bil. $)	Industrials	Financial services	Structured finance	U.S. public finance	International public finance	Annual total
2009	1,705.0	1,828.6	572.0	409.7	295.7	4,810.9
2010	1,286.6	1,484.6	895.0	433.3	306.9	4,406.4
2011	1,339.0	1,332.0	942.4	287.7	336.3	4,237.4
2012	1,777.4	1,563.7	786.1	379.6	339.1	4,845.9
2013	1,912.5	1,499.7	803.5	334.1	316.2	4,866.1
2014	2,070.0	2,011.8	905.3	339.0	339.8	5,666.0
2015	2,022.7	1,746.7	905.0	397.7	446.3	5,518.4
2016	2,253.1	1,921.4	807.6	444.8	738.9	6,165.9
2017	2,269.8	2,084.6	901.8	448.6	541.7	6,246.4
2018	2,015.6	1,970.8	1,062.0	338.9	477.9	5,865.3
2019	2,429.7	2,199.0	1,127.9	421.7	762.0	6,940.2
2019*	1,220.0	1,142.5	578.7	172.8	454.0	3,567.9
2020*	1,929.0	1,352.0	445.3	198.1	555.2	4,479.5
2020 full-year forecast, % change, year over year	20	6	(30)	1	20	6

International Public Finance Ahead Over 20%

Bond issuance from the international public finance sector was down 12% in the first quarter relative to the same period in 2019. But after a tremendous $164 billion total in May, the first half of the year ended up 22% relative to the same period in 2019. Although May was dominated by Chinese issuers, this year's growth has been broad-based across continents and countries.

Data on non-U.S. public finance volume is not reliable for determining the true size of borrowing, but the numbers can suggest major trends. The past four years have recorded the highest volume ever in international public finance, averaging over $627 billion annually.

Other Global Structured Finance

Securitizations and covered bonds outside the U.S. and Europe totaled $90 billion in the first half of 2020, a 13% decline from 2019. Covered bonds reported an increase of 16% year over year, which was offset by a 25% decline in securitizations. Securitizations declined 60% year over year in Australia, 47% in Canada, and 44% in Latin America. However, in Canada, covered bond issuance rose 37% in the first half of 2019, Australian covered bond issuance was down only 17%, and Japan issued no covered bonds. Japan has been the best performer outside the U.S. and Europe, with a midyear securitization total of $30 billion, just off the $32 billion issued in the same period last year.

Risks associated with the current outstanding stock of corporate bonds

The large outstanding amounts and the record repayment requirements are not the only characteristics that distinguish today's outstanding stock of corporate bond debt from that of the previous credit cycles. Other important differences include the aggregate credit quality of issuers, the length of maturities and the level of bondholder rights.

A common measure of market-wide issuer quality that has been used to forecast excess corporate bond returns is the ratio of non-investment grade bond issuance to total corporate bond issuance (Greenwood and Hanson, 2013). Construction of this measure for the non-financial corporate bond market in Figure 5 shows that the share of non-investment grade issuance remained above 20% in every year between 2010 and 2017. It fell only slightly below 20% in 2018 and then rose to 25.2% in 2019. This is the longest period of time since 1980 that the portion of non-investment grade issuance has remained this elevated before a significant decrease in its level and a subsequent increase in default rates. The reason is that it does not take into account changes in credit quality within the two broad categories of investment grade and non-investment grade bonds, which are often used to define investment policies but which themselves include bonds of rather different credit quality.

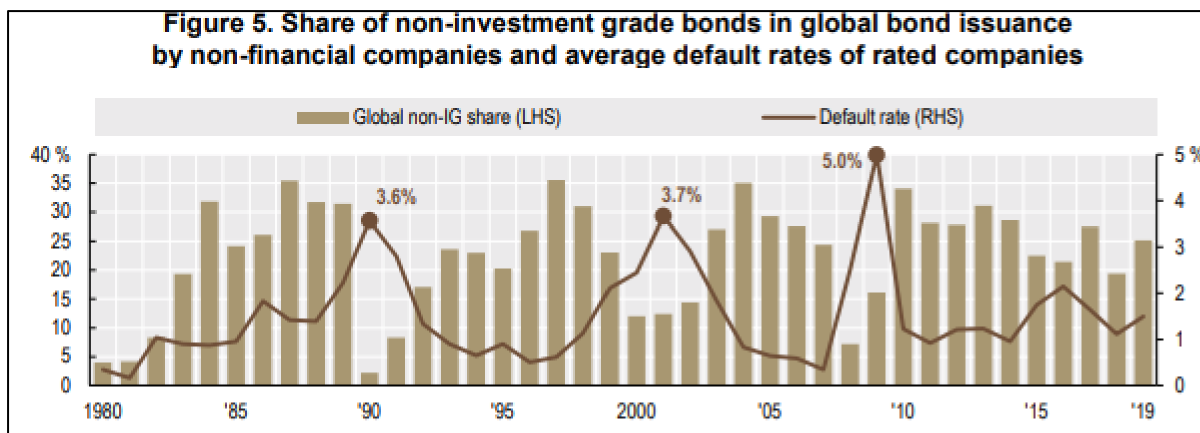


Figure 5. Share of non-investment grade bonds in global bond issuance by non-financial companies and average default rates of rated companies

We saw a number of heavily indebted businesses go to the wall quickly – did COVID simply expose the weaknesses that already existed in companies such as this? What sort of support are businesses looking for right now – e.g. non-dilutive short-term liquidity, restructuring? Are we seeing trends?

The global economic downturn triggered by Covid-19 has increased debt-default levels as losses ripple through bond markets – but the conditions for a perfect storm were in place before the pandemic.

Prior to the Covid-19 situation, we were noticing with our models and research that there was a higher level of debt and a decline in credit trends already growing in the system.

That's common at the later end of what was a very long expansion, where the underwriting and the crush for yield was causing underwriting standards to dip and things were getting financed that probably shouldn't have.

The support that businesses are looking for right now include

Direct state cash flow support

Given the uncertainty about the future economic conditions, the severe liquidity problem faced by the corporate sector and the limited ability of capital markets to be of immediate help for all companies, governments can also support the business sector through direct cash flow support. Considering the urgency, governments, agencies and state-owned financial institutions should act timely and provide flexibility with respect to the conditions and procedures for applications. Importantly, the design of direct financial support schemes for businesses should include mechanisms to incentivise all parties to wind down the schemes when economic conditions improve.

Debt-for-equity swaps

Recently, some companies have reached an agreement with their investors on debt-for-equity swaps, which reduce the leverage ratio and also in some cases make the company eligible for government-backed loan guarantees. Since a typical debt-for-equity swap will dilute the holdings of the existing shareholders, its completion also requires an agreement from the company's shareholders. Adjusting the legal framework to facilitate swap transactions for financially distressed firms could help protect the debtholders' rights and at the same time strengthen the companies' balance sheet with equity capital.

Conditionality of government support

If no private investors can or will act to turn around an insolvent company, the state may choose to step in. An assessment should be made as to whether it is a case of 'technical insolvency' that can be overcome if the company continues operating as a going concern. In this case, the government may choose to inject equity assistance for instance in the form of convertible bonds, which typically can be converted into common stock at the bondholder's discretion. While providing time for an orderly rescue, this may also ensure that the risk and potential rewards are shared between the state and the incumbent shareholders. The state

may also consider joint capital injections with professional investors such as private equity firms or sovereign wealth funds. The expertise of experienced enterprise owners can be complementary, but care must be taken to ensure that the incentives of the public and private investors remain broadly aligned throughout the process.

As we slowly emerge from the pandemic does it appear that certain businesses – e.g. small to medium sized, or within certain sectors – have been hit harder by COVID?

One potent impact of the pandemic has been to accelerate bankruptcies in areas that were already priced like they were going to fail. The hydrocarbons sector has been among the largest cohort of casualties, given the secular headwinds of changing technology, industry disruption and the move towards cleaner energy in accordance with the Paris Agreement. Other sectors that have been particularly hard hit include transport, leisure, consumer discretionary, gaming and retail. Businesses that depend on frequent human interactions are most at risk of getting caught in a distressed scenario in the coming cycle. Investors are bracing themselves for higher default rates over the coming year.

With Covid-19 still very much at the forefront of everything, there is acute pressure to find and adapt to 'the new normal'. Government responses to the emergency have varied widely, however, so investors must consider individual assets in different jurisdictions and whether entities in certain sectors can adapt to implement a more effective business model. This is where the global picture is fragmented.

Right now, Asia is coming out of the first wave of the pandemic – and while there are risks of a second wave, it is quite contained because governments, businesses and individuals are much better prepared.

The contagion implication from the impact of the second wave is quite manageable. We need to live with this potential comeback of the virus until there is a vaccine – so it may take a year or more until an effective cure is found. The business operation may not be able to survive this for another 12 or 18 months, given the cashflow, the top line revenue, which is significantly reduced.

For business who are already in a distressed state or at risk of being so – what action should they be taking right now – e.g. covenant monitoring, trigger monitoring, oversight of new structures once debt has been restructured, transaction advisory/investment management perspectives?

At this point it seems more likely that companies that have tapped markets recently are building up war chests to ride out the COVID-19 lockdowns. Given the amount of funding investment-grade companies in the U.S. and Europe have obtained, another possible use for these funds could be to spur on mergers and acquisitions (M&A). With many highly leveraged entities experiencing profound stress, the number of distressed companies is higher, perhaps making for easier acquisition targets.

First and foremost will be the path of the virus: its severity and the timeline for development of a vaccine or treatment options. Second, central banks' and fiscal authorities' actions in response will likely have a large impact on market sentiment and lenders' continued willingness to offer credit, even if a more muted response than we've seen. Both of these factors will play a large part in determining borrowers' ability to issue more debt while avoiding downgrades, or default.

Some Interesting Global Markets

Germany

Bond market in Germany is reasonably well developed. The majority of bond market participants are institutional investors, such as pension funds, insurance companies and banks. Individual investor holdings of bonds comprise 10-15% of total financial holdings.

An important feature of the corporate bond market is that most of the bonds are listed in exchanges, but a significant proportion of trading takes place through OTC platform. In such cases, listing is preferred not to facilitate trade through exchanges, but to enable institutional investors and fund managers who are restricted to invest in unlisted bonds.

There are several trading platforms, like EUROMTS, EUREX-BOND, in European markets that efficiently provide trading solutions to all such OTC trades. MTS Group is the first wholesale electronic market in the euro area which has promoted the integration of the euro denominated bond market by broadening the range of securities traded and services offered and by extending its platform to other European countries. The EUREX-BOND provides

participants with an electronic platform for OTC wholesale trading in European bonds, ensuring higher liquidity for European bonds and thereby increasing transparency for all market participants.

SME bonds

Since the inception of the German SME bond market in 2010, there were 26 corporate defaults and 4 selective defaults, impacting 34 corporate bonds in total with a total debt volume of EUR 1 bn out of a total invested volume of around EUR 7 bn. This translates to a default rate of 17% by number of bond issues and 15% by bond volume. The interest rate spreads range between 5% and 7%.

The likelihood of further corporate and bond defaults remains high, especially given the size of refinancing needs for 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, there is a question whether all issuers can succeed in refinancing. Refinancing is likely to become even more difficult for the lower rated entities.

Reasons for high default rate

- *Half of defaults related to structural issues:* Almost one half of the issuer defaults and more than half of the bond volumes have been 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 or SIAG Schaaf Industrie AG have been exposed to severe pricing pressures, resulting in several corporate defaults. Moreover, project developers in the renewable energy industry such as CarpeVigo AG, BKN Biostrom AG face ongoing regulatory changes, which 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 also been serious fraud allegations against some of the defaulted issuers regarding misrepresentation of financial accounts (e.g. MIFA Mitteldeutsche Fahrradwerke AG or Penell GmbH) and embezzlement (getgoods.de AG).
- *Bond market 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 already 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 in order to finance risky investment projects, or to avoid short-term bankruptcy.
- *Retail market with limited creditor protection from covenants:* In hindsight, the high proportion of retail investors in the German SME bond market who were impresssed

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 the SME bond market to a limited extent only (10-20% of overall 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 the misuse and misinvestment of proceeds from the debt instruments.

Often the SME bond market was seen as the last resort of financing for weaker debt issuers. This trend 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 ratings 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

- *All market participants adjusting to the new SME bond world:* Given the loss of confidence in the bond market segment, it will take time to regain its credibility and for the market's maturity to evolve. All relevant market participants have already adjusted to these circumstances, either by amending investment behaviour or taking appropriate measures.
- *Investors and debt advisors 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 a lack of investors' demand. Investors are conducting more thorough reviews on their investments, recognising the need for 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 new issuers;
- returning issuers which have already convinced the market with improving financial results; and
- Issuers from sectors with less industry-inherent credit risks such as real estate.

Finally, recent successful bond placements are characterized 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 the exception rather than the rule in the early stages of the market – is becoming the norm for new bond issues.

This can be seen in comprehensive covenant packages comprising the 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 at 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, inventories, 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 the 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 favored by midsized issuers such as Grand City Properties S.A., HELMA Eigenheimbau AG or 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. While 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 practice 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 practice 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 are sorts of soft laws to provide orientation and a more standardised approach, it may protect the segment from additional bond issues from issuers too weak or not yet mature enough to enter the capital markets.

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 liberalization. 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. Securitization has become an important financing tool in the Republic of Korea since it was first used to restructure banks' nonperforming loans following the 1997–98 Asian financial crisis. Collateralized bond obligations and collateralized debt obligations accounted for the bulk of securitized transactions. The market has since expanded to include securitization of residential mortgages, credit card receivables, future trade receivables, and various types of leases and loans.

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

Instruments

Debt instruments include issues from both the government and corporate sectors. A repurchase agreement (repo) market was established in 2002. The short selling of bonds is allowed in the Republic of Korea, provided it is backed by a guarantee. Futures and options contracts were also formed 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 (KDB); and other corporate issues, which may be guaranteed or non-guaranteed. Most corporate bonds are non-guaranteed with three-year maturities.

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

Mortgage-backed securities are issued by the Korea Housing Finance Corporation. The Korea Asset Management Corporation (KAMCO) and the Korea Deposit Insurance Corporation also issue asset-backed securities to recapitalize 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 securitization.

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; and
- market associations

Regulatory agencies

The Republic of Korea's Ministry of Strategy and Finance (MOSF) 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, external economic cooperation, and stabilizing the livelihoods of Koreans.

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

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

The Korea Securities Depository (KSD) 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 equalization 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 01 January 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 a 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 rationalize the regulatory framework of the Financial Supervisory Service (FSS). The plan contains 123 initiatives that emphasize 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 securitizations as originators;
- enhance the effectiveness of short-sale regulations by incorporating these into the Securities and Exchange Act; and
- 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 demutualized 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 Stabilization 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.s

- *Foreign Exchange Liberalisation Plan:* On 19 May 2006, the government announced it was accelerating foreign exchange liberalization to attract investment capital for new infrastructure, and to promote foreign exchange market development. The foreign exchange liberalization plan was completed in 2009. The first phase of the two-phase program was in 2006-2007.

The plan aimed to

- internationalize the won;
- liberalize foreign exchange transactions, including Korean overseas investments; and
- Accelerate development of the foreign exchange market.

- *Consolidation of securities and capital market laws:* The Financial Investment Services and Capital Markets Act (FSCMA) became effective on 04 February 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 recognized 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 recognized 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 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 was at 19 in 2016, with most of them placed privately.

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.

SRI and ESG Bonds

The Investment Grade Corporate Bonds SRI strategy invests in a portfolio of investment grade bonds with a focus on sustainability. It undergoes the same investment process as the Investment Grade Corporate Bonds Strategy, but do not invest in companies with challenges relating to environmental, social or governmental issues. The strategy includes experienced team of portfolio managers managing and aiming to generate a long-term return matching or exceeding the developments in the markets for investment grade bonds.

Social objectives of Social Bonds Social Bonds seek the completion of projects with a clear social objective and which are dedicated to an identified population. These bonds call for issuers to demonstrate the greatest degree of transparency regarding investors and the general public.

Key objectives of Social bonds focus around following areas:

- Affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transport, energy, etc.)
- Access to basic services (e.g. heath, education and vocational training, healthcare, financing and financial services, etc.)
- Affordable housing

- Job creation including through the potential effect of small and medium-sized enterprises financing and microfinance
- Food security

Socioeconomic advancement and empowerment: Examples of target populations include:

- People living below the poverty line
- Excluded and/or marginalized populations and/or communities
- Vulnerable groups, including as result of natural disasters
- People with disabilities
- Migrants and/or displaced persons
- Undereducated population
- Underserved population, owing to a lack of quality access to essential goods and services
- Unemployed people

Categories of SRI and ESG issuers

Investors of the Social Bonds market can be grouped into four categories. The first category and the largest one is that of investors seeking a purely financial return, without any particular consideration to the environmental and social benefits offered by social and green bonds.

A second category is that of "dedicated" investors, that is, those that only make socially-responsible investments, by integrating ESG criteria broadly to all asset classes. A third category, most represented among underwriters of green and Social Bonds, is made up of assets managers who integrate ESG criteria in all asset classes. Social Bonds also interest a final category of investors: SRI investors who manage thematic ESG funds that exclude certain business sectors or adopt a "best in class" approach to select investments among the best-rated organizations within their business sector from an extra-financial perspective

The representation for such investors is shown below:

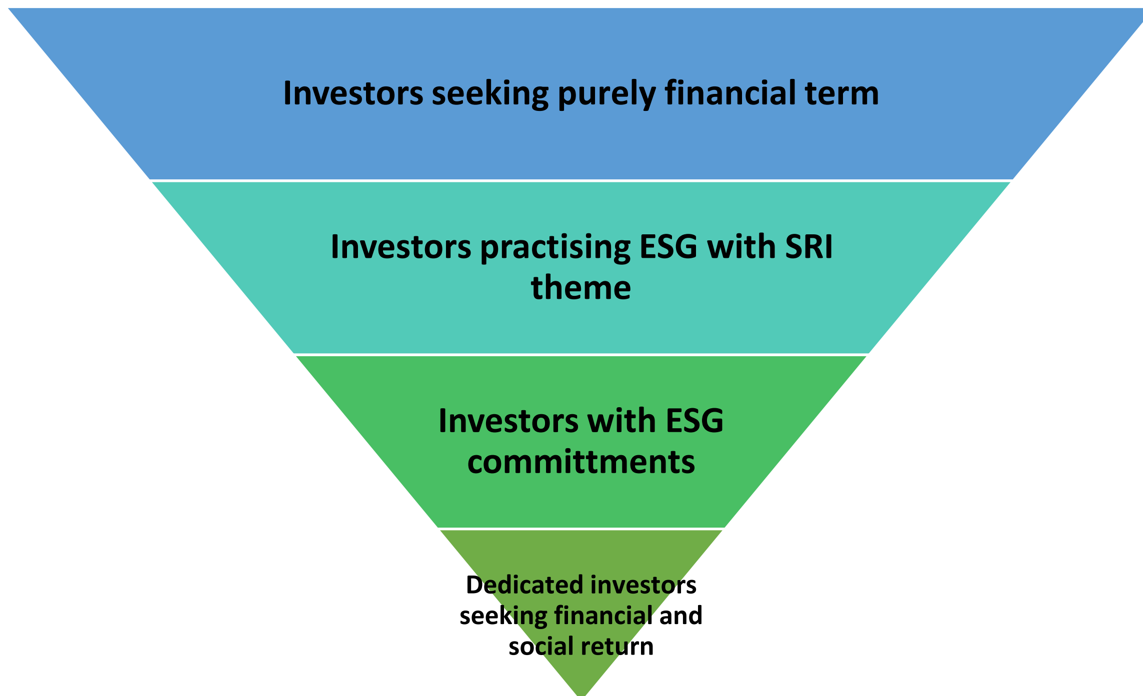


Fig.1. Types of sustainable investors

Global scenario of issuances

Impact Investing is being seen as the fastest growing strategy with a growth of 385%. Although the growth remains small in terms of assets, it has made Impact Investing, the most dynamic and definitely the most promising approach for investors

Social Bond issuances range from 300 million to 1 billion euros. Allocation of proceeds must address one or more social issues and benefit a target population. As the market is growing, Social Bonds are a lever to carry out, showcase and inform on missions with a strong social impact. The global volume of Social Bond issuances (excluding Sustainability and Green Bonds) rose to 16.5 billion dollars in May 2018. The national and supranational public sectors (77%) spearheaded and still lead the Social Bond market. The private sector has become gradually involved since 2017 (23% for banks and businesses). In geographical terms, the Netherlands and Spain are the countries with the highest volume of issuances.

Figure below provides public and private participation over the years in global markets.

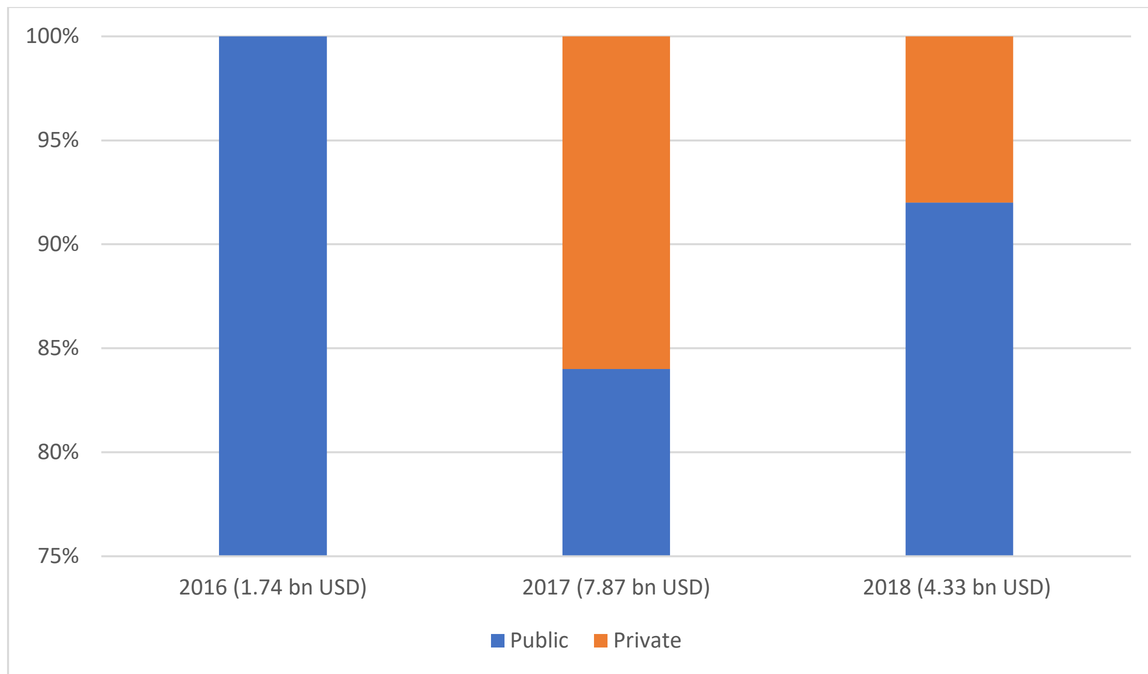


Fig 2. Public and private issuances

Scenario for ESG investing in India

In the past, domestic investors have played a limited role in SRI. However, with increased global recognition of implications of ESG risks on performance of stocks, several international asset management companies investing in India and domestic asset management companies have started to consider ESG risks of companies as material. The momentum seems to be picking up with the announcement/launch of ESG funds within India over the past year. Even while, globally, investors have started to adopt SRI strategies, ESG integration and exclusionary stand out to be the most widely adopted strategies, and only USD 1 tn in the total SRI pool of USD 30 tn can be categorized as climate aligned. In India, the number is much lower with only USD 0.04bn climate aligned investments out of the total USD 28 bn towards sustainable and responsible investments in India. However, with the new set of green businesses emerging on the horizon, it is expected that these numbers will rise significantly in the coming years.

Following table depicts the timeline of events for SRI and sustainable investing in India:

	1988	2009	2010	2011	2012	2013	2015	2017	2018	2019
Reporting	Companies required to report on energy conservation				BRR mandatory for Top 100 companies by market capitalization		BRR mandatory for Top 500 companies by market capitalization	Top 500 companies advised to adopt <IR> framework		
Corporate Governance		First-time implementation of Voluntary Guidelines on Corporate Governance for CPSEs	Mandatory Guidelines on Sustainable Development and Corporate Governance for CPSEs					Kotak Committee on Corporate Governance for listed companies constituted	SEBI accepts select recommendations from Kotak Committee on Corporate Governance	
National Voluntary Guidelines on Social, Environmental and Economic Responsibilities				First release					Update released (Draft stage)	National Guidelines for Responsible Business Conduct released in March 2019
ESG Funds & Indexes	Shariah funds have been around since the '90s				BSE launches Greenex and Carbonex	MSCI India ESG Leaders Index launched		S&P BSE 100 ESG Index launched	Nifty100 ESG Index launched SBI Magnum Equity ESG Fund launched; Avendus announces launch of India ESG fund	Three former Tata group executive's tie-up with Quantum Advisors to launch USD 1bn ESG fund. BNP Paribas filed an offer document for its BNP Paribas India ESG Fund.

Fig 3. Sustainable investing over time in India

SRI action to drive more climate aligned investments

Increasing awareness on the materiality of climate change risks could trigger a virtuous cycle of investment decisions that will increasingly get measured against climate change outcomes. Global pension funds are already taking proactive steps in that direction. For instance, the Norwegian Government Pension Fund Global's environment-related investment mandate requires Norges Bank (their asset manager) to establish environment-related investment mandates in the range of 30-60 billion kroner. Stichting Pensioenfonds ABP (Dutch pension fund for civil servants) had set a € 5bn renewable energy investment target for 2020, of which € 4bn has been achieved as of 2017.

Given that financiers aren't appropriately factoring in climate related risks and/or costs, their investments into conventionally carbon intensive segments are fraught with the possibility of getting stranded once those risks manifest themselves in the future years. This is likely to lead to significant financial instability and it is hence critical that investors start evolving mechanisms for assessing and pricing such risks while building their portfolios.

Further, sectors and activities that are dependent on natural resources are at risk of premature write-downs due to tightening of regulations. Therefore, driven by risk, climate aligned investments are expected to see an upsurge.

Following diagram describes the possible flowchart for creating sustainable environment for ESG investments:

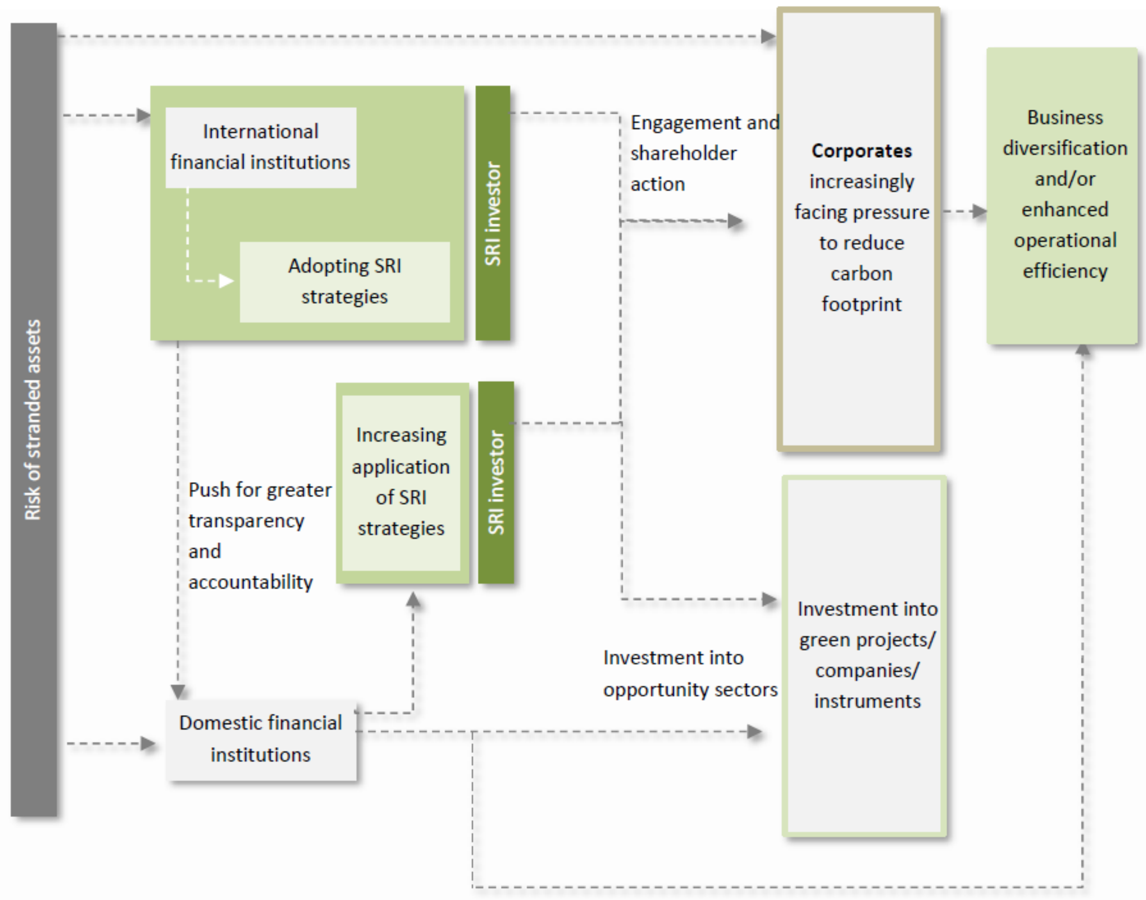


Fig 4. Flowchart for issuance

While the opportunity to meet climate financing need exists, tapping into the opportunity pool requires preparedness and concerted action as discussed on the page overleaf. A key aspect to this is sensitization on the risks of climate change complemented by supportive regulatory and policy measures to inspire investors and thus enable India to be a central destination on the SRI map of the world.

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The Associated Chambers of Commerce and Industry of India (ASSOCHAM) is India's primary business association representing businesses, state chambers, and business associations. The association provides advocacy, networking and professional development and information sharing and other value-added services to its members. ASSOCHAM was founded in 1920 and is headquartered in New Delhi.

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We are India's oldest apex industry body estd. 1920 representing the interests of about 4.5 lakh businesses of all sizes, sectors, and regions.

Our main aim is nation-building through growth of business and harmonious government-industry interface.

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We have teams focusing on the new banking reforms including the formation of the new banking companies arising out of the new licenses. We offer operational support in the areas of financial inclusion, holding company structures and project management services. We also have focus on the new reforms in the areas of subsidiarisation of foreign banks. In addition, we also conduct high level diagnostic studies for public sector and private sector banks.

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