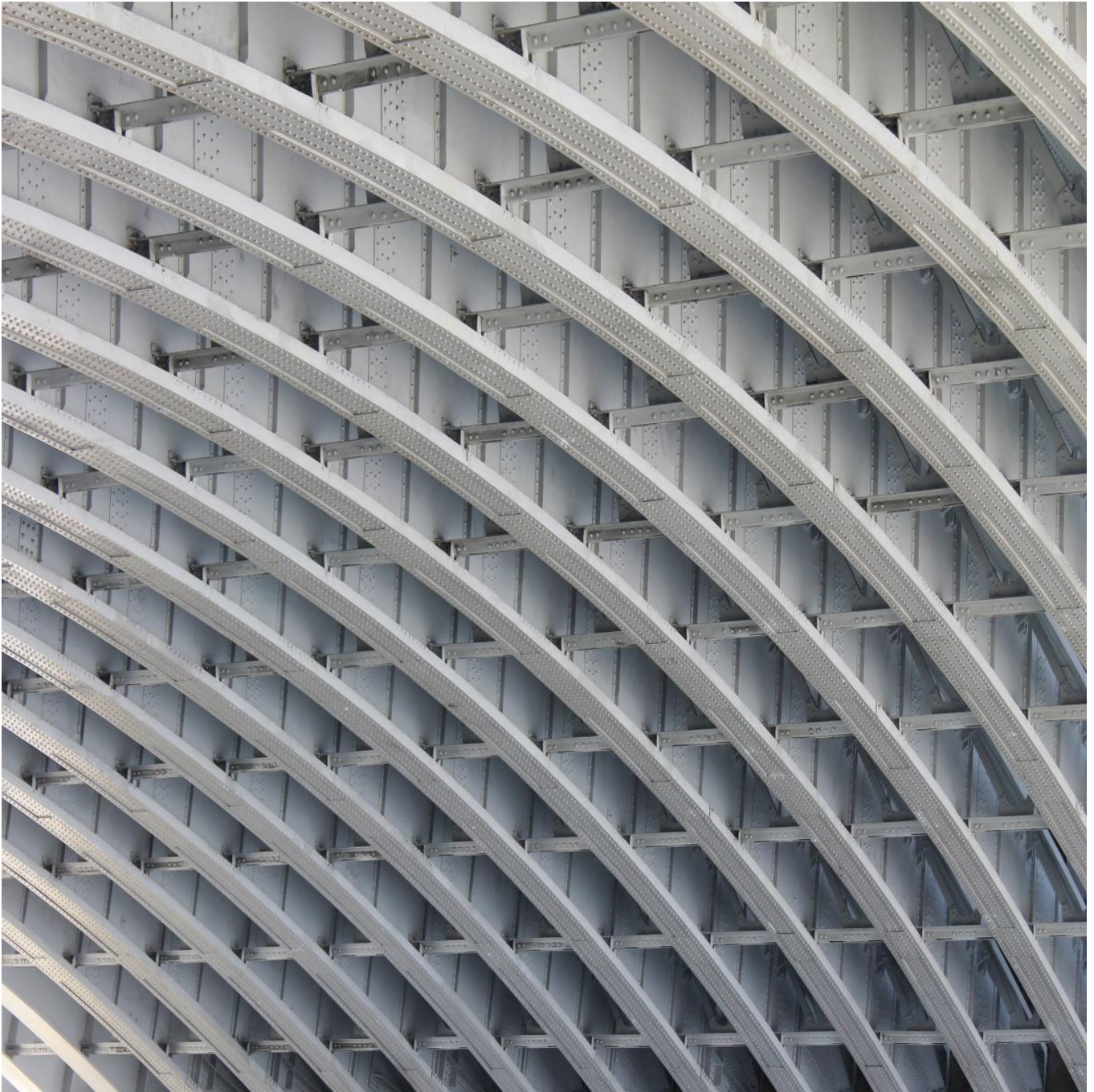


Stars aligned

Funding the Rs 35 lakh crore infra buildout



CRISIL Ratings analytical contacts:

Somasekhar Vemuri

Senior Director, Regulatory Affairs and Operations, and Chief Criteria Officer
somasekhar.vemuri@crisil.com

Ramesh Karunakaran

Senior Director, Rating Criteria and Product Development
ramesh.karunakaran@crisil.com

Naveen Vaidyanathan

Director, Rating Criteria and Product Development
naveen.vaidyanathan@crisil.com

Vishal Krishna

Senior Rating Analyst, Rating Criteria and Product Development
vishal.krishna@crisil.com

Executive summary

Capital expenditure (capex) in the infrastructure sector is expected to total Rs 33-35 lakh crore in fiscals 2025 and 2026, driven by the power, road, and railway sectors.

The central and state governments together are likely to fund three-fourths of this capex, with the balance expected to be met by the private sector. While the government's capex spend will largely be through budgetary outlays, the private sector will rely significantly on debt.

Overall, we expect Rs 10-12 lakh crore of cumulative debt funding requirement in fiscals 2025 and 2026, accounting for a third of the infrastructure capex, mainly led by the power and road sectors. The financial ecosystem is well placed to fund the debt requirement for the expected capex outlay. Financial institutions (FIs)¹, predominantly government-backed, are expected to maintain their funding momentum.

Banks, having significantly improved their balance sheets, are in a position to ramp up funding to the infrastructure sector. The bond market and external commercial borrowings (ECBs) will continue to supplement the debt financing to the sector.

Infrastructure sector has seen a sharp improvement in the credit profile of underlying assets – both in terms of probability of default (PD) and loss-given default (LGD). Policy measures, such as better risk sharing in concession agreements, increasing share of central counterparties, and more stringent insolvency laws, have aided the improvement in credit profiles.

Moreover, innovative vehicles providing diversification and structural benefits, such as infrastructure investment trusts (InvITs) and restricted groups (RGs), will continue to enhance the credit profile of infrastructure assets.

Currently, the bond market plays a limited role in funding the infrastructure sector. However, in the long run, it may have to step up funding to the sector.

The structural improvement in the credit profile of infrastructure assets and further benefits provided by pooling vehicles make the sector amenable to bond market investors.

In addition, policy push encouraging patient capital investors to fund long gestation infrastructure projects will help.

The draft project finance norms released by the Reserve Bank of India (RBI) will be a key monitorable for infrastructure financing depending on their final contours.

Infrastructure capex to increase to Rs 33-35 lakh crore over fiscals 2025 and 2026

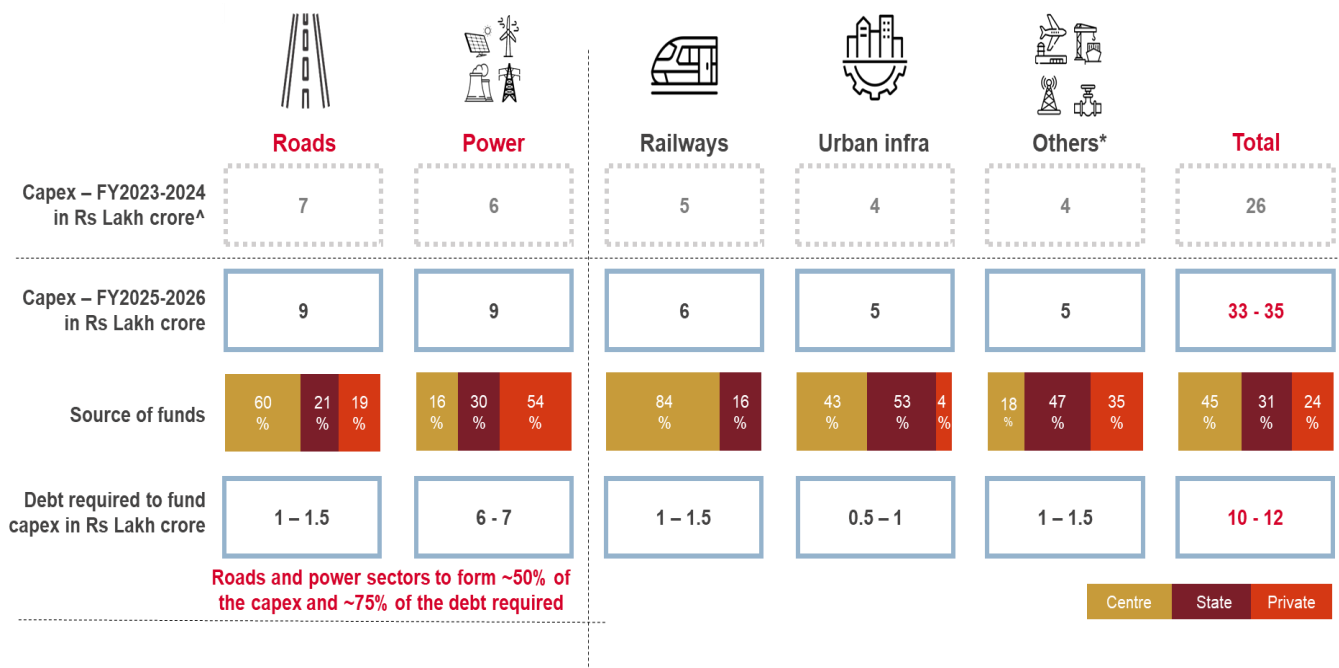
Capex in infrastructure is expected to touch Rs 33-35 lakh crore cumulatively in fiscals 2025 and 2026, which is ~1.3 times the capex during fiscals 2023 and 2024. The higher capex outlay in power and road sectors shall drive this growth.

The surge will ride on India's need for creation of sustainable infrastructure by adding more green power to the energy mix and improving physical connectivity through a denser road network. In fact, roads and power – led by renewables – will likely account for half of the capex outlay with the balance going towards railways, urban infrastructure, and others.

¹ These include Power Finance Corporation (PFC), REC Ltd, National Bank for Financing Infrastructure and Development (NaBFID), Indian Railway Finance Corporation (IRFC), Indian Renewable Energy Development Agency (IREDA), Indian Infrastructure Finance Company Ltd (IIFCL), National Investment and Infrastructure Fund (NIIF), NBFC-IDFs and other private NBFCs

Continued government focus on strengthening infrastructure across the nation through schemes such as National Infrastructure Pipeline (NIP), National Logistics Policy (NLP), and PM Gati Shakti will boost capex in the infrastructure sector. Government authorities and public sector undertakings (PSUs) — both central and state — are likely to do the heavy lifting, contributing to approximately three-fourths of the capex.

Chart 1: Infrastructure capex outlook



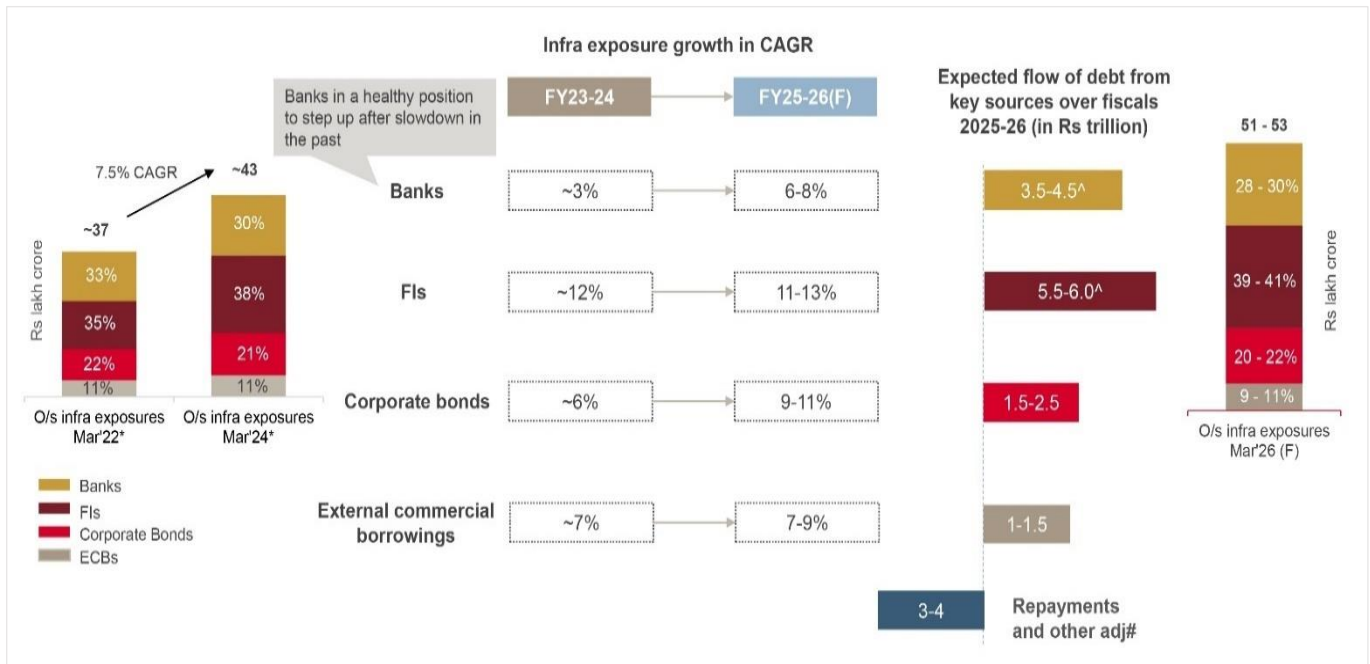
*Others include airports, ports, irrigation, telecom towers, data centres

Government FIs to lead infra financing

CRISIL Ratings expects roughly one-third of the capex to be funded through debt, translating into debt requirement of Rs 10-12 lakh crore with the power and road sectors accounting for about three-fourths of the debt required.

The debt exposure to infrastructure space increased at a compound annual growth rate (CAGR) of 7.5% between fiscals 2022 and 2024 (see chart 2).

Chart 2: Trends in infrastructure financing



*Bonds and ECB outstanding data arrived basis assumption on issuances volume; #Repayment and other adjustments is a negative number; other adjustments include loss funding of distribution companies (discoms); ^Includes incremental working capital required over the projected period

Source: CRISIL Ratings

Within the lending ecosystem, the government-backed FIs have done the heavy lifting in recent years, with their infra exposure growing at a CAGR of ~12% between fiscals 2022 and 2024, accounting for ~60% of the incremental debt exposure. FIs are likely to continue the funding momentum and contribute Rs 5.5-6.0 lakh crore between fiscals 2024 and 2026, driven by the favourable borrowing cost, which enables them to borrow and lend at competitive rates over longer tenures.

To be sure, weighted average cost of borrowings of five govt FIs – PFC, REC, NaBFID, IREDA, IIFCL – in the past decade has reduced by 150-200 basis points (bps). This trend is expected to continue as benchmark G-sec yields are likely to soften supported by improving sovereign credit profile due to reducing fiscal deficit, and inclusion of government securities in the global bond index.

In contrast, infrastructure exposure of banks has grown at a tepid pace, comprising just ~13% of the incremental debt exposure in the past two fiscals, given their focus on cleaning up balance sheets.

However, we believe banks are now in a position to step up infra funding, with their health indicators — capital, asset quality, and earnings profile — having improved in the past few years. Capital position is comfortable, with all public sector banks having a buffer of 100 bps over the regulatory norms and almost all private banks having a buffer of over 300 bps.

Overall gross non-performing assets (NPAs) reduced from ~11.2% in March 2018 to ~2.7% in March 2024, and are likely to touch decadal lows this fiscal. Also, the profitability of banks measured in terms of return on assets (RoA) was at a 20-year high of ~1.3% in fiscal 2024.

That said, banks have been risk-averse towards infrastructure lending because of past issues, and their willingness to increase exposure to the sector remains to be seen.

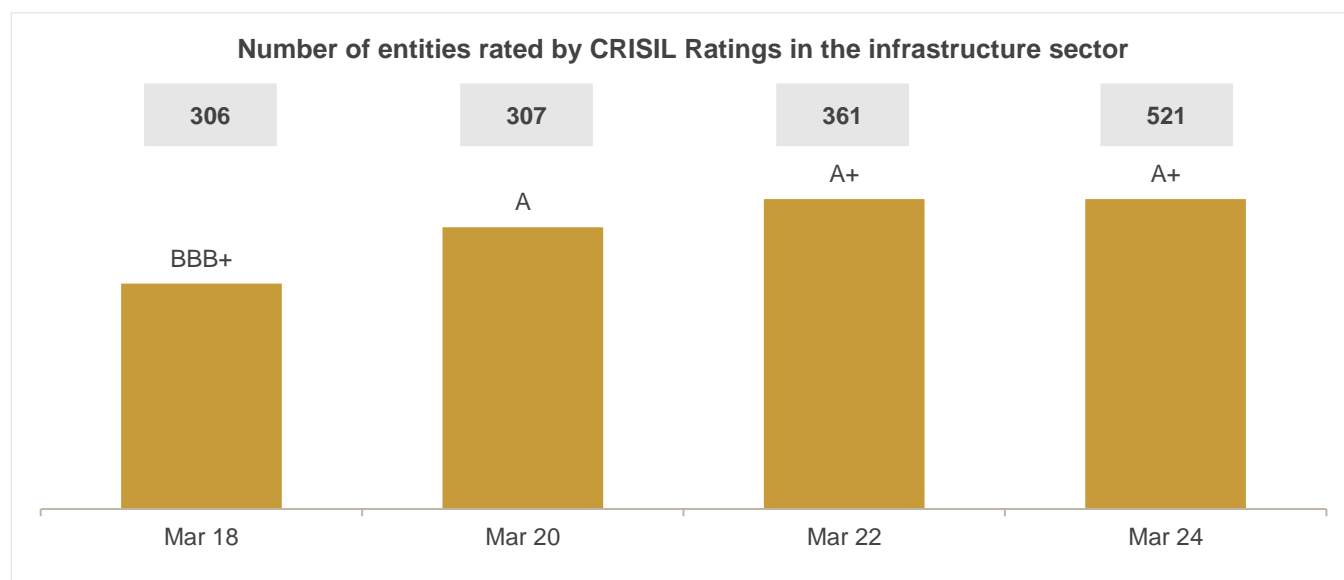
The corporate bond market and ECBs will continue to supplement the debt financing ecosystem, with their infrastructure exposure expected to grow 9-11% and 7-9%, respectively, this fiscal and the next.

Structural improvement in credit profiles a key enabler for financing

Infrastructure funding will be supported by the structural improvement seen in the credit profile of infrastructure assets, driven by a host of policy facilitations. These include more equitable risk sharing between the concessioning authorities and private developers; the enhanced role of central counterparties leading to predictable payment cycles; and the emergence of InvITs aiding in leverage reduction and broad-basing of ownership.

The improvement in the credit profile is visible in both, the PD and LGD of infrastructure assets. The median rating of infrastructure assets in the CRISIL Ratings portfolio has improved from 'BBB+' in fiscal 2018 to 'A+' in fiscal 2024 (see chart 3). This trend is visible in all the key sectors. In the roads and renewables sectors, which form a major portion of rated infra issuers, the median rating for road assets improved from 'BBB+' to 'A' and for renewable assets from 'BBB' to 'A+' during the period.

Chart 3: Trends in median rating of infra-assets in the CRISIL Ratings portfolio



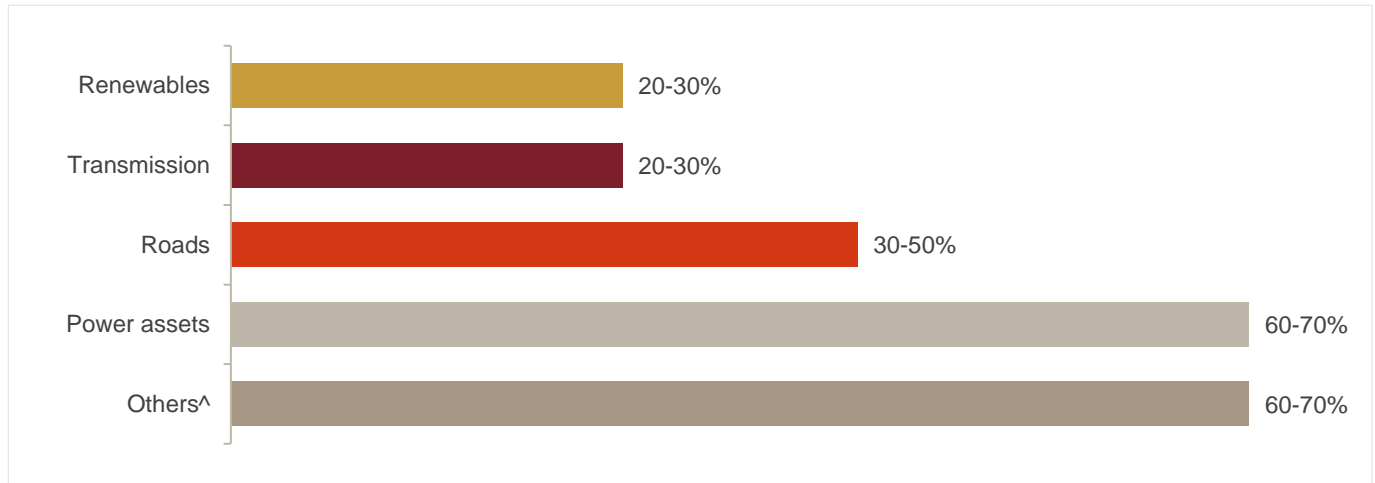
Source: CRISIL Ratings

In the roads sector, for instance, evolved concession agreements in hybrid annual mode (HAM) projects, which reduced bottlenecks during the construction stage, and better credit profile of sponsors were among the key reasons for the improvement. In renewables, the increased presence of central counterparties, liquidity support to distribution companies leading to shorter payment cycles and the emergence of asset pooling structures led to improved credit profiles.

This improvement in the credit profile of infrastructure assets is visible in the second pillar of credit risk, the LGD, as well. To gain insights into LGD for various infra segments, CRISIL Ratings conducted a study² on 150+ infra defaults which occurred in the past decade. The findings were interesting. LGD for infrastructure assets was found to be in the 20-60% range (see chart 4), well below the typical LGD (60-80%) factored in by lenders. Sectors such as renewables and transmission were on the lower end of the LGD spectrum, while thermal power assets were on the higher end. Toll and annuity roads rested in the middle.

² CRISIL Ratings has updated its earlier study – A structural lift in infra LGD done in 2023

Chart 4: CRISIL Ratings study of infra assets indicates 20-60% LGD against typical 60-80% assumption



^Others' include ports, shipyards, airports

Source: CRISIL Ratings (Estimated)

The key takeaway from the study is that the LGD for infra-assets has improved driven by IBC and pre-IBC platforms, and structural reforms in the sector.

Pooling vehicles enhance the credit profile of infrastructure assets

Pooling vehicles such as InvITs and RGs are enablers that enhance the credit profile of infrastructure assets as they provide multi-layer diversification (viz. asset class, geography, and counterparty). InvITs also have regulatory restrictions on financial leverage and limit investments in riskier under-construction projects. These features help elevate the credit profile to match the risk appetite of investors/lenders. Currently, there are 19 operational InvITs with assets under management (AUM) of Rs 4.9 lakh crore, with over Rs 2.5 lakh crore of debt raised.

RGs — where a pool of operating assets come together offering similar benefits of diversification, ring-fencing of cash flows and picking assets with operational track record — are emerging as a popular alternative to InvITs, especially in the renewables sector.

Such pooling structures should continue to gain traction and enhance the credit profile of infrastructure assets.

Infrastructure sector needs higher contribution from the corporate bond market

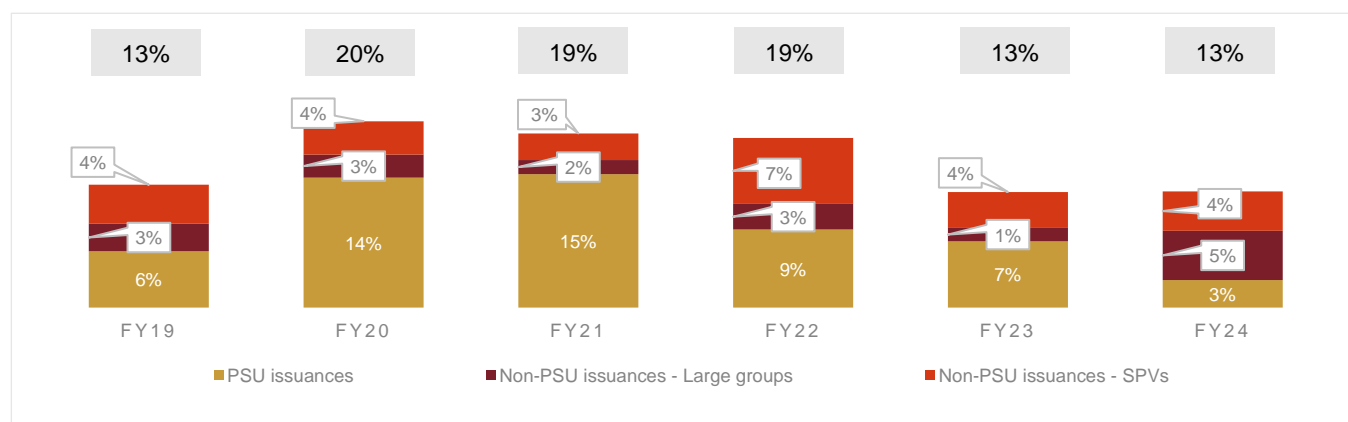
Government FIs and banks are currently the major source of funds in the infrastructure space. The bond market plays a limited role.

Over the last six financial years, issuances from the infrastructure sector averaged only ~16% of total bond issuances (see Chart 5). Within the infrastructure segment, PSU issuances averaged ~9% of total bond issuances and non-PSU issuances ~7%.

Though infrastructure issuances have been growing steadily, funding from the bond market for infrastructure assets still lags the requirement.

Chart 5: Bond issuances from the infrastructure sector remain modest; non-PSU issuances even lower

Share of infrastructure issuances in overall corporate bond issuances



Source: Prime database and CRISIL Ratings estimates

The structural improvement in the credit profile of infrastructure assets and further benefits provided by pooling vehicles make the sector amenable to bond market investors. Moreover, infrastructure assets fit the bill well in terms of key investment characteristics sought by bond market investors, such as long tenure, a favourable risk profile, reasonable risk-adjusted returns, and better recovery prospects.

However, the key investor segment within the bond market, i.e., the patient capital investors, has shown low appetite. For instance, investment of life insurers in the infrastructure sector (including housing) stood at only ~8.5% of their investment book as of December 2023.

A policy pivot in the form of a bigger push to encourage patient capital investors to fund long gestation infrastructure projects is required. This can be in the form of relaxation in exposure and rating limits. For example, for insurance companies, investment exposure to a public limited infrastructure investee company is limited to a lower of 20% of special purpose vehicle (SPV) project cost or 10% of the paid-up share capital, free reserves, and debentures or bonds of the investee company. Also, pension funds and insurance companies are allowed to invest only in infrastructure assets rated 'AA' or above. While they can invest in instruments rated up to 'A', this is only if the instrument is EL 1 (Expected Loss 1) rated.

Exposure limit for insurance companies is a major constraint for infrastructure take-out financing

Particulars	Rs. Crore (A)	Exposure limit in % (B)	Exposure limit in Rs. Crore (A*B)	Maximum investment exposure allowed
Project cost	600	20%	120 (i)	Lower of (i) or (ii) = Rs. 15 crore
Paid-up share capital, free reserves, and debentures	150	10%	15 (ii)	

Generally, the size of paid-up capital and free reserves of infrastructure SPVs tends to be a small proportion of the project cost (say 25%) because these SPVs are funded predominantly through bank debt. Assuming the project is funded through debt : equity of 3:1, the maximum exposure allowed for a single insurer would be restricted to Rs 15 crore (as shown above), which would only be 3.3% of the total debt. This constrains infrastructure SPVs to tap investments from insurance companies for take-out financing.

Conclusion

The infrastructure sector is well-placed to attract debt capital. The expected strength of the financial ecosystem and the structural improvement in the credit profile of infrastructure assets will help.

That said, the infrastructure sector needs a higher contribution of financing from capital markets. This requires a policy pivot to encourage participation of patient capital investors in directly funding long gestation infrastructure projects.

Also, the RBI, in its draft project financing norms, proposes a significant increase in the prudential floor for standard assets provisioning (the existing requirement of 0.4% of the funds outstanding is proposed to be increased to 5% for under-construction projects). The change in prudential floors without factoring the credit profile of the infrastructure asset may increase the interest cost for infrastructure projects across the board. Actual implementation of these proposed norms bears watching.

About CRISIL Ratings Limited (A subsidiary of CRISIL Limited, an S&P Global Company)

CRISIL Ratings pioneered the concept of credit rating in India in 1987. With a tradition of independence, analytical rigour and innovation, we set the standards in the credit rating business. We rate the entire range of debt instruments, such as, bank loans, certificates of deposit, commercial paper, non-convertible / convertible / partially convertible bonds and debentures, perpetual bonds, bank hybrid capital instruments, asset-backed and mortgage-backed securities, partial guarantees and other structured debt instruments. We have rated over 35,000 large and mid-scale corporates and financial institutions. We have also instituted several innovations in India in the rating business, including rating municipal bonds, partially guaranteed instruments and infrastructure investment trusts (InvITs). CRISIL Ratings Limited ("CRISIL Ratings") is a wholly-owned subsidiary of CRISIL Limited ("CRISIL"). CRISIL

Ratings Limited is registered in India as a credit rating agency with the Securities and Exchange Board of India ("SEBI").

For more information, visit www.crisilratings.com.

About CRISIL Limited

CRISIL is a leading, agile and innovative global analytics company driven by its mission of making markets function better.

It is India's foremost provider of ratings, data, research, analytics and solutions with a strong track record of growth, culture of innovation, and global footprint.

It has delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers through businesses that operate from India, the US, the UK, Argentina, Poland, China, Hong Kong and Singapore.

It is majority owned by S&P Global Inc, a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide.

CRISIL Privacy

CRISIL respects your privacy. We may use your personal information, such as your name, location, contact number and email id to fulfil your request, service your account and to provide you with additional information from CRISIL. For further information on CRISIL's privacy policy please visit www.crisil.com/privacy.