Ratings

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Building bonds

It's time bond investors embraced the infrastructure sector

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Executive summary

The Indian infrastructure space has seen a significant turnaround in recent past with large global investor funds vying for equity and debt investment opportunities in this segment. To be sure, the domestic infrastructure sectors[1] have been able to attract over USD 74 billion[2] FDI investments in the past five years. These investments have been made by several marque global investors which include the likes of Blackstone, Brookfield, KKR, Macquarie, CDPQ and Canadian Pension Plan Investment Board.

So, what has changed in the Indian infrastructure segment that appeals large global investors?

Over the last decade, concerted effort has been made to address the issues plaguing various segments in the sector and thereby improve the risk perception. For instance, there is better risk sharing in the contracts awarded; concession agreements have been revised to address the bottlenecks that hampered the projects; and heightened role of central agencies as key stakeholders has improved operational performance and consequently investor confidence.

Besides, operational infrastructure projects inherently carry lower risks. The way this works, implementation risks decline once a project becomes operational, and the passive nature of these assets means there is minimal intervention to operate.

Then, long-term contracts ensure revenue stability and visibility. The introduction of infrastructure investment trusts (InvITs) is another positive that has seen most of the operational assets moving into more transparent structures, with lower leverage and better diversification resulting in improved credit risk profile.

Given these developments, it is high time for domestic bond market investors to increase the allocation towards infrastructure issuances.

As such, bond market investors typically look for stable, long-term investment options (pension and insurance account for 38% of the investments in the bond market). Thus, exposure to debt instruments of operational infrastructure assets fits the bill. What's more, some of these instruments provide better risk-adjusted returns, too.

The impending merger of the HDFC twins (HDFC Bank and HDFC Ltd) by the end of next fiscal presents yet another opportunity as the group will rely more on low-cost deposits rather than debt from the capital markets. The bond market can seize this opportunity and contribute to the Indian infrastructure story.

[1] Communication services, transport, construction, and energy
[2] RBI annual report

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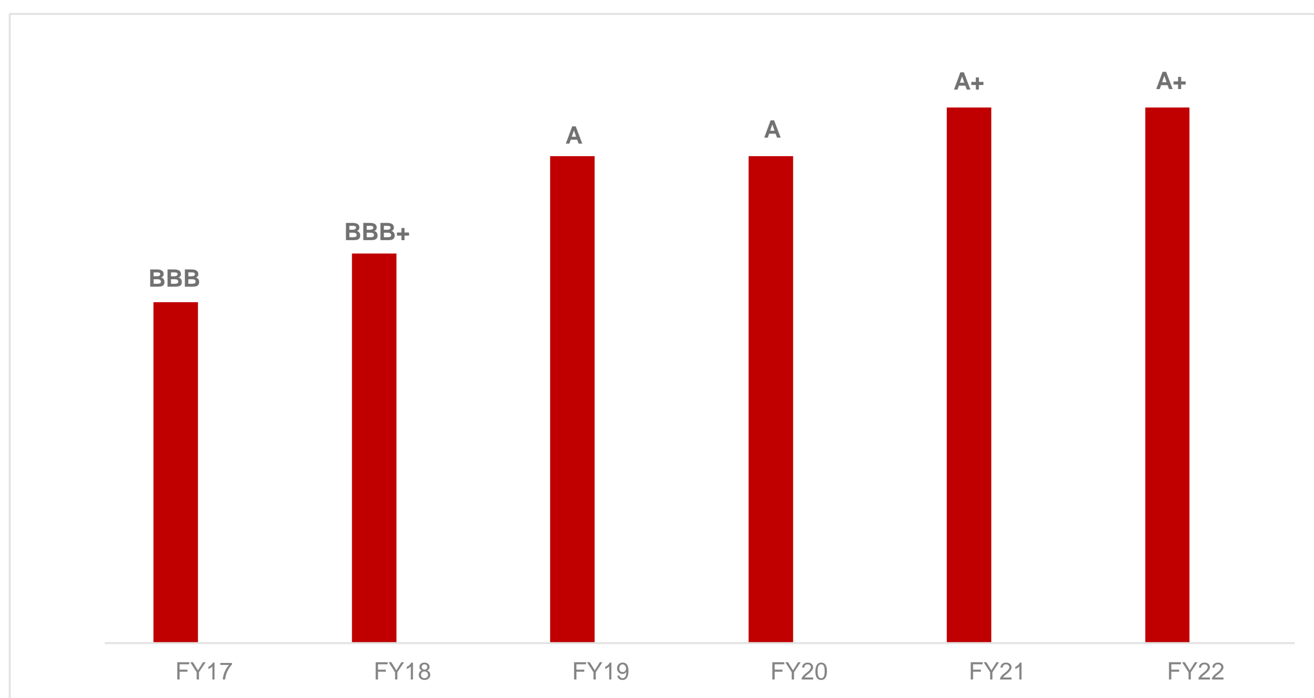
Infrastructure is an evolved space today

The infrastructure sector has undergone significant improvements to address the concerns of the developers and the investors. This is reflected in the median ratings in CRISIL Ratings portfolio of infra assets as shown below in the chart 1.

Chart 1: Median credit rating of CRISIL Rated infrastructure entities



Source: CRISIL Ratings

Four key improvements in the sector

1. Equitable risk sharing

Concession agreements have been modified to fairly distribute risks between the concessioning authorities and private entities. A case in point is the road infrastructure.

The sector has seen a time period when the implementation risk was entirely borne by the developers. Unresolved right of way (ROW) issues stranded projects; aggressive bidding / underperformance due to demand slump coupled with rising interest rates saw projects turn unsustainable with heavy financial burden.

The concession agreements today have address some of these critical gaps. *(Refer table 1)*

One such instance is hybrid annuity model (HAM) projects awarded by the National Highways Authority of India (NHAI). In this model, the NHAI bears a part of the project cost, making it a key stakeholder.

Besides, the project construction milestones are measured only once 80% of ROW achieves 3G[3] stage, thereby significantly reducing ROW-related risks. The option to descope/delink further helps the sponsor take a considered call on project completion and receive annuity for the project constructed thus far in case there are any last-mile ROW issues. Moreover, the sponsor is compensated for inflation and interest rate risks during the operational phase, thereby significantly reducing the basis risk.

Also, unlike in the past, the terms of the concession agreement have undergone periodic revisions to plug gaps for smoother functioning.

Table 1: HAM Vs Annuity concession agreements

Particulars	HAM	Annuity concession agreement (2010)
Funding risk	**Low** 40% of project cost borne by NHAI	**High** Entire funding tie-up to be arranged by developer
Implementation risk	**Low** • Provision to automatically reduce the scope of the project for the portion of ROW not granted within pre specified days from appointed date (AD) • Provisional Completion certificate issued if completion of 100% of highway for which ROW was received as of 180 days[4] from AD	**High** • No provision to automatically reduce the scope of project • Provisional Completion certificate dependent on finishing 75% of the highway
Basis risk - Interest rate risk and risk of fluctuations in maintenance cost	**Low** • Interest on annuity balance offsets interest rate risk to a large extent • Inflation-adjusted (70% WPI and 30% CPI) maintenance compensation mitigates inflation risk to a large extent	**High** Fixed inflow received in the form of annuity. No offsets available for interest or inflation

The build-operate-transfer (BOT) concession agreements have also been aligned with developer interests, keeping in mind the macroeconomic scenario.

Apart from roads, government holding strategic stake in key assets such as airports also reflects its intent of driving, overseeing and sharing the risks in large capital outlay projects. The adoption of hybrid-till model allows a potential upside for airport operators on a part of the non-aero revenue.

[3] 3G stage – compensation decided for the land
[4] 20% of the construction period

2. Central counterparty presence improving performance

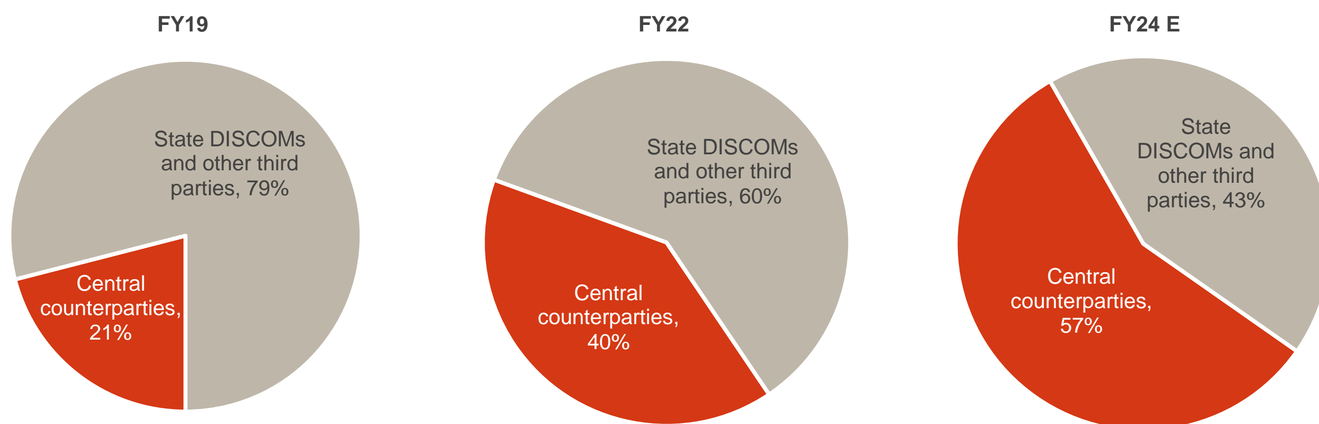
The presence of central counterparties such as the NHAI, Solar Energy Corporation of India (SECI) / NTPC Vidyut Vyapar Nigam ltd (NVVNL), and the Power Grid Corporation of India (PGCIL) in the roads, renewables and transmission sectors respectively instils investor confidence and ensures robust performance.

For instance, in the past five fiscals, the NHAI has awarded 40-50% of the projects as HAM projects. The nodal body's track record in making annuity payments for these projects has been impeccable. Delays, if any, are limited to about 10 – 20 days from annuity date (as per a study on operational HAM projects).

The role of SECI and NTPC as counterparties in renewable energy projects has been increasing steadily *(refer chart 2).* While delays by state discoms (distribution companies) have been an Achilles' heel for power gencos (generation companies), the presence of central counterparties has streamlined payments for renewable projects. To be sure the tariff bids for renewable projects having central counterparties have been received favourably by developers, this is visible from the higher risk premium factored in tariff bids in the case of state discoms vis-à-vis central counterparties *(refer chart 3).*

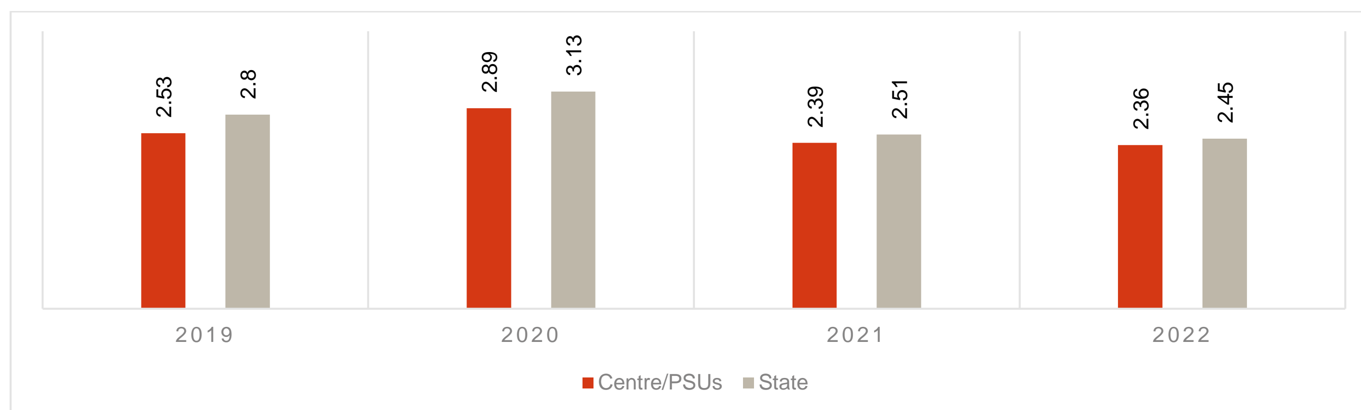
Increased role of central counterparties in the renewable energy space

Chart 2: Proportion of central counterparties in large CRISIL rated renewable players



Source: CRISIL Ratings estimates

Chart 3: Comparison of weighted average tariff bid for solar projects Central counterparties Vs State DISCOM per kwh



Source: CRISIL Research

In the case of transmission projects, the point of connection mechanism cushions inter-state transmission assets from inordinate payment delays by discoms. The mechanism ensures payments from discoms are pooled and distributed to various transmission companies, thereby reducing receivables.

Furthermore, in the case of public-private-partnership (PPP) projects, presence of central counterparties generally entails termination payment that is activated in case of force majeure events. This safeguards investor interest by capping the loss levels and gives the clear visibility of the loss that may have to be borne.

Thus, beyond the thrust given towards ramping up infrastructure facilities, the government is working towards enhancing investor confidence by ensuring concession agreements fairly and equitably distribute risk, timely payments are made wherever central counterparties are involved, and there is a partnership with private sector in setting up projects critical for economic development.

3. IBC and pre-IBC resolution platforms have improved recovery prospects

The Insolvency and Bankruptcy Code (IBC), 2016, has provided a platform for resolution of stressed assets and is a positive for all sectors, including infrastructure. Resolution of some of the large assets by this platform has been a positive. While the average recovery rate and resolution timelines have a lot more to be desired, it can only improve from here.

The Reserve Bank of India (RBI) push towards a pre-IBC resolution platform 30 days from the date of default, coupled with the precedence of several promoters losing control of key flagship assets in IBC, has indirectly helped to foster financial discipline and bring down default resolution timelines. With early detection of stressed assets and quicker resolution, the economic value gets preserved, leading to lower losses. The default resolution support is developing and is a step in the right direction to improve the appetite of debt capital markets for lower-rated bonds.

4. InvIT benefits include regulatory oversight, transparency, lower leverage, and diversification

The introduction of InvITs has allowed financial investors to participate in management of a portfolio of assets. More importantly InvITs have provided the right avenue for the developers to recycle the capital locked in operational projects. This has resulted in solving the critical gaps of price discovery and liquidity issues faced by developers in offloading operational projects in the past. Also, these structures offer significant value to investors including the retail investors by offering transparency in terms of periodic disclosures and inherently support credit risk profile by way of cap on leverage levels and diversification benefits.

Since its introduction in 2017, the platform has attracted over 18 InvITs with debt of ~Rs 1.8 lakh crore.

Credit risk profiles of AAA or AA make these InvITs amenable to bond market investors.

Over the medium term, assets under management (AUM) of the InvITs is expected to grow by Rs 8 lakh crore, thereby providing attractive investment avenue in debt instruments for long-term, risk-averse investors.

Given the novelty of these vehicles, their debt instruments are currently trading at a higher premium, thereby offering better risk-adjusted returns.

Time for bond investors to re-evaluate risks

To reiterate, it is critical for domestic bond markets to play a more significant role in the infrastructure space, when large global investor funds have upped their game in the segment. Over past five years the total bond issuances have been to the tune of Rs 6-7 lakh crore per annum, of this annual issuance contributed by the infrastructure segment amounts to only ~Rs 1 lakh crore (refer chart 4). To be sure, even within the infrastructure segment PSUs issuances have been in forefront (refer chart 5).

Chart 4: Annual infra bond issuances in lakh crores

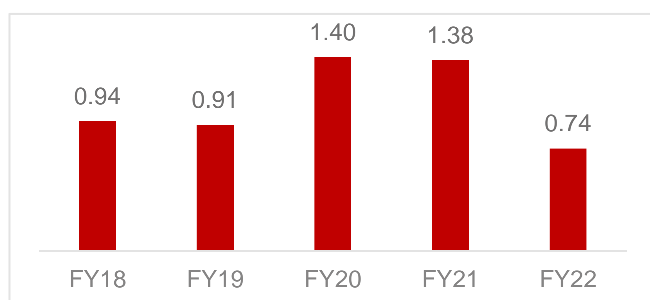
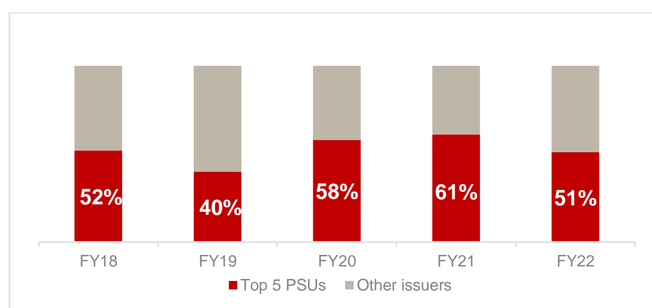


Chart 5: Infra bond issuances – top 5 PSUs Vs other



Source: CRISIL Ratings, Prime database

A re-evaluation of the perceived risk therefore becomes imperative here.

Key investment characteristics sought by bond market investors include long tenure, favourable risk profile, reasonable risk-adjusted returns and better recovery prospects. An evolved infrastructure segment makes it amenable to meet all these expectations and can find a natural ally in bond investors because of:

Long tenure: Patient capital investors contribute 38% to the total corpus of the domestic debt capital market. These investors look for long-term investment options, and infrastructure asset classes can easily provide this as the consession period / asset life is quite long ranging from 15-25 years or more . Besides, mutual funds can also play a key role in infrastructure financing – by investing in shorter tenure bonds, which can be refinanced at maturity on the back of long life of these assets.

Favourable risk profile: Contractual nature of cash flows mostly from strong central counterparties coupled with virtually monopolistic operations ensures high cash flow stability through business cycles matching investor risk appetite. The proportion of AAA and AA rated infra issuers in CRISIL Ratings portfolio formed ~46% of the entire infrastructure portfolio comprising 361 entities in fiscal 2022, against ~22% of 260 entities in fiscal 2017.

Reasonable yield: The yield of infra debt issuances is comparable to that of the corporates. At times, yields are even better due to the novelty of the asset class or the structures such as InvITs.

Better recovery prospects: The loss given default (LGD) tends to be low due to utility nature of these assets, long asset life that allows for restructuring, presence of substitution clauses which allows for change of ownership in case of sponsor distress, and presence of termination payments in PPP projects. This, along with improved platforms for resolution of stressed assets, can ensure limited loss for investors.

Diversification benefits and scale: The investment opportunity in this segment is also expected to be quite large and diversified. The National Infrastructure Pipeline has an outlay of Rs 111 lakh crore investment by 2025. The

National Monetisation Pipeline is planning to recycle government infrastructure assets of about Rs 6 lakh crore by 2025. Many of these will find their way into InvITs and can provide an investment opportunity for bond markets and that too across diverse infra asset classes with varied operational characteristics.

With the imminent merger of HDFC twins, the group is expected to replace capital market borrowings with sticky retail deposits. The NBFC behemoth is one of the largest private sector issuers cornering ~8% of the bond market. After the merger, the bond issuances from the combined entity are expected to trend lower than the erstwhile twins operating as separate entities, creating a supply-side gap.

The resultant void offers the bond market an opportunity to fill. And embracing the infrastructure sector will more than serve the cause.

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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.

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