

# Financial Foresights



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## New and Innovative ways for Infrastructure Financing





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# Contents

<b>1. INDUSTRY INSIGHTS</b>	
■ <b>Innovations to Attract Private Capital in Infrastructure</b> .....	7
<i>Sameer Bhatia, President</i> <i>CRISIL Infrastructure Advisory</i>	
■ <b>Innovative Policy Measures for Accelerating Infrastructure Financing- Risk recognition and management will be key for funding projects</b> .....	10
<i>Saugata Bhattacharya, Senior Vice President</i> <i>Business and Economic Research, Axis Bank</i>	
■ <b>A Strong Corporate Bond Market and Alternate Investment Vehicles can help meet Infrastructure Financing Gap</b> .....	13
<i>Shubham Jain, Vice President &amp; Group-Head</i> <i>Corporate Sector Ratings, ICRA Limited</i>	
■ <b>Alternate Sources of Financing Infrastructure - Exploring Sources other than Banks and Public Sector</b> .....	16
<i>P R Jaishankar, Chief General Manager</i> <i>IIFCL</i>	
■ <b>Asset Based Securitization for Renewable Financing</b> .....	19
<i>Snigdha Kala, Senior Manager</i> <i>Emergent Ventures Limited</i>	
■ <b>Financial Sector - What are the Lessons from the IL&amp;FS Crisis?</b> .....	22
<i>Suneet Maheshwari, Founder &amp; Managing Partner</i> <i>Udvoik Infrastructure Advisor</i>	
■ <b>Infrastructure Financing for State Governments</b> .....	25
<i>Devayan Dey, Director</i> <i>Capital Projects &amp; Infrastructure, PwC</i>	
■ <b>New and Innovative ways for Infrastructure Financing - Some Methods and Deterrents</b> .....	28
<i>R Venkatraman, Senior Director &amp; Head - Infrastructure and Project Finance</i> <i>India Ratings &amp; Research - A Fitch Group Company</i>	
■ <b>Infrastructure Financing in India</b> .....	31
<i>Abizer Diwanji, Head - Financial Services &amp; Restructuring</i> <i>EY</i>	
<b>2. FICCI'S DATA CENTRE</b> .....	37
■ Equity Capital Markets .....	38
■ Mergers & Acquisitions .....	41
■ Debt Capital Markets .....	43
■ Loan Markets .....	45
■ Project Finance .....	47
■ Investment Banking Revenue .....	49
<b>3. FINANCIAL SECTOR ENGAGEMENTS</b> .....	51



The image features four thick, curved brushstrokes arranged in a circular pattern. The top stroke is green, the left one is orange, the bottom one is a lighter orange, and the right one is yellow. The text 'Industry Insights' is centered within the negative space of the brushstrokes.

# Industry Insights



# Innovations to Attract Private Capital in Infrastructure



**Sameer Bhatia**

*President*

*CRISIL Infrastructure Advisory*

India requires about Rs 50 lakh crore of infrastructure investments over the five fiscals through 202 to build out its infrastructure and sustain real GDP growth above 7%, according to CRISIL's calculations. Over the last few years, the Government has been largely financing infrastructure projects with very little private sector participation. Moreover, there is a dearth of development capital in the country with the absence of large and significant development financial institutions, which can take infrastructure project risks. In the recent past, high stress and delinquencies in the infrastructure sector has scarred the balance sheets of both banks and investors, thus affecting fresh investments. It is thus imperative that innovative financing instruments are deployed through non-government channels. These typically match the risk, return and time horizon of various sources of capital to the profiles of underlying infrastructure assets. They create market efficiency by ensuring that investors get the opportunity to take risks for which they are most equipped, and help recycle capital to facilitate further investments. We look at three ways to innovate and find money for the infrastructure build-out:

## 1. Attracting capital by reducing risk through credit guarantee

For trustees of 'patient' capital such as pensions and insurers, infrastructure projects are typically not a great option. That's because they are very credit-risk averse and prevented by regulations and/or internal investment policies from securities rated below the AA category. This is where credit guarantee comes in, and is offered by commercial banks, multilateral agencies, government agencies (state and central) and parent corporations. It provides investors an additional level of comfort on repayment in the event of default. For the issuer, credit enhancement lowers the cost of financing by notching up credit rating.

A case in point is the Rs 451 crore bond issuance by ReNew Power Ventures Pvt. Ltd. in 2015. These were the first credit-enhanced infrastructure bonds in the country, guaranteed by India Infrastructure Finance

Company Ltd (IIFCL). The issuance was to refinance ReNew's debt for its 85 MW wind power project in Maharashtra. IIFCL provided the first-loss partial credit guarantee to the bondholders. IDFC Ltd. was the sole arranger and underwriter to the bonds with a tenor of 18 years. The partial credit guarantee by IIFCL enhanced the credit rating of the bond to 'AA+ (SO)'. The project structure was supported by an unconditional guarantee extended by IIFCL for a value equivalent to more than 26% of the outstanding principal until September 30, 2017, and thereafter 28% of the outstanding principal or Rs 60 crore.

Considering the importance of the guarantee mechanism, there is a need for the government to set up a well-capitalised non-banking finance company (NBFC) to issue credit guarantees for such exposures. However, the current legal framework for banks or NBFCs does not cover entities engaged in the business of providing

guarantees. The proposed guarantee company will require suitable adaptations with respect to stressed asset recognition, provisioning and capital adequacy norms that are aligned with the credit guarantee business. Appropriate guidance in this regard may also be sought from the regulatory framework formulated by the Reserve Bank of India (RBI) for mortgage guarantee companies (not a class of NBFCs) dealing with housing loans. Their business is substantially similar to that of bond guarantee fund/ credit enhancement fund.

## 2. Taking the pooled funding route for urban infrastructure

The availability of finance at state or regional level has always been limited due to high credit risk of the local government. Pooled funding arrangements help local governing bodies of small and medium cities aggregate their financing needs and diversify credit risk, attracting investors and spreading the transaction costs among many borrowers. These arrangements help the urban local bodies raise low cost capital from diversified set of investors, such as multilateral banks and foreign and local capital markets/ funds.

The Tamil Nadu government, with support from the World Bank, took to this route by establishing the Tamil Nadu Urban Development Fund (TNUDF). The fund was set up

as a public-private partnership to channel long-term debt (mostly line of credit from multilateral agencies and financial institutions) for urban infrastructure projects. TNUDF has high-quality loan assets with 100% recovery rates for the past 13 years. The state government also established a Water and Sanitation Pooled Fund (WSPF) as a legally registered trust for the same purpose. The TNUDF and WSPF are managed by an independent entity, Tamil Nadu Urban Development Infrastructure Financial Ltd, which is 51% owned by private sector ICICI Bank and 49% the state government. It is necessary for states to create capacity and encourage the establishment of such institutions that can identify and manage infrastructure assets.

## 3. Monetising operational assets

Infrastructure finance must also evolve to enable recycling of assets in operation. The toll-operate-transfer (ToT) model recently launched by the NHAI, and Infrastructure Investment Trusts (InvITs), apart from securitisation, are excellent options:

### a. ToT

Under this, select operational stretches of national highways constructed by the NHAI or a concessionaire are bundled and bid out to the private sector. The NHAI can securitise the toll receivables by collecting

an upfront concession fee from the bidder. The private party quoting the highest upfront payment will get to collect the toll, operate and maintain the underlying road assets for 30 years from the date of financial closure. This model is expected to help the nodal agency monetise its operating road assets and thus generate growth capital for constructing new roads under the Bharatmala programme.

In March 2018, the first package – ToT Bundle 1 – comprising nine road assets (total length of around 700 km) attracted many bidders' interest. The Macquarie Group won the bid with the highest upfront premium of about Rs 9,680 crore against the NHAI's reserve price of Rs 6,258 crore. The ToT model has so far seen interest from large private equity funds, pension funds and sovereign wealth funds. Upcoming ToT bids are expected to get good response from several long-term players.

### b. InvITs

InvITs are vehicles that hold infrastructure assets, such as operational roads and transmission assets, which have long concession periods and stable cash flows. They can raise funds by listing on the exchanges and issuing units to investors. The sponsor of the assets retain operational control of the assets and divest part of the holding over a period of time to realise the market value and raise significant capital. InvITs help developers

raise capital from a wider investor base, besides helping sponsors time the market for stake dilution. They are hybrid instruments regulated by the Securities and Exchange Board of India (SEBI) and are mandated to pay at least 90% distributable cash flows to investors. Such distributions are to be mandatorily made at least on a half-yearly basis. Owing to their pass-through status, InvIT units offer tax efficient returns and are ideally suited for long-term investors.

So far, three companies have raised funds through the InvIT route – IRB Infrastructure Developers Ltd and L&T Infrastructure Projects Development Company Ltd

in the roads sector and Sterlite Power in the transmission sector. Robust management, strong governance and continuous addition of good quality assets will determine the yields generated, and eventually determine investor interest in this instrument.

**c. Securitisation of receivables**

Given the reluctance of institutional investors to bear the construction risk inherent in the infrastructure sector, securitised papers backed by cash flows of operating infrastructure assets provide another avenue for patient capital. Most infrastructure assets typically bear a rating of not more than ‘BBB-’ and with the absence of a market for

lower-rated securitised papers, it is envisaged that the complete asset pool will require support to improve credit quality.

Credit enhancements such as excess interest spread, cash collateral and guarantee can help improve the credit quality to meet investor expectations. The securitised papers can usher in capital market investors to the infrastructure asset class.

The pillars of innovation in infrastructure financing are appropriate policy and legal frameworks, enforceability of contracts and predictability in execution.

An ecosystem that has it all will also help the government rein in fiscal deficit ■

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# Innovative Policy Measures for Accelerating Infrastructure Financing-

## Risk recognition and management will be key for funding projects



**Saugata Bhattacharya**

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### 1. Financing needs for infrastructure projects in India

The 2017-18 Economic Survey points to the “substantial step up of investment in infrastructure mostly in transportation, energy, communication, housing & sanitation and urban infrastructure sector”. The G20 Global Infrastructure Outlook projects that India will need \$4.5 trillion in infrastructure financing over 2040, of which \$3.9 trillion can be funded with domestic savings”.

Technically, the definition of infrastructure has also diffused, with “social and commercial” segments likely to see increasing demand for projects, with conventional segments like power and telecom requiring less funds and much more in sectors like urban infrastructure. This has implications for financing, since stand-alone commercial viability of these projects is lower and the scope of lending by financial institutions is limited, requiring more government funding. Innovating financing structures

to ease the constraints will be key to effective delivery of these infrastructure services. Moreover, segments other than the conventional segments will provide financing opportunities, eg., constructing energy efficient buildings, minimizing transmission losses, providing cost efficient alternate energy sources to rural India etc.

The first major concerted push into the introduction of private investment away from public began in the early 2000s with a series of policy reforms designed to structure Public Private Partnerships, drawing from international experience and a concerted policy design in India. However, some of these advances were stalled with a policy stasis, and a dilution of the strict commercial concession and contract frameworks progressively put in place. The consequences subsequently emerged.

Debt constraints, fuel supply challenges for power plants, environmental clearances, land acquisition, etc., have held up a large number of projects, which can achieve commissioning

within the short-term.

Infrastructure projects are fraught with disputes that cause inordinate delays due to slow resolution processes. Project implementation is another major concern; on an average, projects suffer from 20 to 25% time and cost over-runs, which rises to as high as 50% per cent in some sub-sectors (source: IBEF).

### 2. Conventional financing sources and emerging challenges

Commercial banks over the past decade (since the earlier Development Finance Institutions morphed into them) have been the dominant source of finance. Even as they are likely to remain a dominant financier, the banking system will only be able to increase its exposure limited by regulatory prudential norms and their own board mandated risk guardrails. Banks are also increasingly reluctant to take on the asset liability mismatch risks, and will have to hand off some of these risks to the contractual savings institutions – insurance, provident funds, etc. with long tenor funds.

Despite sustained and concerted efforts to develop the corporate bond markets as a channel both for raising finance as well as handing off risk, the initiatives have met with limited success. The expanding corpuses of mutual funds are now providing access to the working capital financing necessary for project operation.

Globally, contractual savings institutions are large investors in utilities and operational infrastructure projects which provide the stable cash flows required for matching their payouts. This needs to be replicated in India as well. In the interim, some Infrastructure Investment Trusts (Invits) and Infra Development Funds (IDFs) have begun to invest in roads and some commercial real estate projects. A problem is that prudential practices of these institutions prevent them from investing in projects below a specified credit rating. Most projects, however, are structured as standalone Special Purpose Vehicles (SPVs), which just do not allow the required rating. Credit enhancement is needed for a ratings upgrade, but the design of such an institution is a difficult issue.

In an environment where banks and financial institutions have limited risk appetite for funding private developers of infra projects and developers themselves are struggling to reduce leverage, the role of the Government in maintaining the momentum of project investment becomes very important. The FY19 Union Budget has significantly increased allocations to the infrastructure sector,

allocating Rs 5.97 trillion (\$ 92 billion), including Railways, rural universal household electrification (Saubhagya programme), the Green Energy Corridor Project and telecom infrastructure [Source IBEF]. Public spending is likely to be a catalyst for “crowding in” private sector investment.

A potentially large corpus of funds for bridging the funding gap at competitive interest rates are multilateral agencies and foreign Sovereign Wealth Funds. The role of the National Infrastructure Investment Fund (NIIF) in intermediating these funds is likely to be critical.

### 3. Policy measures to mitigate risk perceptions of potential domestic and foreign investors and create an enabling environment

Infrastructure financing poses significant credit and liquidity risks due to the long-gestation period involved. Infrastructure project financing is largely based on contracts – unlike corporate funding which is mostly collateral based and depends on cash flows which are used for amortizing (interest and principal repayments of) the loans. The Government has taken significant steps to facilitate the operating environment for many projects which were stranded due to pending environment and other clearances, but cash flows in some sectors still remain clogged, mostly due to inadequate or stalled linkages to fuel supply.

#### a. Macroeconomic policies

Macroeconomic stability is

often a basic hygiene factor in infra financing. Given the long term exposure of infra financing, with the need for forecasting growth and inflation assumptions critical for cash flow projections, increased economic and market volatility can have adverse effects on project viability. This is particularly true of foreign currency funding with assumptions on exchange rates used for 10 to 20 year contracts

#### b. Pricing of infrastructure services

User charges for cost recovery will need to become an increasingly important source of cash flows, particularly for the likely rise in urban infrastructure projects. The willingness or ability to pay of the potential user of these facilities either built by the private sector in a public-private partnership or by the public sector itself will determine the viability of projects. There is a need to have an inbuilt mechanism in the pricing contract which provides for a pass-through of input cost rises to the end users. Given the limits of public financing or inordinately high user charges, a balance is needed to ensure that the realizations for the service provider are remunerative and based on commercial considerations.

#### c. Designing markets and concession structures

The flip side of stable and viable pricing of infra services is to optimize (not maximize) competition in the relevant segment. Various auction and design mechanisms have been introduced to increase bidding

in segments like electricity transmission, roads, pipelines, etc., which have characteristics of a natural monopoly, where multiple players are not feasible.

**d. Regulatory and policy incentives**

RBI's prudential guidelines are periodically reviewed to facilitate credit flows. Since July 2014, banks are permitted to issue long-term bonds with a minimum maturity of seven years for lending to long term projects in infrastructure and affordable housing. The bonds are exempted from maintenance of CRR and SLR and from priority sector lending. As noted earlier, takeout financing is an important channel for freeing up banks' balance sheets, thereby releasing funds for fresh lending and augment debt funding. Infrastructure Debt Funds (IDFs) structured as NBFCs were permitted to refinance projects, which are increasingly getting more traction. IDFs structured as trusts (Mutual Funds) are also permitted to allow the investors to take direct risks and exposure.

Regulatory Forbearance for implementing complex

Infrastructure projects permits important flexibility. Unforeseen events can cause delays in the start of commercial operations fixed at the time of financial closure. RBI has allowed certain relaxations to delayed projects within the overall ambit of prudential compliance.

**e. Resolution of stressed assets**

Although the current resolution mechanism through NCLT under the Insolvency and Bankruptcy Code is subsuming most other mechanisms, various restructuring programmes have been implemented progressively, with varying degrees of success. RBI has issued guidelines to encourage sale of stressed assets to Securitisation or Reconstruction Companies (SCs, RCs) They have been encouraged at a stage when the projects are revivable with realizable value, making it a supportive system for stressed asset management with greater emphasis on asset reconstruction rather than asset stripping.

**f. Information disclosure**

The Central Repository of Information on Large Credits (CRILC) for credit is designed to enable banks

to take informed credit decisions. Similarly, for loan securitization, the CERSAI database now permits most financial entities to access information. Data from GST

**4. Conclusion**

When all is said and done, infrastructure financing is all about identifying and recognising risks, allocating them to the specific stakeholder who is best able to mitigate them, and designing appropriate policy and regulatory mechanisms to minimise the impact on investment decisions. Since project finance is largely based on contracts, rather than collateral as in conventional funding, sanctity of contracts, particularly in pricing and taxation, is critical to investor confidence.

India is already a very attractive investment destination for overseas institutional investors, with significant advances in policy measures in the World Bank rankings of Ease of Doing Business Survey. An aggressive follow through of these ongoing policy measures will ensure a continuing pipeline of financing for infrastructure projects. ■

*Views mentioned in the article are author's personal views*

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# A Strong Corporate Bond Market and Alternate Investment Vehicles can help meet Infrastructure Financing Gap



**Shubham Jain**

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Infrastructure projects in India are majorly owned and funded by the Government. However, the Government’s ability to fund these projects is often constrained by its fiscal position. This often limits the pace of infrastructure creation and leads to infrastructure deficit. Hence, other avenues like funding from multilateral agencies and private sector participation are also important for improving the pace of infrastructure development. These avenues provide funding support and bring in higher efficiency

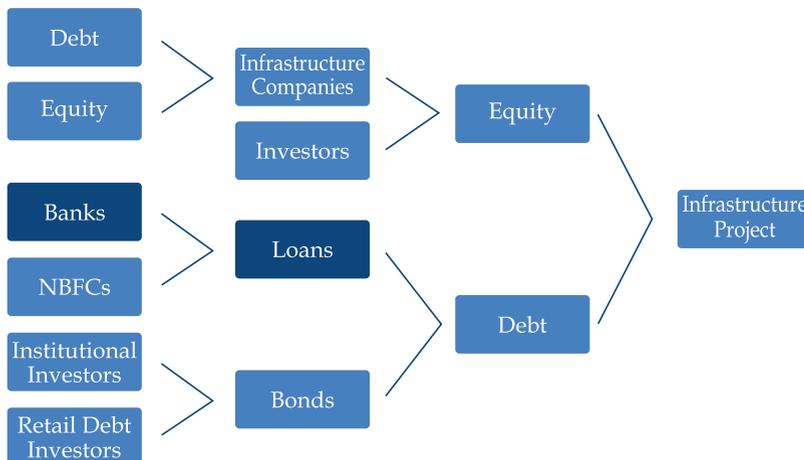
The infrastructure projects undertaken by the private sector or under public-private partnerships

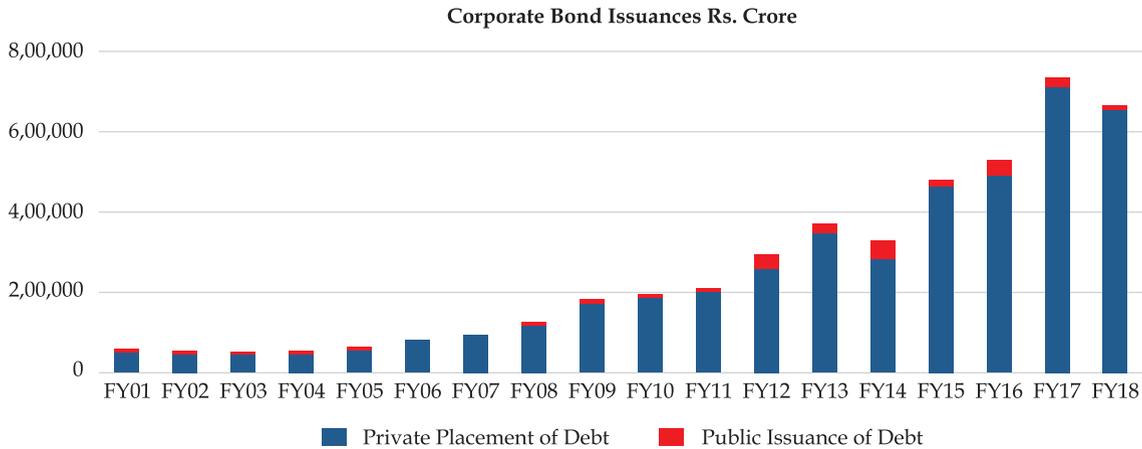
involve a mix of equity and debt funding. The debt is primarily financed by commercial banks and Non-Banking Financial Companies (NBFCs), with limited participation of corporate debt markets. Given the long tenure of the debt required for infrastructure projects and the relatively low maturity profile of their deposit base, banks often face asset-liability mismatches when providing for long-tenure loans for infrastructure projects. Further, with growing infrastructure development projects, the demand for borrowing from the sector has also increased. This has become a constraint for some banks due to

their sectoral exposure norms as well as high non-performing assets in the sector.

Given this backdrop, a strong corporate debt market is very important for the efficient channelling of funds from investors to corporate borrowers. In this regard, the regulators in India have been actively taking steps to support development and strengthen the corporate debt market. These efforts are also visible in the corporate bond market, which has grown at a CAGR of 19% in the last decade, with the amount outstanding for corporate bonds increasing to about Rs. 28 lakh crore at present. Though the overall size of the corporate bond market is lower compared to the outstanding bank credit of Rs. 76 lakh crore, the corporate bond market is expected to grow at a higher pace than banking credit growth, given the conducive environment.

However, it is important to note that while the debt market has grown, it is still dominated by private placements and has limited secondary transactions. These factors constrain liquidity. Further,





Source: Prime database, ICRA research

most of the debt raised in the Indian corporate bond market is by banks and NBFCs or AA or higher rated corporates. Bonds issued by the infrastructure sector have averaged only about 15% of the total issuances in the last five years. Moreover, a major part of the bonds issued by the infrastructure sector is from public-sector entities like NHAI, Power Grid, REC, etc. Thus, the actual bond issuance by private sector players or infrastructure projects remains modest.

Institutional investors with longer investment horizons like pension funds, insurance funds, etc, are more capable of providing long-term funding, as required by infrastructure projects. Further, these investors have sufficient capital that can be deployed in long-term assets. However, risks associated with infrastructure projects often render them lower in investment priority for the pension and insurance funds. Moreover, the prudential norms for pension and insurance funds also restrict their investments to only assets with very high credit ratings (AA and above), as most of the infrastructure projects have relatively lower credit ratings (with almost 75% of the projects rated in BBB or lower categories).

Hence, it is important to support an innovative mechanism that will enable the infrastructure sector to

access the corporate bond market and will also channelise long-term investors to this sector. In addition to the measures taken to improve the overall corporate bond market, some innovative initiatives, like partial credit enhancement through guarantees and the development of a new credit rating scale for the infrastructure sector, have been taken in the past specifically for the infrastructure sector. However, the market response has been muted.

### New credit rating scale for infrastructure

Infrastructure projects, particularly those under implementation, carry high revenue risk concentration, given the single revenue stream, and often have uncertain/volatile cashflow, which results in lower credit ratings on a conventional rating scale based on the probability of default. While projects generate a steady stream of long-term cashflow, post completion and stabilisation, which helps improve their credit profiles, only some projects get a rating high enough to meet the threshold required for investment by insurance and pension funds. To overcome these limitations and to provide broader information on associated risks to prospective investors, a new credit rating system for infrastructure

projects, based on the expected loss approach, was devised. However, the market acceptance of the new rating system has been weak so far.

### Partial credit enhancement of bonds

Another step taken towards improving the credit rating of infrastructure projects is through credit enhancement in the form of a partial guarantee from a strong entity. Under this scheme, banks and financial institutions like IIFCL provide partial credit guarantees to viable infrastructure projects for a pre-determined share of the debt. With this being the first loss default guarantee (FLDG), it will enhance the credit rating of the bonds issued by these infrastructure companies and help them tap the corporate bond market for refinancing existing loans. On this line, a dedicated credit enhancement fund is in the pipeline to provide partial credit guarantees to infrastructure projects.

### Infrastructure debt fund

Infrastructure debt funds (IDFs) are investment vehicles formed as NBFCs or mutual funds for investment in infrastructure projects. They can act as an intermediary between long-term investors and infrastructure projects. While IDFs mostly invest

in the debt or equity of operational projects, the diversification of assets helps in achieving a better credit profile. Regulations for IDFs in India were allowed in 2011 though the traction has been slow. Currently, there are three NBFC-based IDFs and three mutual-fund based IDFs in India.

### Infrastructure Investment Trusts

Infrastructure Investment Trusts (InvITs) are trusts that invest in infrastructure assets, mainly operational projects. InvITs provide a recurring cashflow to investors though the returns are not fixed and depend on the performance of the projects. Hence, InvITs are instruments with characteristics between equity and debt. InvITs represent a tax-efficient vehicle for investors with an appetite for infrastructure projects while earning a regular stream of returns. So far, three InvITs have been able to raise money from investors. The complex nature of these instruments, risks associated with infrastructure projects, and investor expectations of higher yields have been key reasons for lower investor appetite for InvITs.

### National Investment and Infrastructure Fund

National Investment and

Infrastructure Fund (NIIF) is like a sovereign wealth fund dedicated for investment in the infrastructure sector, in which the Government of India (GoI) intends to hold 49% while the rest is to be held by various long-term investors. NIIF aim to attract global long-term investors like sovereign funds, which can invest in Indian infrastructure projects in partnership with the GoI. The planned size of the NIIF is about Rs. 40,000 crore. However, there has been slow progress, so far, in the materialisation of investments by the NIIF.

### Pooling mechanism

The resource pooling mechanism has helped lower project-specific risks significantly in the power transmission sector. Under this model, Power Grid Corporation of India Ltd (PGCIL) collects all the receivables from different power purchasing companies and pays transmission companies proportionately. This helps in the diversification of cashflow streams. On similar lines, for the road and renewable power segments, the pooling of cashflow from a set of projects helps lower the overall risk due to diversification and has helped improve the credit profile as well.

### Concluding remarks

Corporate bonds can act as an important alternative to loans for infrastructure sector funding, while InvITs and the NIIF can help unlock equity capital for infrastructure developers. As the corporate bond market would be catering primarily to the operational projects, it would help in transferring debt from banks to long-term investors, thereby releasing capital for the banks to lend to new projects. Borrowing from banks is expected to remain the main source of finance for greenfield infrastructure projects. However, as banks take higher risks while financing infrastructure projects during their implementation stage, the transfer of debt to the bond market, post the commercialisation of operations when the risks are lower, would not be preferable for many banks unless there is adequate compensation for the risks taken by them. Further, consistent measures to strengthen the corporate bond market by broadening the investor base and improving transparency, along with supporting innovative financing vehicles like InvITs and the NIIF, will help in improving the financing of infrastructure projects and in bridging the infrastructure financing gap. ■

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*Mr. Jain handles a diversified portfolio including large and mid corporates while leading key sectors including Real estate, Construction, Infrastructure (Transportation including Roads, Airports, Metro) and Healthcare. With the help of a team of more than 20 credit analysts spread across branches, he handles a large portfolio of rating cases as well as research responsibility for the above mentioned sectors. He has also been instrumental in guiding various structured rating assignments, including country's first transaction based on IIFCL's partial guarantee scheme, InviT structure ratings and ICRA's first CMBS transaction*

*Mr. Jain has lead the exercise for devising the new rating framework for Infrastructure sector in the country under the aegis of Department of Economic Affairs (MoF). He has also assisted the "Atre Committee" formed by Ministry of Defence to devise the criterion for selection of Strategic Partners from the private sector.*

*A frequent speaker on various industry forums on Real Estate, Construction and Infrastructure sectors, Mr. Jain has also authored several thought provoking articles related to his domain sectors. He is a regular on leading business channels and is widely quoted in print media.*

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# Alternate Sources of Financing Infrastructure - Exploring Sources other than Banks and Public Sector



**P R Jaishankar**

*Chief General Manager*

*IIFCL*

## Need for well-developed Infrastructure in India

India is the seventh largest economy in the world in terms of GDP at current prices and one of the fastest growing economies of the World, as per IMF data. The rapid growth of the Indian economy has brought into focus the state of infrastructure in India. Infrastructure is one of the primary enablers as well as the foundation on which rapid economic growth is based. Investment into infrastructure sector can result in multi-fold benefits since the sector has strong forward and backward linkages with other sectors of the economy. As per a report by McKinsey & Company, one dollar of infrastructure investment can raise GDP by twenty cents in the long run.

## Huge funding requirement and current infrastructure financing model in India

India's infrastructure needs are ever growing in order to support the burgeoning economy and population. As per Budget Speech 2018-19, investment requirement in infrastructure is estimated to be

more than Rs 50 lakh crore over five year period. Similar requirement was projected by CRISIL for the period FY 2018-22.

Historically, infrastructure was financed mainly by the government. However, given the huge funding requirements of the sector, the focus shifted to private sector financing of infrastructure. This led to a spurt in PPP projects, particularly in roads and power sector with over 1500 PPP projects already been undertaken in India so far. Today, India offers one of the world's largest markets for PPPs, as the infrastructure sector matured.

## Existing sources of financing not adequate

Apart from budgetary sources, banks have been the key financiers for infrastructure sector in India. However, they are stepping back from infrastructure financing due to key constraints like **deterioration of asset quality** (as per RBI's Financial Stability Report Jun'18 edition, stressed assets as a percentage of bank credit increased from 19.6% as on Sep 2017 to 22.6% as on Mar 2018), **capital constraints** (increased capital requirement under Basel III – as per Fitch Report, Indian banks

will require around Rs 4.3 lakh Cr in new capital by FYE19 to meet Basel III standards), **asset liability mismatch** (A RBI report mentions that more than three-fourth of banks' deposit and borrowings have maturity of up to 5 years, as against 20-25 years economic life of infrastructure projects), **credit risk** arising from exposure to infrastructure sector. In view of the above issues, funding from banks on a level similar to that witnessed between 2013 and 2015 may not be possible in the future. In fact, banks have already begun to step away from infrastructure financing. Banks' outstanding credit to infrastructure sector has decreased by 8% in last 2 years from Rs. 9.6 lakh crore as at March 2016 to Rs. 8.9 lakh crore as at March 2018. This has led to infrastructure companies increasingly eyeing non-bank sources of financing such as corporate bonds. Pension and insurance funds are also severely constrained by regulations to invest in infrastructure sector. IRDA, PFRDA and CDBT guidelines for Insurance, Pension and Provident Funds require the infrastructure debt securities to be rated at least AA or equivalent to be eligible

for investment. IRDA regulations restrict insurance companies to invest up to 25% of the net worth of the infrastructure SPV, which is very low initially. Hence, there is a need for alternate sources to meet the funding requirements of the sector.

## Private sector financing of Infrastructure

The share of private sector in financing of infrastructure has grown steadily over the years. In 2017, the infrastructure investment stood at USD 137 billion out of which 46% (USD 63 billion) was financed by the private sector.

However, private sector financing is facing many challenges. Balance sheets of major developers are already highly leveraged making further raising of bank loans difficult. Indian corporate bond market is still at nascent stage. While domestic sponsors are incapable of coming up with sufficient equity, overseas investors are more interested in brownfield projects. To augment increased flow of resources from long term investors into infrastructure sector, secondary market can play a key role as an alternative market oriented financing mechanism

## Alternative financing of infrastructure

The huge financing requirement for Infrastructure and the bad debt crisis have highlighted the fact that traditional sources of finance (like banks) need to be complemented with newer sources of finance in order to meet the ever growing financing gap in infrastructure

In response to this need, the financial market has seen the development of a number of innovative financing tools and

mechanisms to act as alternates to bank financing. Some of these market innovations include innovative financing vehicles such as Infrastructure Investment Trusts (InvITs), Alternative Investment Funds (AIFs) and institutions such as National Investment and Infrastructure Fund (NIIF), Infrastructure Debt Funds (IDFs), etc. The alternate sources can broadly be categorized into 'Institutions' and 'Products/ Mechanisms'.

## “Institutional” alternate sources of financ

### Infrastructure Debt Funds (IDFs)

Infrastructure Debt Funds (IDFs) are investment vehicles sponsored by commercial banks and NBFCs in India. Domestic/offshore institutional investors, especially insurance and pension funds can invest through units and bonds issued by the IDFs. IDFs are either run by NBFCs (like ICICI Bank-backed India Infradebt, L&T-owned L&T IDF) or are operated by mutual fund houses (like IIFCL, ILFS).

### Infrastructure Investment Trust (InvITs)

InvITs enable investments into the infrastructure sector by pooling small sums of money from multiple investors. InvITs registered so far in India include GMR Infrastructure Investment Trust, MEP Infrastructure Investment Trust, IRB InvIT Fund etc.

### Alternative Investment Funds (AIFs)

AIFs are privately pooled investment vehicles which collect funds from investors, and invest it in accordance with a defined policy. AIFs help developers unlock

tied-up capital by allowing them to monetise their investments through new class of long term investors (Pension Funds, Private Equity firms etc.). The potential of AIFs can be gauged by the fact that states like Tamil Nadu and Andhra Pradesh have setup AIFs while National Investment and Infrastructure Fund (NIIF) too is an AIF.

### National Investment and Infrastructure Fund (NIIF)

Government of India established NIIF with an aim to attract investments from both domestic and international sources for infrastructure development in commercially viable projects, both greenfield and brownfield including stalled projects. As on date, three funds have been established by the Government under the NIIF platform and registered with SEBI as Category II Alternative Investment Funds.

## “Products” as alternate sources of financ

### Monetization of Assets

Long-term investors (insurance companies and pension funds) and overseas investors (sovereign wealth funds, and FIIs) are more comfortable in investing in operational projects where construction risk is over and revenue-generation has started. Equity in completed infrastructure projects may be divested by offering it to long-term investors, including overseas investors. This model is being successfully followed in many developed countries. NHAI's Toll-Operate-Transfer model aims to monetise some of its existing projects and invests the corpus primarily into roads and highways

projects. Sydney based Macquarie Group won the rights to manage 648 km of national highways by bidding Rs 9,681 Crore in the country's first TOT auction held in March this year.

#### Masala Bonds

Rupee-denominated bonds are issued to offshore investors. Since these bonds are raised in rupee, the issuer of the bonds doesn't have to bear any exchange-rate risk. This allows foreign investors to earn a better yield to compensate for the currency risk they incur. It also provides Indian entities access to overseas capital markets.

#### Bonds

Corporate Bond Market in India lacks the liquidity and depth required to support infrastructure financing. Infrastructure projects have low credit rating (generally BBB level), while bond market in India has appetite for higher rated bonds (AA and above).

#### Credit Enhancement

This is an innovative method to enhance the credit rating of infrastructure projects enabling them to raise funds from capital markets. It enables channelization of long-term funds from insurance companies and pension funds to the infrastructure sector, and frees up banks' capital for financing newer projects. Loan repayments are better matched to project's cash flows. IIFCL has played a key role in the development of this innovative funding mechanism and stimulating the bond markets. During the year 2015-16, IIFCL operationalized the credit enhancement initiative and so far, 3 projects have successfully replaced their bank loans with a total bond issue size of around Rs 1,338 Crore. Till 31st March 2018, IIFCL has provided sanctions to 15 projects with a bond issue size of Rs 8,380

Crore and initial IIFCL guarantee of Rs 2,256 Crore.

#### Credit Enhancement (CE) Company

The Union Budget 2016-17 mentioned of setting up of a dedicated credit enhancement fund for infrastructure sector. In August 2016, IIFCL was brought in to set up the Fund and has been acting as the nodal agency for setting up of the Fund. This is an innovative institutional initiative for infrastructure sector that will result in interplay of multiplier effects for the entire economy. Due to improved viability, profitability and valuation of infrastructure projects, these projects would be able to access the bond market, which would in turn simulate its development. CE Company would aid in de-risking of banking sector and strengthening of its fundamentals. ■

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*P. R. Jaishankar comes with a rich experience of over 28 years in the Development Banking and Financial Sector, wherein he has handled Top Management and Board Level roles, with specialized exposure in Infrastructure, Mortgage and Capital Markets. He is presently serving as CEO IIFCL Projects Ltd (IPL), Chief General Manager, IIFCL, Chairman (Board of Trustee) of IIFCL Asset Management Company Limited (IAMCL) and Director, IFCI Factors Ltd.*

*At IIFCL, he has been looking after Infrastructure Project Finance, Corporate Planning, and Development of Innovative Products such as Take-out Finance, Credit Enhancement. In addition to this, he is also handling Human Resources, CSR, Corporate Communication and MIS departments of the Company. He is leading the initiative of setting up of a dedicated Credit Enhancement Company for the infrastructure sector on behalf of IIFCL, pursuant to an announcement in the Union Budget 2016-17. Under his leadership as MD & CEO of IPL during 2013-14, he led a swift turnaround of the Company in its initial years with a robust year-to-year topline growth, a positive PAT and EPS (increased 3 times). He also led IPL in achieving New Businesses, Expanding Client Base, Strengthening Stakeholder Relationships as well as Building & Developing Institutional Capacities.*

*Before joining IIFCL, he has worked with the National Housing Bank (NHB) for around 23 years during 1989 to 2011. At NHB, he has held various senior level positions including Zonal Manager (South India Zone) with independent charge of 3 Regional Offices in Andhra Pradesh, Tamil Nadu and Karnataka (also covering Kerala State), stationed at Hyderabad. He is well known for having conceptualized and structured the first ever Mortgage Securitization Transaction in India in the year 2000, followed by a number of other innovative instruments/products in the Indian Capital Market such as Takeout Finance, Credit Enhancements, Affordable Housing Finance, Reverse Mortgages (enabled Annuities) etc. He has also been a member of the Advisory Board constituted by the Ministry of Shipping, Government of India to guide policy and implementation of PPP projects in the Ports Sector.*

*Mr. Jaishankar holds a Bachelors' Degree in Civil Engineering from Osmania University, a Masters in Technology from the Indian Institute of Technology, Delhi and an MBA (Finance) from the Faculty of Management Studies (FMS), Delhi University.*

# Asset Based Securitization for Renewable Financing



**Snigdha Kala**

*Senior Manager*

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So far, banks have been the primary source of financing of debt for Renewable Energy (RE) projects in India. As the market evolves, banks are becoming more flexible in structuring debt. They are now comfortable with longer tenor loans, sculpted repayment plans etc.

RE ecosystem has also been improving. For some years India has seen a steady stream of bids for new renewable energy projects and this is expected to continue for the foreseeable future. Key operational risks are being removed, as seen with the improvement plans for transmission and distribution infrastructure. RE assets have rapidly scaled in this environment, and have crossed 70 GW already. A revised ambition of 225 GW capacity by 2022 has been presented which would require investments at the rate of 35 GW or more annually.

Time is ripe for launching new financing instruments that support RE scale up and attract large amounts of capital from new sources, such as pension funds, insurance companies, sovereign wealth funds, asset managers managing large pooled assets etc. which seek large capital

deployment with low-risk. In response, several financing instruments have been proposed, such as Green Bonds, Investment Trusts, Infrastructure Debt Funds, Asset Based Securitization (ABS) etc. Further, risk management instruments such as Performance Insurance, Credit Enhancements, and Guarantee Funds are needed to support financing instruments.

This paper discusses Asset Based Securitization (ABS) as a means of scaling flow of finance to renewable energy assets.

## What is Asset Based Securitization (ABS)

Asset Based Securitization pools cash from several individually illiquid, operating assets, and efficiently distributes it to investors. Its key features include:

- Collateral is the cash-flow generated from long-term contracts for assets.
- Securities are issued by a bankruptcy remote special purpose vehicle (SPV) known as the issuers.
- Cross-collateralization of assets is achieved by pooling several distinct assets

Assets, which underpin ABS, have the following characteristics:

- Long-term contracts like leases, loans, or Power Purchase Agreements (PPA)s, cash-flows from which become the collateral for ABS
- Measurable counterparty risks, which drives risk assessment for the overall asset pool underlying the ABS.
- Other risks such as technical performance, regulatory and contract risks are low for operating assets.

## ABS makes assets attractive for investors by reducing risks and aggregating assets

ABS helps **reduce risks** for investors and allows risk-averse investors to participate in otherwise inaccessible asset classes.

As renewable assets become operational, their risk profile changes for the better by removal of several development risks:

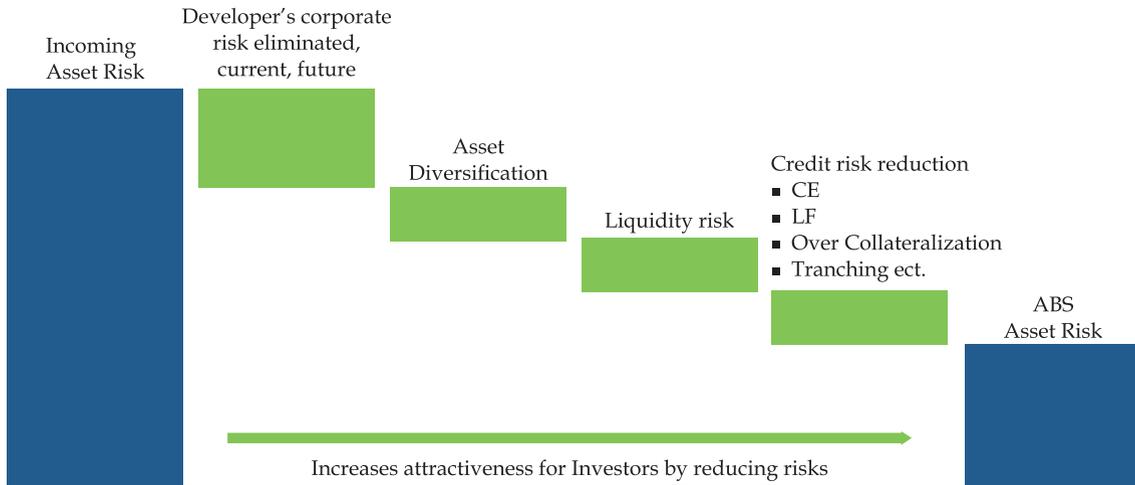
- Land, permitting and evacuation risks, as operational project have already overcome these risks.

- Technical performance risks – because project performance data is available and can be validated.

By pooling cash-flows into bankruptcy remote SPVs, risks associated with a developer’s

business are removed from operational assets. Risks are further diversified by aggregating assets from many technologies, climatic regions, counterparties etc. Additionally, risks can be reduced further by differentially allocating them across different

investor classes by tranching, or by overcollateralization. Lastly risks can also be alleviated by improving liquidity as ABS securities can be traded. The diagram below depicts the risk reduction achieved by ABS for RE assets.



ABS is attractive to asset developers because it releases capital and collaterals for new asset development, improves repayment tenor, reduces interest rate risks (ABS normally has fixed interest rates), accesses new investor classes and improves overall availability of funds for the sector.

Although new to RE assets, ABS has been in use in other asset classes in India and has delivered the benefits cited above. Default rates on ABS instruments have been nil during 2014-2017.

### Typical ABS structure

A number of stakeholders come into play for ABS issuance. The diagram below depicts a typical structure. The SPV structure normally used is a Trust and Pass-Through Certificates are issued as the security. Trust acts as a pass-through vehicle and income is only subject to tax in investor’s hands. SPV can also be

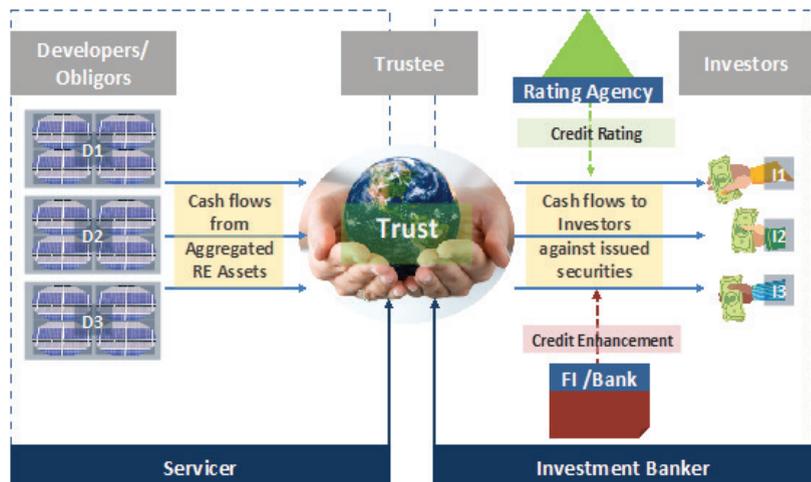
structured under AIF (Alternative Investment Fund)- category I rules, which affords higher flexibility in terms of issuable instruments and contracting.

The Trust is managed by Trustees who govern the Trust and protect investor interests.

Servicer identifies appropriate solar assets, establishes necessary

contractual arrangements between SPVs and developers on one hand and investors on the other. Servicer also monitors asset performance and helps investors enforce contracts in case of defaults.

Investment banker organizes credit rating, credit enhancement (if any) and markets the securities to investors. IIFCL (India Infrastructure Finance



Corporation Ltd), IREDA and other development finance institutions already provide credit enhancement in India. ABS securities require continuous credit rating assessments for providing investors an un-biased assessment of underlying asset quality.

### Credit enhancement through security design

Credit enhancement can also be achieved through security design. The following features can be used:

- Tranching
- Over-Collateralization

By using a cascading structure of priority rights on cash-flows, which is known as tranching, different investors can have different risk exposure from the same asset pool. This is depicted below

Higher rated tranches carry lower yields and higher priority on cash-fl w distribution vis-à-vis lower rated tranches. The priority could be in terms of payment of principle as well as interest.

Pension funds can subscribe to low risk tranches rated > AA+. Asset portfolios that were so far unable to subscribe to lower rated renewable assets, would now be able participate in the appropriate tranche of these assets. This will open up the sector for new investor classes.

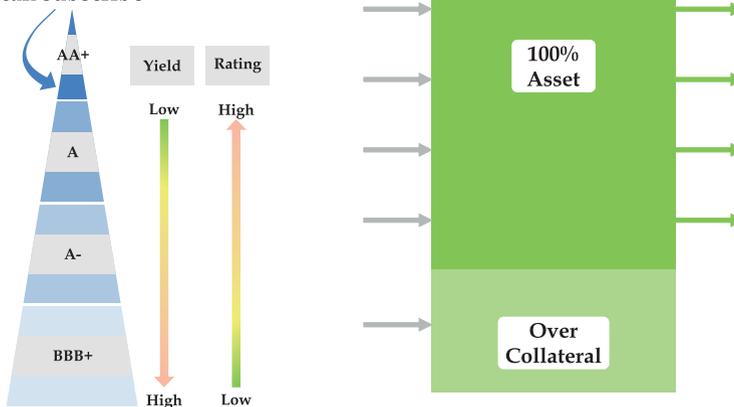
### Credit can also be enhanced using over-collateralization

Under over-collateralization, developers or obligors assign higher level of cash-flows to the SPV and subscribe to the lowest rated securities. This allows a buffer for cash-flows assigned to the financial investors and results in credit enhancement.

## India is ripe for deployment of ABS

India has already deployed 70 GW of renewable energy assets (bulk being less than 5 years old). The sector is expected to reach 225 GW in size by 2022 and its success will depend on how efficiently it accesses capital markets. Renewable energy assets typically have low and assessable risks once operational. ABS structures can provide low risk, liquid securities for large investors who are unable to provide primary debt during development phase but are keen to invest in RE assets. Further through mutual funds, high quality ABS can also open up renewable energy assets for individual investors. ■

Pensions Funds can subscribe



*Snigdha Kala is Senior Manager at EVI She has 6+ years of experience in the sector, with over 3 years of experience in solar development, financial modeling and deals. She has worked on a number of business and development models for solar, along with managing investment deals in her previous roles. Her key Strengths are:*

- 1) *Business Planning and Strategy: Opportunity identification & business modeling, Market entry strategy development, Partnership development, Vendor identification, financial modeling & analysis Cost & price optimization activitie*
- 2) *Financial Management: Investment analysis and deal analysis, Financial modeling, Risk based contract management, Debt Initiation & management at leading banks and FIs, Buying & selling assets (private investors).*

*Snigdha holds an MBA from ISB and a Masters of Science from University of Oxford, UK.*

# Financial Sector – What are the Lessons from the IL&FS Crisis?



**Suneet Maheshwari**

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*Udvik Infrastructure Advisor*

The recent crisis at IL&FS and its consequent impact on the financial markets have raised several questions amongst the different market players, government, regulators, media and the common public. This piece will attempt to list some of them and look for answers.

## 1. What should the Govt do?

The last few years, government has taken several reform steps, viz., GST & Bankruptcy Code which has put the economy somewhat back on recovery but for that we still need to see steady financial markets, which will induce sustainable increase in investments both from within and outside the country. Market environment of rupee fall, stress in banks & financial markets only adds to this challenge. The need at this time would be for the government to take certain steps which are seen as empathetic and decisive. Qn 1 – Could the government have acted faster in the case of IL&FS? Given that the magnitude of the problem was not understood initially and in fact will only now be fully known with the

new board examining these details. But no sooner did the government realise the issue – it moved fast and without anyone in the market realising this till Monday morning i.e 1st October 2018. Personally I think we should be circumspect about how fast government should act – and I believe the government did the right thing in not acting in haste.

- a. However, the government could have added a few domain experts to the board nominees it put on IL&FS.
- b. And the government should, however, push for a review of the entire gamut of regulations and integrated monitoring across RBI, SEBI, IRDA, PFRDA & MCA to ensure that the risks that large systemic holding companies, large conglomerates and NBFCs are well regulated.
- c. With Rs 16000 crores receivable by IL&FS as overdue claims from various projects to government agencies, this could be the significant reason contributing to IL&FS crisis. The most important thing that government can do is to ensure that payment claims by government agencies, whether

central or state, should be done within a specified period of 90 days – may be explore creating a law or a procedure. In cases where arbitration awards have been given the tendency to go to courts should be discouraged by referring to a panel of the administrative ministry, finance ministry and Niti Aayog for such an approval – else the arbitration award should prevail.

## 2. Regulation

Currently the RBI regulatory framework for a Core Investment Company (NBFC) needs to be reviewed. The aggregation of investments, borrowing and guarantees given at the Holdco (CIC) level and their intrinsic worth is inadequately supervised alongwith all the inter-related transactions.

- a. The whole regulation of listed downstream entities with the holdings vested in an unlisted holdco whether it is a CIC or a Trust needs to be reviewed.
- b. The definition of an assisted and/or related company should be revisited and clarified – so that there are no different interpretations across different regulatory regimes.

- c. RBI inspection – Inspections for Core Investment Companies especially for systemically important ones should be made as stringent as for NBFCs & banks. Also RBI should look to augment its capabilities by having external auditors and retaining some retired bank & NBFC employees as a part of its inspection process to enable it to have contemporary market knowledge.

### 3. Liquidity window

With country's economy becoming larger, it's quite obvious that besides banks, the role of NBFCs and mutual funds is also now quite large. Yet the liquidity window is available only to the banks (except during post Bear Sterns & Lehman crisis). It is suggested that MoF very urgently works with RBI that to create a liquidity window for NBFCs and with SEBI to create another liquidity window for Mutual Funds. One will have to also create a similar facility for Insurance sector – should they face a claims pressure of large magnitude due to a large man-made or natural disaster which should not lead them to dump investments in the market and create another crisis. The government alongwith all regulators should do simulation of such systemic crisis triggered by a variety of events to ensure we are ready.

- a. These liquidity windows can initially be operationalised by Govt/RBI & SEBI. And thereafter, in consultation with the industry, suitable replenishments to this liquidity window can be made to make it self-sustaining by having suitable fee on liability side

transactions for NBFCs & a small transaction fee added to the entry load & sale a purchase of units and similarly for insurance policies.

### 4. The liquidity in credit & bond

Markets have completely dried up. Bond markets have been trading AAA paper around 10%. Govt needs to focus on this on a priority basis as this is not only impacting the entire corporate sector but also the SME sector – and will have a direct impact on jobs. This is further aggravated by 11 banks under PCA impacting a large credit flow. Credit flow has to be restarted immediately else this will have tremendous impact on jobs and therefore on the political economy.

- a. MoF should work with RBI on a war footing to get 11 banks off the PCA status. This is hindering credit flow into the market to the tune of Rs 15,000-20,000 crore a month. This can be done by capitalising them and merging 2 or more of them and sequestering the toxic assets in an SPV in the merger process.
- b. In the short term, encouraging the good banks (SBI etc) to open special drives to provide the additional financing needs of some of the SME clients of stressed banks.
- c. RBI to channelize a large amount through SIDBI/SBI/ other banks to activate a large SME refinance window for all the banks – and ensure normal credit flow in SMEs.

This should be structured as a special co-financing fund initiative – with just a 10% exposure to SIDBI/SBI balance sheet. LIC could also be asked to pitch in for this effort through their affiliates IDBI & Corporation Bank

### 5. Rating agencies

Before holding them and the concerned individuals accountable, it would be better to engage with them individually and then as an industry group to evolve a better mechanism to regulate them and introduce a peer review & a sample check system for their rating rationale. We also need to understand if the rating agencies have analysed their mistakes and the corrective actions they are taking to prevent recurrence.

### 6. Create a war room

It is imperative to create a war room of market experts from different parts of the financial system to provide real time practical inputs. This could well be based out of Mumbai – to facilitate ease of meetings (a couple of bankers with both treasury experience, debt market experts, project & infrastructure finance experts, FX treasury experts & financial market economists with representatives from RBI, SEBI, IRDA, PFRDA, SBI & LIC). Situation would have to be monitored and steps may have to be tweaked on a real time basis. All further steps should be taken based on their advice. to be taken based on their advice.

## 7. Corporate Governance

This is one area where the government needs to set an example through its bylaws, FIs & PSUs and parallelly work with leading members of the industry. Nothing will be achieved by going after the independent directors unless a malafide intention is proved. It is very difficult to get good directors and therefore steps should be taken in a carefully calibrated way. There could be a move to create a accrediting agency for appointment of

new directors, which should also provide training and certification service to ensure that they are fully equipped from a knowledge perspective.

## 8. Media

There needs to be single point person on behalf of all Government and regulatory agencies for all information to be given to the media. Multiple contact points could create asynchronous information across different agencies. In the IL&FS case there was a clear misunderstanding that parent

IL&FS is an NBFC where as it is a Core Investment Company and the other that Government has taken over IL&FS instead of superseding the board & the management.

And finally just as the risk of theft & other crime always exists and so does police, similarly the risk of a fraud or a miscalculated decision will always exist due to human greed. But better all-round development of regulation and enforcement alongwith principle centred regulation (as opposed to a rule centred one) will help. ■

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*Suneet is a known infrastructure thought leader and business strategist in India, with over 36 years' experience in project and corporate finance, investment banking and private equity with a focus on infrastructure & large corporates. To his credit, he has successfully nurtured and developed over 8 start-ups and rapid growth situations and much experience in organising & mobilising the right teams in infrastructure finance, private equity, policy advisory & development. He is well networked across the spectrum of the industry and Government at key decision making levels.*

*He has been at the forefront of public policy engagements w.r.t infrastructure reform, PPP initiatives, infrastructure financing and Indian credit markets and has been active on various policy advocacy matters at public fora like FICCI, He continues his advocacy now from the proposed platform Udvik Infrastructure Advisors LLP and has recently given Ministry of Finance with inputs on revival of private financing in infrastructure sectors with specific focus on tackling stressed infrastructure asset*

*Besides being a Science graduate and an MBA, he has also completed Executive Training Programs from Harvard Business School in Restructuring of FIs & Banks and Strategy and Operations Strategy & Management.*

# Infrastructure Financing for State Governments



**Devayan Dey**

*Director, Capital Projects & Infrastructure*

*PwC*

## 1.1. Infrastructure finance and states

The issue of infrastructure financing (both of accessing finance and at a cheaper cost of capital) is more relevant for state governments today. Not only because central government has had fair share of both windfalls and successfully implemented strategies (CRF, ToT, etc), but also because we see significant number of State Megaprojects (highways, expressways, metros, economic corridors, airports, etc) as front-runners today.

## 1.2. 'Need' to drive allocation

Not everyone agrees when it is said capital is available. When talking of public goods, government departments may talk about insufficient budgets and therefore a financing gap. But, more often it may just be inefficiency in either articulation of need or allocation.

Let us take for example, a city trying to solve mobility problem. Different departments trying to solve the same problem may come up with needs of Metro, Elevated Corridor, Ring Roads, BRTS, Fleet expansion, etc. Now the question is which solution(s)

should be implemented. In absence of a decision making tool (e.g. comprehensive transport demand model) coupled with the issue of organizations working in silos; we end up trying to implement all, adding up costs and in the process 'manufacture' a capital inadequacy problem, or at least magnify the gap.

Similar is the case of budgeting. For example, most of the funding sources available for the development of roads are scheme based rather than need based, creating inefficient silos. In recent years, we do see positive action under Finance Commission with the share of general-purpose transfers going up and specific purpose transfers coming down. However, there still exists multiple scheme/organization driven fund silos; efficacy of which needs to be revisited especially when funds remain unutilized. Auditor Generals' office may be the most suitable agency to validate the efficacy around budgeting efficiency, consolidate the learnings on an annual basis, thereby creating a feedback loop.

## 1.3. PPP for efficiency, not new money

Even if the gap is as large as

envisaged, the immediate thought often is of private finance/PPP to plug the gap. The underlying argument in PPPs was supposed to be 'efficiency'. However, the concept has been long hijacked by 'financing gap' argument.

What needs to be understood is PPPs can't create new money. Private sector as well as lenders put in money for some returns, possibly expensive ones. Unless such higher cost is offset by efficiency driven savings, Governments can very well borrow from capital markets and may collect the user-charge/annuity to service payments. One may argue about the limitations posed by FRBM norms and practicality. But then we are going back to being lured by the age old devil of 'off-budget borrowing'.

If the efficiency argument is to be brought back to the frontline, we might actually see significant reduction in 'financing gap'. As of now, there are enough reasons to believe that PPPs have not been tapped into completely for the efficiency that it can offer because :

- We often see projects worth millions of dollars being given hardly 3 months' time to bid, and still hoping to see private sector coming up with

innovations driving efficiency up and price down. Well, private sector doesn't have a magic wand.

- Procurement criteria haven't evolved which is evident from the slow pace of financial closures during last few years (only a third of HAM projects awarded in FY 18 have achieved FC so far). Selecting the right player or enabling the case of pre-financed bids is still a work-in-progress matter. Such false starts only lead to delays as inflation drives up the cost
- Limited investments in R&D from private sector is another constraint. For example, pricing wars today in highways sector is primarily function of two things - access to cheap supply chain (quarries, bitumen, and machineries) and financing cost. Design, construction and maintenance innovations are rare. Similarly, the argument of whole life cycle costing fails when Operation and Maintenance arms (in true sense) still do not exist in most; and SPVs still operate only as the source of construction turnover for the parent.
- Overuse of PPPs have led to a private sector capacity gap - both financial and technical. Today, more than players competing for projects, projects are competing for players. Also as the efficiency drivers are more around local factors, foreign developers have traditionally remained away from Indian PPPs (although we see them participating in South Asian as well as African projects).
- The usual suspects of land acquisition and clearances

remain. Possibly, the message has been directed at the wrong stakeholders so far. For example, efforts from the state revenue department to digitize land records may yield better result in addressing land acquisition. Systemic issues need to be addressed differently than just a mere change in contractual clause.

#### 1.4. Structuring for Stakeholders

Over the last couple of years, the risk sharing narrative has undergone a significant change. For a sustainable infrastructure financing set-up, the projects need to be thought of not only from the Government-Private Sector-lender risk appetite perspective, but also from secondary market investors' perspective. After all, capital has to recycle and for that right asset classes are necessary.

Although counterintuitive, data shows FIIs to be more keen on upside than a low risk/reward profile. Be it for InvIT (which is rather a hybrid debt/equity product) or PEs or FIIs, return expectations remain high. Under the circumstances, models like HAM do not make much sense for such investors as the chances of upside get set during 'unwanted' construction period. On the other hand, pure toll projects may drive away lenders given the experience during last two decades.

Intermediate structures like toll with minimum revenue guarantee along with upside sharing norms may be ideal. It will protect lenders and concessionaire from traffic downside, provide investors with possibility of upside and help government to generate funding. With electronic toll collection picking up, concerns around

misreporting of traffic and revenue is also likely to be less.

Similarly, moving away from solo-linear projects in transportation to network contracts creates the right economies of scale, driving down the price. For stakeholders like concessionaires, the push to invest in in-house O&M arms would also be larger.

#### 1.5. Innovative funding - radical shifts

Until the time the GST regime stabilizes and sees further clarity, we do foresee major hiccups in States' finances. Unfortunately, PPP or even financing instruments (e.g Masala Bond, Green Bond, Co-financing, etc) can only be of short term relief. If overused, states can very well fall in the trap of spiraling up fiscal and revenue deficits and higher financing costs. The most direct answer to combating this is scaling up tax and non-tax revenues.

Charging a cess on an existing tax was the easiest way to ramp up revenues, until many got subsumed under GST. States now have challenges on ideating innovative ways to ramp up revenues. While, ToT kind of models can be replicated in states, the traffic figures on state asset wouldn't always warrant for a sizeable transaction value. In such situations, alternate revenue sources need to be thought of with more rigor. Thankfully, we have good examples of such initiatives across the country.

Let's take asset monetization. School playgrounds are idle assets post school hours and we can see some innovative PPPs around idle-time asset utilization. In roads and highways, the asset beyond the carriageway is mostly idle. Thoughts around monetizing them

as utility corridors also can be seen. Land value capture mechanisms including tax incremental financing (TIF), transfer of development rights (TDR), relaxation of FSI/FARs, betterment levy are some of the mechanisms being aggressively pursued by many. Wayside amenities, EV charging infrastructure integrated with parking models, advertisements are yet other non-farebox revenue models emerging.

While, there are still areas around road tax, registration tax, liquor, fuel cess, etc that States can exploit, there are challenges. For example, items like additional cess on fuel may be off the limits for most states by now. Ramping up other taxes like registration tax may actually lead to migration of new vehicle purchase to neighboring states/UTs, which could boomerang into lower GST collection for the State. Therefore, the efforts into ideating innovative revenue streams by the States will also need careful eyes.

### 1.6. Innovative financing – little tweaks

The funding streams will take time to kickoff. Meanwhile, we need ways to manage short to medium term financing. State Government guarantees come to the rescue of debt instruments quite often. But

there are two negative scenarios typically seen in such schemes – either the government guarantees have been already overused triggering contingent liability threats or fiscal situation is not good enough to command superior credit ratings thereby increasing borrowing costs. In such cases, credit enhancement products like external Guarantees (e.g MIGA’s NHFO, IIFCL’s PCG, ADB’s PCG, etc) can be looked at, should there be a reasonable case of guarantee premium being offset by reduced borrowing cost and the terms being suitable for the State. Similar mechanisms can be explored for PPPs if needed. The appetite of NIIIF, InvITs being engaged in State assets could be explored as well; although that requires strong action on governance, disclosures, institutional capacity, etc.

The need, otherwise, really is of minor tweaks. For example, we still do see payment delays cropping in State based multilateral funded projects. The issue is real and cause is trivial. The multilateral projects generally operate on a reimbursement mode where the Government pays first and then gets it reimbursed from MDB; thereby increasing reliance on State finances. A minor tweak to change

the operation from ‘reimbursement’ format to ‘direct disbursement’ format with some controls may be all that is needed to resolve the payment issue. Such issues need to be identified, studied and tackled on a continuous basis.

### 1.7. Way forward

The infrastructure financing challenge is a bit of both an exaggeration and reality. And dealing with it would need rather incremental and well thought over changes over-time. Without prudence, infrastructure financing in States may hit a roadblock.

The road to financing sustenance is neither simple nor easy. The medium-to-long term opportunities remain around making the process of need articulation and budget allocation efficient, solving systemic issues through the right owners and most importantly, making immediate efforts towards ramping up State revenues. The low hanging fruits however lies in reorienting the process involved in a PPP to unlock efficiency driven value rather than volume, structuring PPPs differently for emerging stakeholders and in favor of efficiency; and making incremental process improvements on a continuous basis. ■

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*Devayan is a Director with PwC’s Capital Projects and Infrastructure Practice. He has worked extensively in the Roads and Highways sector across rather diverse themes including financing, PPPs, contract management, technology and analytics, BPR, road safety, M&A, public finance, etc. His global clientele includes Governments, Developers, Engineering Corporates Multilateral Development Banks, Commercial Banks, Pension Funds and Private Equity.*

*After having worked in engineering & construction space at site and corporate level operations, Devayan spent significant time in research with transaction cost economics as central theme. Presently, he serves as referee to leading international academic journals in engineering management and economics domain.*

*A mobility enthusiast at heart, Devayan is a strong advocate of technology and analytics in future of transport, including opening up avenues for efficiency and financing. Together with his team, he spends significant time today in developing solutions in this space.*

*Devayan holds a Bachelors degree in Civil Engineering from NIT Allahabad and a Post Graduate Degree from University College London, specializing in private finance initiatives.*

# New and Innovative ways for Infrastructure Financing – Some Methods and Deterrents



**R Venkatraman**

*Senior Director & Head - Infrastructure and Project Finance*

*India Ratings & Research – A Fitch Group Company*

## Background

Infrastructure financing, especially in markets like India, is a complex phenomenon. This is because, infrastructure needs longer term debt and a depth in the market; however the Indian market setting, the investor appetite, the investible products available, funding avenues and the regulatory orientation are towards the conventional short to medium term financing which India is used to. Traditionally, the governments have sought financing for infrastructure through budgetary framework of the central and the state government and through public sector banks and the public-private partnership (PPPs) though existed was sporadic and sectoral. Till the dawn of the year 2000; the lending banks generally considered the public infrastructure assets with a government affiliation and therefore the lending to these assets were considered relatively simpler. However, the size and scale of PPPs mounted since the year 2001 and legislations enabled private investments. India is still at an evolving stage in handling these assets from the financing side

and operational perspectives. I am hereby presenting some fragmented and non-cohesive thoughts on the infrastructure financing and impediments for creation of a long term debt market in India.

## Specific issues faced by infrastructure assets in India

Indian lending system is familiar with corporate balance sheet financing as against asset level financing or project financing. The assessment differs in many perspectives, the major ones being, in case of project financing - generally a higher debt gearing relatively, ring-fencing mechanism, a specific and defined economic or a revenue tenure and defined operation and maintenance mechanism. Simply put, these assets need longer term liabilities and a deeper infra-specific debt market, lest a huge asset-liability mismatch may see looming at a broader systemic level.

## Efficient and swift risk transition system imminent

Secondly, in India, the banks are ideally suited to bear construction

risks. However, based on the attractiveness to the project, the operation risks could be transferred to the bond market. The bond market is ideally suited to bear operations related risks. However, there exists an appetite only for very highly rated papers. Not much of a demand for 'A' rating category instruments in the bond market. This skewness in market appetite for higher rating category instruments compresses the ability of the bond markets to go deeper and acts as a deterrent for the smoother transition from the bank loan market to the bond market

## Absence of diversified debt products poses vulnerabilities

Non-availability of debt-product range severely constricts the development of infrastructure debt markets in India. For example, bullet payments, refinancing options are limited and shallow. The longer economic life of the assets reasonably allow for partial amortization with partial bullet repayment structures. The ability and efficiency of bullet structures will have to be determined by the

ability of the asset to refinance after the expiry of the original debt tenor. For capital intensive assets, refinancing is inevitable to balance debt structures. Otherwise it will be an overload on the cash flows to service debt and interest within a particular time period; given the inefficiency in the system – where debt tenor cannot match with the longer economic life of the asset.

### **Huge asset-liability mismatch in infrastructure**

Theoretically, it can be stated that there is no long term debt market in India. Banks are typically working capital lenders although term loans are for a longer period. This is because one of the requirements of project finance is typically introduction of ‘certainty’ and avoid unpredictability to de-risk to the extent possible. But bank loan interest typically reset every year or every two years. Cashflows and debt coverage metrics are very sensitive to even a small change in interest rate because; generally these assets are very highly leveraged. In operating projects where refinancing has happened with top-up loans, the leverage is even higher; thus the coverages are lower and it becomes even more sensitive. Long term development financial institutions – IDBI, IFCI, ICICI and lastly IDFC – typically started their business as long term development financial institutions; which are formed to create bankable assets to the system; can we say; couldn’t sustain in that form to manage its asset-liability mismatch? All that we can say is that typically they don’t exist in the form that they were created. Most

of these institutions had to convert themselves into banks. Perhaps, it can be attributed to the inefficient and shallow debt market and absence of debt products to choose from to tackle their mismatch.

### **Need for an efficient non senior debt market**

Also Indian infrastructure has a very plain debt-equity structure. Absence of junior debt is a material missing component in Infrastructure financing. Junior debt is necessary in a project capital structure for several reasons. Junior/Subordinated debt plays the role of a debt when a project is performing well and acts as equity when a project is facing temporary cash flow impairment. Junior debt is essential to any long term project asset because; over its long economic life; the project could face stress and are subject to economic cycles. Exposing the senior debt holders (since, theoretically the cost of senior debt is tax deductible and hence the net cost is assumed to be lower than the cost of equity and subordinated debt) to such day-to-day operational vulnerabilities will shake the confidence of investors and consequently, the bond market. There are many weak links in the project that could play out adversely at any point in the life cycle of a project. The subordinated debt should be structured in such a way that it protects the senior lenders from such vulnerabilities thereby subjugating itself to a penultimate claimant (equity holder being the ultimate claimant) in the cashflow waterfall mechanism. This is also required to instill a larger confidence in the bond market. A ‘default’ in a

bond market would have serious repercussions on the financing of the asset itself. Therefore it is important for the regulators and for the market as a whole to introduce a good subordinate debt market which is expected to act as a ‘shock-absorber’ or a cushion to handle routine susceptibilities arising out of externalities. The ironical fact is that this is virtually absent in India (at least in the infrastructure space). Junior debt market is also expected to bring down the arbitrage on the cost of funds from various sources to finance infrastructure assets

### **Addressing counterparty risks mandatory**

Counterparty risks weigh heavily on infrastructure projects in India. Timely payments by revenue counterparties and adherence to contractual commitment will determine the efficiency of a debt market. In India counterparties are insensitive to the debt market. A default of an obligation by counterparty will trigger a default on the debt that can have wider ramifications. Investor confidence in the market is materially dependent on counterparties honoring the obligations. Most revenue counterparties in India are government and sub-sovereign entities. At a time when foreign investments in debt and equity are sought; if sub-sovereign entities breach contractual obligations; it will hinder the market and for a similar risk profiles, premiums will be demanded by the investors; which skews the market and create arbitrary arbitrages. One way of addressing the issue is to make the counterparty one of the parties in the bond indentures. For example,

insistence on penal interest on delays on payments for power purchase, penalties for delayed availability payments etc. However the effectiveness lies only with the counterparties and their behavior.

## Regulatory

Regulation plays a major role in developing an efficient debt market. If a market is not fully developed; equally the regulatory atmosphere

is to bear its burden. An enabling atmosphere is necessary for investments to flow into these much capital starved sector. Regulatory and provisioning norms will have to take into account the nature of the asset and their economic life and potential rather than just applying corporate norms to infrastructure assets. It is also the duty of the regulatory and political environment to support the growth

of longer term development financial institutions

## Conclusion

An efficient infrastructure market to develop; must have smoother risk transition systems, diversified product ranges; a longer tenor market – not just bond market – even institutional lending mechanisms and diversified product range. ■

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*Venkat is Senior Director at India Ratings & Research (earlier known as Fitch Ratings India) and heads the ratings and research of Infrastructure Projects, specifically, Energy – coal based thermal power projects, Renewable Energy, Airports, Seaports and Highway projects in India. He has been with the Fitch Group since June 2007.*

*Venkat has an overall experience of a little over 22 years in core finance and treasury, structuring, appraisal and financing of infrastructure projects. Prior to joining Fitch, he worked for the Sub-National Fund jointly managed by the International Finance Corporation (IFC) and the World Bank. There he worked on structuring and financing urban infrastructure projects including environmental infrastructure.*

*Before joining IFC, since mid-1999 Venkat worked on a World Bank funded Tamilnadu Urban Development Project where he was the lead member from the State of Tamilnadu and pioneered the promotion of the first non-recourse municipal bonds and pooled financing structures in India – The Water and Sanitation Pooled Fund. He was a key team member in developing universal municipal banking model and had been heading appraisal and financing of sub-national based infrastructure projects. Besides, he focused on developing credit culture amongst various layers of sub-sovereign entities in India.*

*Venkat is a Bachelor of Commerce from the University of Madras. He is a Chartered Accountant, a Management Accountant and carries a Management graduate (MS) from BITS, Pilani.*

# Infrastructure Financing in India



**Abizer Diwanji**

Head - Financial Services & Restructuring  
EY

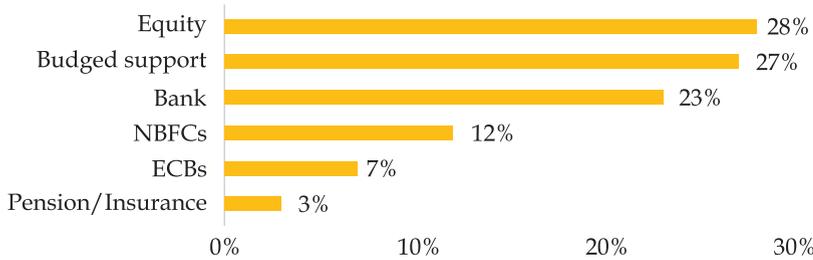
India requires around INR 50 trillion worth of investment in infrastructure by 2022 with over 75% of the funds needed for power, transport and urban infrastructure development. Going by past trends, about 25-30% of the required outlay is expected to be funded through

government's budgetary support and around 25% through sponsor equity. This pegs the infrastructure debt market contribution to around 50% of the balance requirement, which is approximately INR 25 trillion.

## Infrastructure investment trends

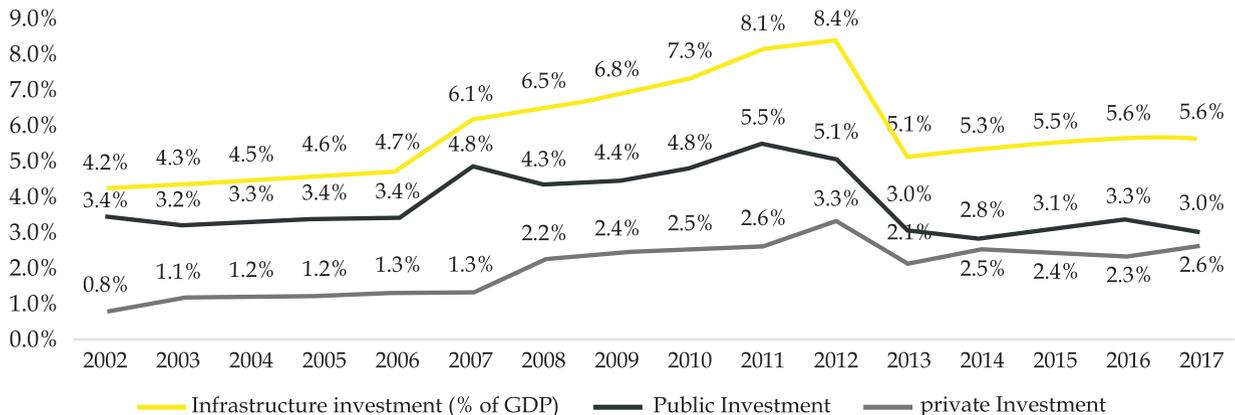
The infrastructure sector witnessed a significant increase in investment from 2007 to 2012, rising from 4.7% of GDP to a peak of 8.4% of GDP in 2012. This was due to a massive jump in private sector investment which boosted the overall investment. However, subsequent to 2012, there was an industry wide slowdown. The authority apparatus failed to provide timely clearances for infrastructure proposals that came up during the boom phase of investments. This led to project delays and stoppages with regulatory hurdles holding up the progress.

Sources of infrastructure financing



Source: 12th Five Year Plan, EY Analysis

Infrastructure in India - investment trend (% of GDP)



Once the slowdown started, negative factors such as political scams and subsequent government policy indecisions further impacted the sector adversely, leading

to defaults and rising NPAs in banks, which started becoming wary of financing infrastructure projects. Consequently, investments

dropped to about 5.1% of GDP in 2013. The investments have marginally risen in last 5 years and were at 5.6% of GDP in 2017.

**Key factors leading to stress in infrastructure sector**

- Delays in land acquisition, environmental and other clearances, leading to time and cost overrun
- Aggressive bidding in projects based on speculative assumptions and setting unrealistic completion timelines also affected project viability
- Awarding contracts and concessions to parties quoting the lowest price (or the highest premium) without ensuring project implementation capabilities
- Uncertainty in policy and regulatory framework related to DDT, availability of section 80-IA, land acquisition, GAAR, coal availability, MAT applicability to foreign companies, GST, others
- Significant delays in payments by government entities, especially by public sector DISCOM
- Delays in resolution of disputes and claims
- Repayment schedules of bank loans not aligned with expected cash flows from the project
- Absence of commensurate long-term financing instrument

**Key initiatives required to reduce government risk in infra projects**

It is essential for the government to simplify project approval processes and introduce measures to promptly resolve project implementation and operational issues in a time-bound manner.

- Major clearances that impact the viability of projects should be available well in advance.
- Set up industry specific quasi-judicial, focused on speedy resolutions to avoid delays in resolution of disputes or claims.
- Objective and speedy compensation mechanism in an equitable manner to make good financial loss suffered by concessionaire as a result of delay in land acquisition/ approvals/ defaults on part of the authority.
- Ensuring independent regulators for all infrastructure sectors so that there is no

inherent conflicts such as in the case of NHAI, which operates in the twin capacity of ‘operator’ and ‘regulator’. This is essential to manage the sector risk perception and avoid any bias in action.

- Incorporating enabling clauses in model concession agreements to permit renegotiation of contracts under unanticipated economic conditions.

**Significance of growing the debt market in India**

The debt market allows the government to mobilise funds for its development activities and helps in efficient allocation of resources in the economy. Government securities play a significant role in internal debt management, monetary policy facilitation and short term liquidity management. The debt market also provides greater funding avenues to public sector and private sector projects and reduces the pressure on bank financing

The size of the Indian debt market was approximately INR 103.5 trillion as on March 31, 2017, with government securities (both Central and State) accounting for more than 70% of the market. Notably, the share of the corporate bonds was around 21% only.

The corporate bonds as a percentage of GDP have grown from around 5% in 2012 to around 17% in 2017. As compared to the USA (115% of GDP), UK (114% of GDP), Japan (68% of GDP) and other major global economies, this level of penetration is still considerably lower.

**Opportune time for deepening the corporate bond market to reduce financing burden on banks**

Conventionally, banks in India have played a pivotal role in providing finance to the infrastructure sector, especially in areas such as power and roads. Additionally, credit has

flown into the infrastructure sector via NBFCs, mutual funds and capital markets, the source of the bulk of which has also been bank finance. Banks support, directly or indirectly, about 50% of the infrastructure financing needs in the country.

However, given the current state of the domestic banks, with weakened balance sheets and focus on clean-up of stressed credit in the system (including losses in infrastructure exposures), the growth of banking advances is likely to remain low in the near to medium term. This provides an opportunity to develop the corporate bond markets to meet the future financing needs of the sector.

A deep bond market is critical for the growth of any economy, and

for India, it's a very appropriate time to take firm steps towards encouraging corporate borrowers to shift away from the traditional bank financing. Taking a step in this direction, SEBI has recently mandated listed companies having outstanding borrowings of over INR 1 billion and a credit rating of AA or more to raise 25% of their incremental borrowings through corporate bonds from April 1, 2019. Such initiatives have to be strengthened further with regulatory and systemic initiatives to build greater confidence among funding institutions and investment bodies to step forward in meeting the financing needs of the bond issuers. Initiatives have to be less of "regulatory-push" and more of "investor-pull" in nature.

The issuer base in India is also limited to AAA and AA rated categories. Widening the issuer base to BBB, BB and even 'Junk' categories will help in deepening the bond markets. However, this will mean taking bold capital account convertibility decisions and opening up the debt market to international investors. Improving liquidity in secondary debt markets will also be essential.

With the required shift in focus towards substitution of bank financing with bonds and other alternative sources, new financing avenues have been introduced in the last few years. These need further encouragement and development going forward to enhance their acceptance among issuers and financiers.

Sr. No.	Financing option	Description
1	Masala bonds	Though the number of issuances have increased slightly within the last year, the constraints for growth in Masala bond financing route remains in the form of minimum average maturity requirement of 5 years, higher premium on account of investor's currency risk on INR, withholding taxes of 5% (this has been waived for FY19 by the government recently) and absence of a liquid INR market with efficient interest and currency hedging options for investors.
2	Partial Credit Enhancement ('PCE')	In order to encourage bond financing and enable long-term fund providers such as insurance and pension funds to invest in corporate bonds issued for infrastructure projects, Indian banks and government owned entities are permitted to extend PCE to enhance credit rating of corporate bonds. The regulations with regard to additional provisioning required by banks while providing First Loss Guarantee for PCE-backed bonds and a prudent waterfall mechanism on default, among PCE lenders and the bondholders can be developed to improve the acceptance of the PCE financing route among banks and investors.
3	Infrastructure Debt Funds ('IDFs')	IDFs are investment vehicles which can be sponsored by commercial banks and NBFCs in India in which domestic/offshore institutional investors, especially insurance and pension funds can invest through units and bonds issued by the IDFs. They were introduced with the objective of refinancing of existing debt of infrastructure companies to create fresh headroom for banks to lend to fresh infrastructure projects. With economic growth, IDFs should be an active financing route moving forward provided they create capabilities through specialist asset managers who are experts in understanding the specific challenges in the sector and manage risks accordingly.

Sr. No.	Financing option	Description
4	Infrastructure Investment Trust (InvITs)	InvITs function by pooling multiple projects under a single trust. InvITs enable wider and long-term re-finance for existing infrastructure projects and freeing up of current developer's capital for reinvestment into new infrastructure projects. InvITs can have long-term maturities, similar to that of government securities. InvITs are increasingly being looked at investments that distribute returns in the form of dividends, interest and buybacks in addition to market price gains over a period.
5	Hybrid Annuity Model (HAM)	The HAM model formulates sharing of risks between developers and the Government with the financing risk jointly shared between the two, enabling a lower debt burden on the project and improving project returns. HAM contracts from NHAI have increased exponentially from less than 10% of awards in FY16 to nearly 50% in FY18, representing a growth in the order award value from INR 70 billion to INR 765 billion in less than three years. Going forward, HAM is expected to be the preferred model for NHAI as well as well-rated developers who are likely to cautiously bid for projects keeping in view political risks and rising interest rates.
6	Green bonds	India has an ambitious target of building 175 gigawatt of renewable energy capacity by 2022 and this requires a massive funding to the extent of US\$200 billion. Green bonds were introduced supplement the renewable sector funding avenues by enabling investments by insurance and pension funds in India to channelize the long-term funds available with them. The potential investors rely more on the issuer strength than the project metrics, seeking a rating of AA- or more. The bonds also entail a higher initial cost of issuance, ongoing charges, stricter compliances in terms of additional disclosures, monitoring of the utilization of funds, reporting, etc. Green bonds by Indian corporate has diversified the investor base for bond issuances and have demonstrated the potential to attract foreign investors that are committed to back projects that enable sustainable development.

## Conclusion

Historically, the banks and the government have been the major sources of funding infrastructure projects in India. Given the need to meet the investment levels to maintain sustainable development of the economy and the weakened position of banks in India at present, the government alone cannot fund the entire infrastructure needs, with all its prevailing fiscal constraints. Therefore, it will be essential for the private sector to tie-up with the government and step-up its investments in infrastructure.

The required significance of increasing private sector partnerships and investment,

presents an ideal opportunity for introducing new and improving the existing alternative financing options. For expanding the corporate bond market, banks' support through the PCE route will also be required. For the private sector to contribute higher, government and the regulators have to keep on improving the efficiency of financial markets and implement better, stable and clear policies with regard to project development.

**Brief case study: Mobilization of development funds from healthy operating projects in government sector, a key alternative to raise finance and**

## reduce dependencies on government support

Given the fiscal limitations of state governments and dearth of resources to meet all requirements, the states often find it challenging to support the financing requirements of new infrastructure projects. More often than not, they are compelled to prioritise projects and phase their development one after the other, depending on the need and purpose. This results in deferred implementation of projects resulting in the required infrastructure development happening over an elongated period of time.

For India to achieve the desired growth rate over the next couple

of decades, simultaneous and expeditious execution of key infrastructure projects will be necessary. For this to happen, mobilization of additional resources by the government sector is imperative. Government bodies and corporates should identify existing and operating assets that can be monetized or leveraged to raise additional resources that can meet the financing requirement for new projects and reduce dependencies on state budgets and resources.

This approach has worked successfully recently for a state owned corporate which is engaged in development of road projects in the state. The corporate has road projects which are generating toll revenues and have a sound track record of operations. It requires funds to implement few large critical projects in near future, all of which are necessary to improve the state connectivity and ease traffic

Though wholly-owned by the state, the government's fiscal constraints restricted it from financially supporting all of these

projects. To add to its challenges, the corporate's balance sheet was over-leveraged with large NCD redemptions due in next 2-3 years and majority of its projects were securitized to third parties during the near term, which meant there were no cash flows from these projects to the corporate for some amount of time in the near future. The NPA problem in the banking system and current liquidity scenario further constrained its ability to raise funds.

Given the situation, the corporate had to identify its marquee existing projects and develop a financing plan to mobilise funds for its new projects. Each key operating project was carved out into a wholly-owned subsidiary (WOS) to raise funds through the securitization of the future toll receivables from the respective projects. For each project, the rights to collect toll were transferred to the WOS by the corporate through a model concession agreement route to provide necessary comfort and

security to lenders / investors. The key was to develop and structure the WOS model in a manner to enable ring-fencing and trapping of the future cash flows from the project. Various additional conditions related to ring-fencing the security, providing sufficient DSRA, cash sweep, termination rights, etc. were thoughtfully put to enable the operating WOS to be well-rated.

The above approach helped the corporate to capitalize on the proven performance of its operating project and its balance concession period. This also lowered the leverage on the balance sheet of the corporate. With the above structure in place, the project WOS had the flexibility to raise the securitization debt in a variety of forms including a domestic bond/NCD, Masala Bond, FPI route or term loans from banks. Depending on the amount of funds required for other new projects, the corporate also has the flexibility between part and full monetisation of such WOS. ■

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*Abizer has been working with the Indian banking and non-banking financial services companies, Insurance companies, Asset reconstruction firms and investment funds for over two decades. He is very active in financial services sector, distressed debt and special situations, fund raising and Financial services M&A.*

*Abizer has been a thought leader in Banking and Distressed Asset space, having been part of various think-tanks on critical issues as well as a speaker on financial markets, Restructuring, Insolvency & Bankruptcy, ARCs and financial services in various discussions and seminars.*

*During his career, Abizer has been involved in approximately 100 private equity transactions on the transactions support side in Financial Services, IT, BPO, Pharma and Oil and Gas. He has extensive experience in assisting buyers and sellers of businesses in evaluating the risks and opportunities of their intended transactions.*

*Prior to EY, Abizer has been with KPMG India for 15 years and ended his journey with the firm as Head of Financial Services.*

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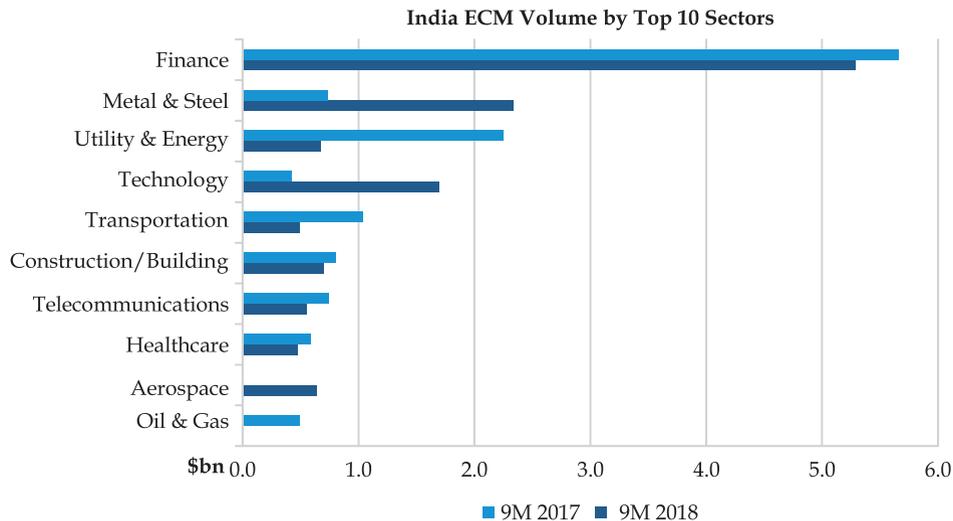
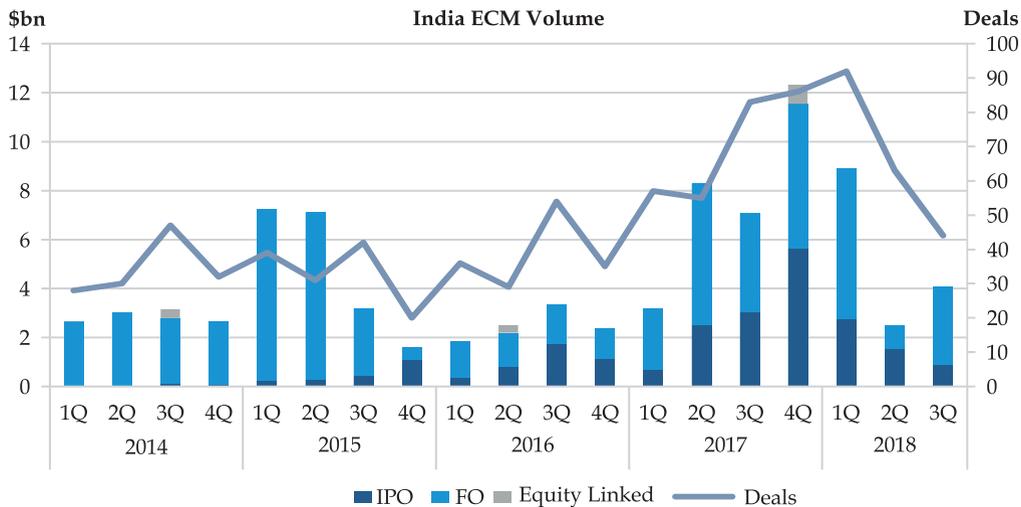


FICCI – Data Centre

# Equity Capital Markets

- **Indian ECM** volume stood at \$15.5bn (via 199 deals) for 9M 2018, down 17% on the \$18.5bn (via 195 deals) raised in 9M 2017
- **IPO** volume decreased 17% to \$5.2bn (via 140 deals) for 9M 2018, compared to \$6.2bn (via 131 deals) for 9M 2017. There were no convertibles issued for the first nine months of 2018 and 2017
- **Follow-on** volume for 9M 2018 decreased 16% to \$10.3bn (via 59 deals) from the \$12.3bn (via 64 deals) for 9M 2017
- **HDFC Banks's** \$1.8bn follow on via book runners **BAML, CS, JPM, MS, BNPP, GS, Nomura and UBS** is the largest ECM transaction for 9M 2018

In association with



Top 10 ECM Deals - 9M 2018					
Date	Issuer	Sector	Deal Type	Deal Value(\$m)	Bookrunners
31-Jul	HDFC Bank	Finance	FO	1,820	BAML, CS, JPM, MS,BNP,GS, NOM, UBS
12-Mar	TCS	Technology	FO	1,383	MS, CITI
14-Mar	Tata Steel Ltd	Metal & Steel	FO	1,221	AXIS, ICICI, KOTAK, SBI
14-Mar	Tata Steel Ltd	Metal & Steel	FO	736	AXIS, ICICI, KOTAK, SBI
20-Mar	Bandhan Bank Ltd	Finance	IPO	686	KOTAK, AXIS, GS, JM Financial, JPM
21-Mar	Hindustan Aeronautics	Aerospace	IPO	635	SBI, AXIS
15-Feb	Idea Cellular Ltd	Telecommunications	FO	546	BAML, CITI
26-Mar	ICICI Securities Ltd	Finance	IPO	540	BAML, CITI, CITIC, Edelweiss, IIFL, SBI
4-May	IndInfraVIT Trust	Transportation	IPO	472	ICICI, CITI
30-Jul	HDFC Asset Mgmt	Finance	IPO	408	KOTAK, AXIS, BAML, CITI, CITIC, HDFC, ICICI, JM Financial, JPM, MS, NOM

Asia Pacific ECM Volume by Nation 9M 2018				
Pos.	Nationality	Deal Value (\$m)	No.	% Share
1	China	128,120	441	56.5
2	Japan	27,477	192	12.1
3	Australia	18,493	545	8.2
4	India	15,455	199	6.8
5	South Korea	13,279	111	5.9
6	Singapore	4,149	62	1.8
7	Taiwan	3,996	127	1.8
8	Hong Kong	3,849	158	1.7
9	Vietnam	3,106	6	1.4
10	Thailand	2,818	17	1.2

India ECM Volume 9M 2018				
Pos.	Bookrunner Parent	Deal Value (\$m)	No.	% Share
1	Citi	2,156	16	14.0
2	Axis Bank	1,436	17	9.3
3	Kotak Mahindra Bank Ltd	1,368	14	8.9
4	ICICI Bank	1,268	13	8.2
5	Morgan Stanley	1,223	7	7.9
6	State Bank of India	1,209	13	7.8
7	Bank of America Merrill Lynch	675	5	4.4
8	JM Financial Ltd	625	12	4.0
9	JPMorgan	564	6	3.7
10	Credit Suisse	498	7	3.2

## India FO and Conv. Volume 9M 2018

Pos.	Bookrunner Parent	Deal Value (\$m)	No.	% Share
1	Citi	1,644	11	16.0
2	Morgan Stanley	1,134	5	11.1
3	Kotak Mahindra Bank Ltd	883	6	8.6
4	Axis Bank	861	11	8.4
5	ICICI Bank	821	6	8.0
6	State Bank of India	621	5	6.1
7	Bank of America Merrill Lynch	551	3	5.4
8	Fortune Financial Services (India)	448	7	4.4
9	Credit Suisse	386	5	3.8
10	JPMorgan	353	3	3.4

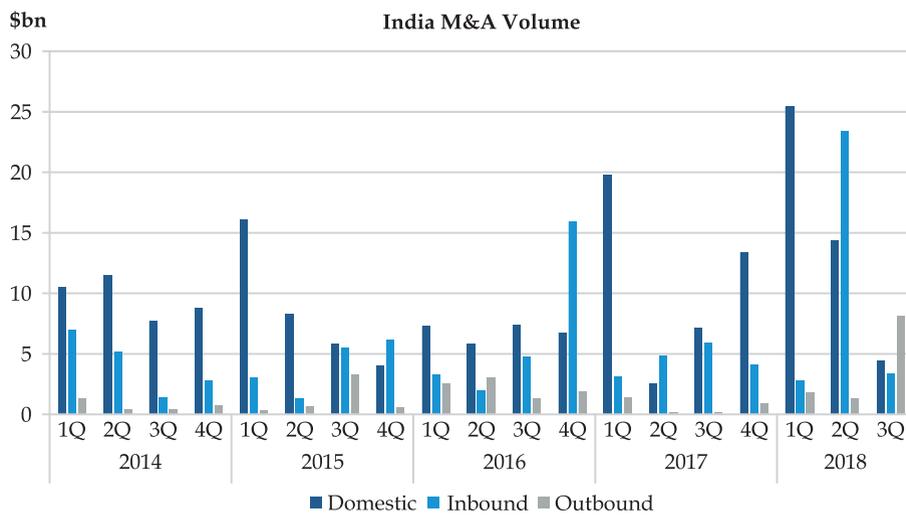
## India Block Trade Volume 9M 2018

Pos.	Bookrunner Parent	Deal Value (\$m)	No.	% Share
1	Citi	1,644	11	21.5
2	Morgan Stanley	1,134	5	14.9
3	Bank of America Merrill Lynch	551	3	7.2
4	Fortune Financial Services (India)	448	7	5.9
5	Credit Suisse	386	5	5.1
6	JPMorgan	353	3	4.6
7	ICICI Bank	332	4	4.3
8	JM Financial Ltd	280	6	3.7
9	Goldman Sachs	271	2	3.6
10	Edelweiss Financial Services Ltd	261	6	3.4

Note: 9M = First nine months

# Mergers & Acquisitions

- **India** ranked as the fourth targeted nation in **Asia Pacific region** for 9M 2018 with \$75.5bn, up considerably on the \$46.2bn announced for 9M 2017
- India **Outbound M&A** volume up considerably to \$11.4bn for 9M 2018 compared to \$1.8bn for 9M 2017
- India **Inbound M&A** volume up drastically to \$29.6bn for 9M 2018 from the \$13.9bn for 9M 2017
- **Domestic M&A** volume up 50% to \$44.4bn for 9M 2018, compared with \$29.5bn for 9M 2017
- **Walmart INC's**, 77.0% stake in **Flipkart Ltd.** in a \$16.0bn valued transaction is the largest announced M&A transaction for 9M 2018



## India Announced M&A Advisory Ranking 9M 2018

Pos.	Advisor	Value \$m	# Deals	% Share
1	JPMorgan	26,501	7	35.9
2	Goldman Sachs	25,193	6	34.1
3	Barclays	17,750	6	24.0
4	Citi	7,813	7	10.6
5	Morgan Stanley	4,970	2	6.7
6	Bank of America Merrill Lynch	4,918	3	6.7
7	State Bank of India	4,235	3	5.7
8	Raine Group LLC	3,089	2	4.2
9	Credit Suisse	3,059	8	4.1
10	Kotak Mahindra Bank Ltd	1,932	5	2.6

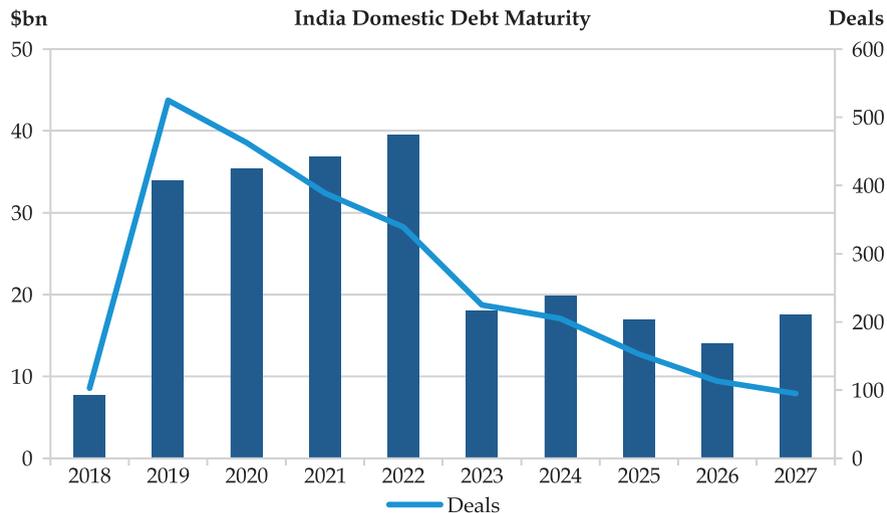
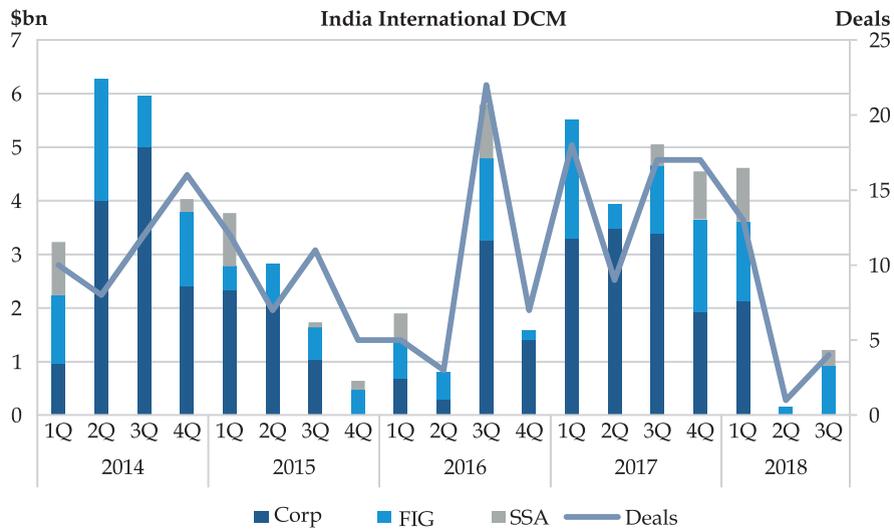
## India Announced M&amp;A Attorney Ranking 9M 2018

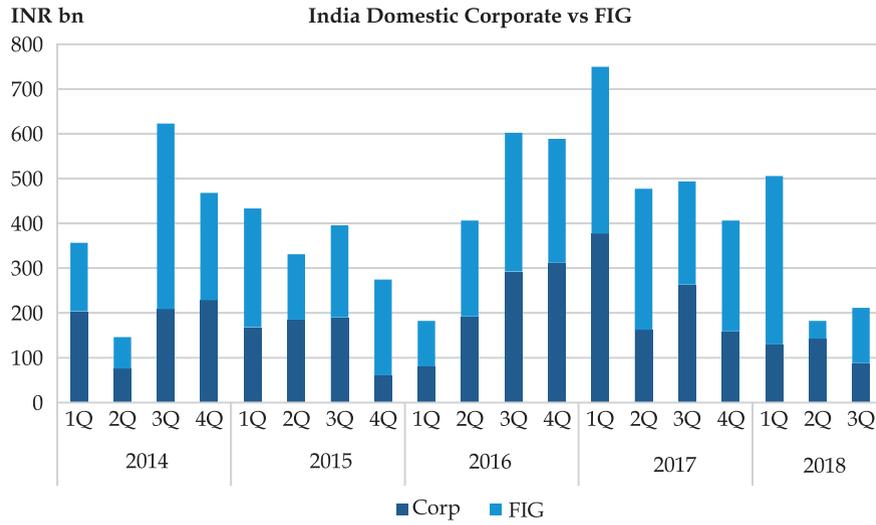
Pos.	Attorney	Value \$m	# Deals	% Share
1	AZB & Partners	24,668	46	33.4
2	Cyril Amarchand Mangaldas	22,145	9	30.0
3	Shardul Amarchand Mangaldas & Co	21,315	8	28.8
4	Khaitan & Co	19,398	8	26.2
5	Allen & Gledhill LLP	17,017	2	23.0
6	Gunderson Dettmer Stough Villeneuve	16,794	2	22.7
7	Dentons	16,000	1	21.6
7	Hogan Lovells	16,000	1	21.6
7	Gibson Dunn & Crutcher	16,000	1	21.6
7	Allen & Overy LLP	16,000	1	21.6

Note: 9M = First nine months

# Debt Capital Markets

- **India DCM** issuance for 9M 2018 reached \$26.3bn (via 257 deals), down 48% on the \$50.1bn (via 436 deals) raised in 9M 2017
- **Corporate IG** and **Agency** bonds accounted for 58% and 29% of the total DCM volume with \$15.2bn and \$7.6bn, respectively for 9M 2018
  - **Tata Sons Ltd.** led the offshore issuer table for 9M 2018 with a 21.7% share, while **NABARD** topped the domestic issuer ranking with a 20.5% share
- **India Domestic DCM** volume reached INR1.34tr for 9M 2018, down 42% on the INR2.31tr raised in 9M 2017. Activity decreased to 239 deals during 9M 2018 from the 392 recorded for 9M 2017
- **International** issuance for 9M 2018 reached \$6.0bn, compared with 9M 2017 volume of \$14.5bn. Activity decreased to 18 deals versus 44 deals for 9M 2017

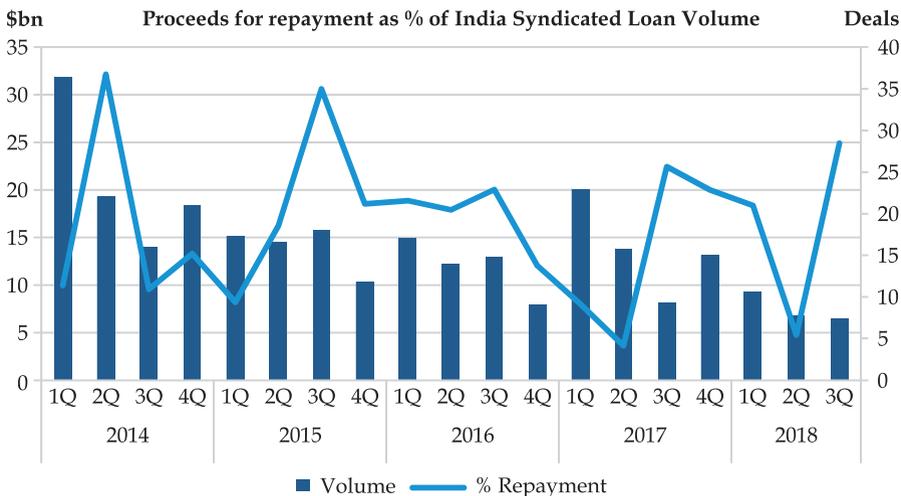
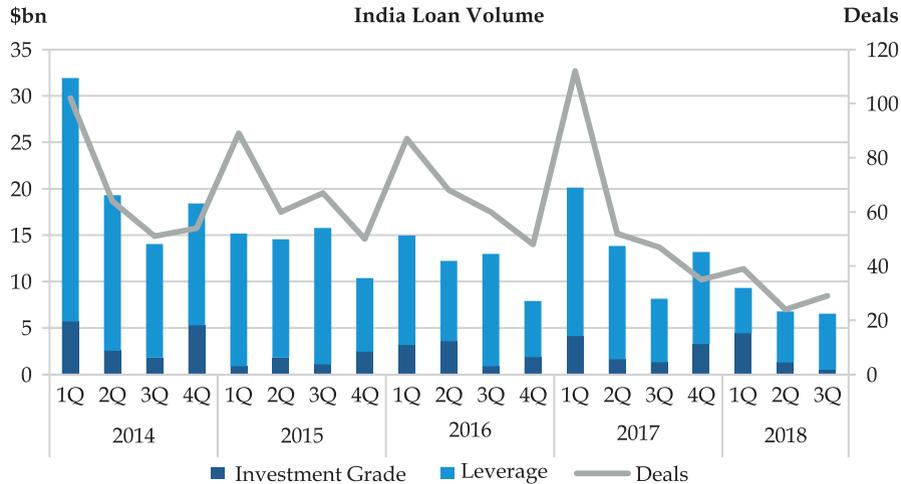


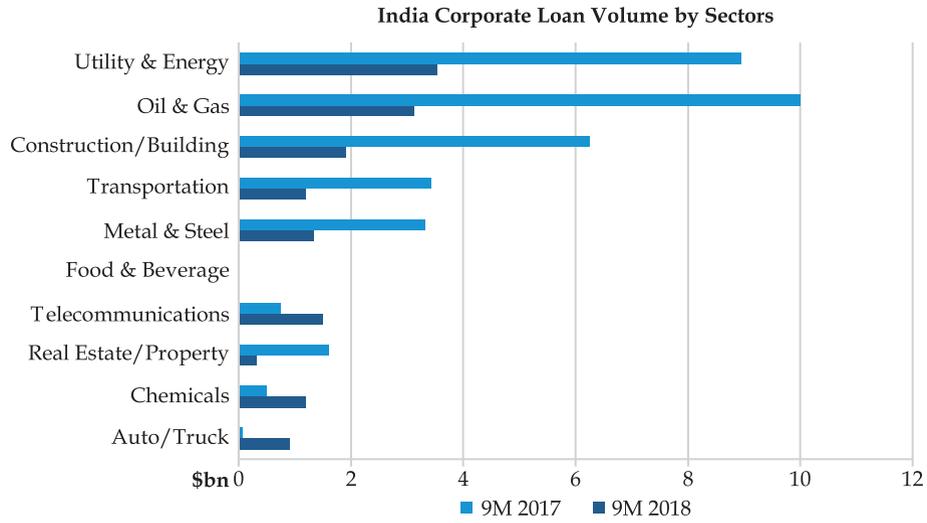


Note: 9M = First nine months

# Loan Markets

- **India loan** volume fell drastically to \$22.6bn (via 92 deals) for 9M 2018 compared to the \$42.1bn (via 211 deals) for 9M 2017
- **Leveraged** loan volume was down to \$16.4bn via 78 deals, compared to \$35.1bn (via 195 deals) for 9M 2017
- **Investment grade** loan volume was down to \$6.2bn (via 14 deals) versus \$7.0bn (via 16 deals) for 9M 2017
- Among the corporate borrowers, **Utility & Energy** sector topped the industry ranking for 9M 2018 (\$3.5bn) with a 20.8% share
- **ONGC's** \$1.7bn **investment grade** deal arranged by **IDBI Capital** is the largest transaction for 9M 2018





Note: 9M = First nine months

# Project Finance

## India Project Finance Loans Ranking 9M 2018

Pos.	Mandated Lead Arranger	Value \$m	# Deals	% Share
1	State Bank of India	1,529	9	23.7
2	Yes Bank Ltd	1,503	4	23.3
3	Axis Bank Ltd	1,172	8	18.1
4	ICICI Bank Ltd	462	8	7.2
5	IndusInd Bank Ltd	253	2	3.9
6	Power Finance Corp Ltd	211	4	3.3
7	Bajaj Consultants Pvt Ltd	159	1	2.5
8	IBRD-World Bank	146	1	2.3
9	HDFC Bank Ltd	137	4	2.1
10	Punjab National Bank	99	1	1.5

## India Sponsor Ranking for Project Finance 9M 2018

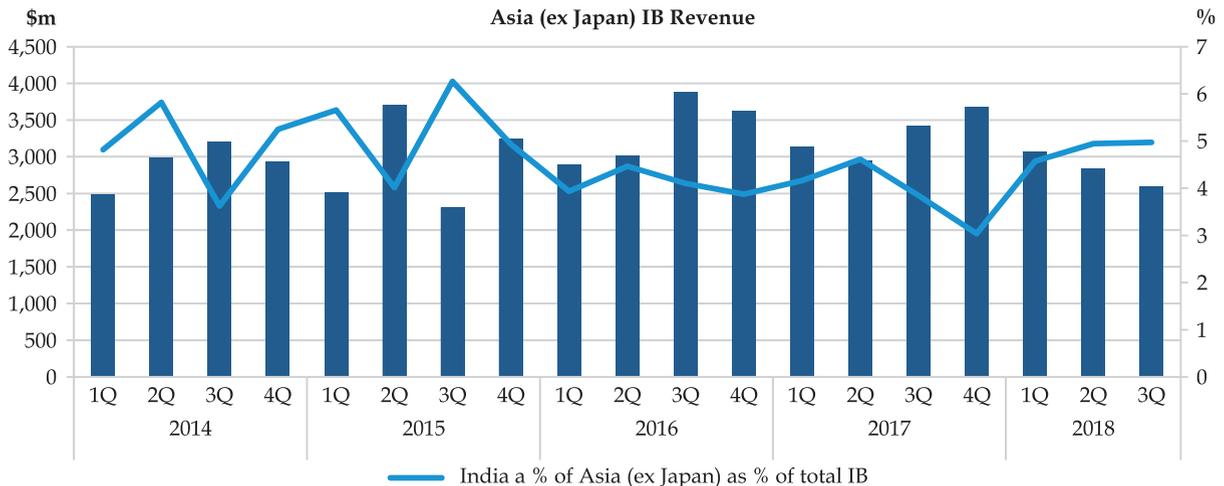
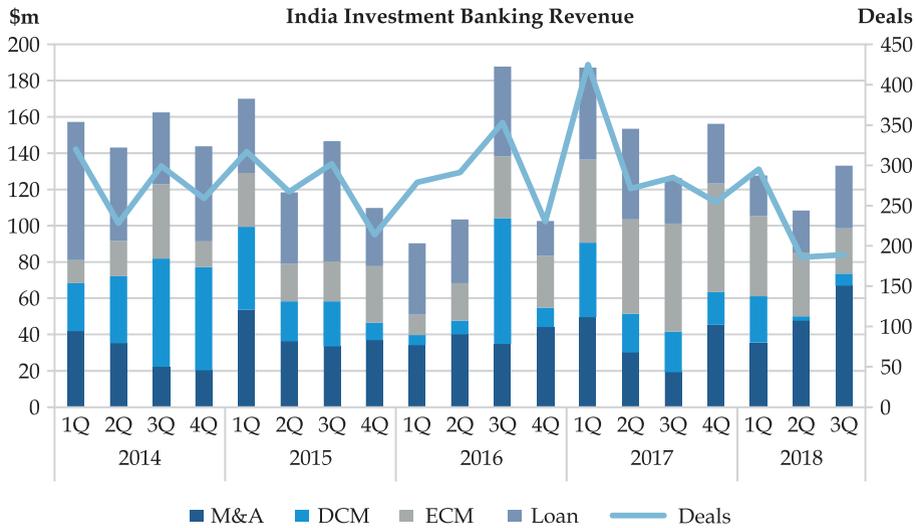
Pos.	Sponsor	Value \$m	# Deals	% Share
1	Macquarie Group Ltd-MGL	874	1	11.4
2	JSW Steel Ltd	698	1	9.1
3	Essel Group	543	2	7.1
4	JSW Group	447	2	5.8
5	Volcan Investments Ltd	437	1	5.7
6	Shapoorji Pallonji & Corp Ltd	294	1	3.8
7	Birla Corp Ltd	266	1	3.5
8	Parampujya Solar Energy Pvt Ltd	250	1	3.3
9	H-Energy Renewables Pvt Ltd	231	1	3.0
10	Sadbhav Engineering Ltd	199	2	2.6

Top 10 Indian Project Finance Deals 9M 2018				
Financial Close Date	Borrower	Project Name	Sector	Value \$m
22-Aug	Puintola Tollway Pvt Ltd	TOT Macquarie Highway Project Andhra, Oriya, Gujarat	Road	874
31-Aug	JSW Steel Ltd	Dolvi Steel Plant Expansion	Steel mill	698
9-Jul	Vedanta Ltd	Vedanta Aluminium Lanjigarh and Jharsuguda Refinancing 2018	Power	437
26-Mar	Warora-Kurnool Transmission Ltd	Warora-Kurnool Switchable Line Reactors PPP	Power	429
2-Jan	Shapoorji Pallonji Pandoh Takoli Pvt Ltd	Four Laning of Pandoh-Takoli Highway	Road	294
23-Jan	JSW Jaigarh Port Ltd	Jaigarh Port Expansion Refinancing	Port	279
1-Mar	Haridaspur Paradip Railway Co Ltd	Haradispur-Paradip Railway PPP Additonal Financing	Rail-Infrastructure	270
15-Jan	Reliance Cement Co Pvt Ltd	Reliance Cement Plant Refinancing II	Processing plant	266
12-Feb	Wardha Power Co Pvt Ltd	Adani 350MW Solar PV Project in Karnataka	Renewable fuel	250
28-Mar	H-Energy Pvt Ltd	H-Energy FSRU-based LNG Storage & Regasification Facility	Oil Refinery/LNG and LPG Plants	231

Note: 9M = First nine months

# Investment Banking Revenue

- **India IB revenue** reached \$369m for 9M 2018, down 21% on 9M 2017 (\$467m). Revenue for the current quarter (\$133m) up 23% compared to last quarter 2018 (\$108m)
- **Syndicated Loan fees** accounted for 22% of total India IB revenue for 9M 2018 with \$80m which is down by 37% on the \$126m for 9M 2017
- **DCM revenue** accounted for 9% of total India IB revenue for 9M 2018 with \$35m which is down 59% on the \$85m for 9M 2017
- **M&A fees** accounted for 41% of the total India IB revenue for 9M 2018 with \$150m compared to \$99m for 9M 2017
- **ECM fees** accounting for 28% of the total India IB revenue, decreased 34% to \$104m in 9M 2018 from the \$157m for 9M 2017



Note: 9M = First nine months



The graphic consists of four thick, curved brushstrokes. One is green, starting from the top right and curving towards the center. Three are in shades of orange and yellow, starting from the left and bottom, and curving towards the center. They all appear to meet or point towards the text.

# Financial Sector Engagements

## FICCI-NITI Aayog Conference on Digital Payments: Trends, Issues and Opportunities



(L-R)

Mr Sudhakar Ramasubramanian, MD & CEO, Aditya Birla Idea Payments Bank Ltd. and Co-Chairman, FICCI Fintech Committee, Mr Ratan P Watal, Principal Advisor, NITI Aayog and Member Secretary, EACPM, Mr Dilip Chenoy, Secretary General, FICCI, Ms Jyoti Vij, Deputy Secretary General, FICCI

The digital payments market in India is expected to grow to US\$1 trillion by 2023 led by growth in mobile payments, presenting huge business opportunities for players in the digital space. Mobile payments are slated to rise from \$10 billion in 2017-18 to \$190 billion by 2023.

These estimates are based on a study by Credit Suisse and have been mentioned in a booklet titled Digital Payments: Trends, Issues and Opportunities, launched in New Delhi on 31 July 2018, by Ratan P Watal, Principal Advisor, NITI Aayog and Member Secretary, EACPM, at a conference organised by FICCI and NITI Aayog. This is

the second annual edition of the booklet on digital payments which was published in July 2017.

The key messages in the booklet are:

- Growth momentum of digital payments in volume and value sustained post demonetisation
- Spectacular growth in new products like UPI
- Steps taken to bring in a new regulatory regime as per Watal Committee Report
- The RBI has taken four key initiatives to usher in a new era of digital payments
- World of opportunities ahead for FinTech players.

Watal dwelt on the growth trends in digital payments as mentioned in the booklet, which are:

- Digital payments clocked a robust growth in 2017-18 both in volume and value terms
- In volume terms, the growth during the year was much higher than the trend growth rate during 2011-16
- Growth in total retail payments in value terms has seen a three-fold increase than the trend rate of the last five year
- The Unified Payments Service (UPI) and Immediate Payment Service (IMPS) segments in terms of volume registered a spectacular growth during

2017- 18. UPI, despite being a new product in the payment segment, has shown a great adoption rate among consumers and merchants.

- Total card payments continued its growth momentum and exceeded the trend growth rate of the last five years both in volume and value terms.

The analysis of growth trends is based on both MeitY (Ministry of Electronics and Information Technology) and RBI data. While MeitY data provides volume data in public domain, the RBI provides both volume and value data in public domain. A note on data sources is also included in the booklet, which gives a comparative picture of the data sets captured by MeitY and RBI.

The new features of this booklet cover the areas of policy developments, global trends and opportunities. In the policy space, Watal emphasised on amendment of the Payment and Settlement Act, 2007, a significant development.

While responding to queries, Watal shared the initiative taken by NITI Aayog in collaboration with the Ministry of Human Resource Development under the Global



*Dignitaries releasing the booklet.*

Initiative of Academic Networks (GIAN) Scheme. NITI Aayog has initiated a short-term course on digital payments. This course was held at Mangalore University from 23 to 27 July 2018.

In conclusion, Watal remarked that the proposed changes in the regulatory framework, entry of global giants and the advancement of technology will drive the future growth of digital payments in the country.

Dilip Chenoy, Secretary General, FICCI and Sudhakar Ramasubramanian, MD & CEO, Aditya Birla Idea Payments Bank Ltd and Co-chair, FICCI FinTech Committee, also shared their

perspectives on the subject.

Following a presentation on trends in digital payments by BN Satpathy, Senior Consultant, EACPM and NITI Aayog, the industry perspective on digital payments issues and opportunities was shared by Kiran Shetty, CEO, SWIFT India; Rinki Dhingra, Senior President & National Head, Government Banking, YES Bank; Sanjeev Moghe, Executive Vice President & Head - Cards & Merchant Acquiring Business, Axis Bank; Amitabh Tewary, Vice President - Market Development, South Asia, MasterCard and Gaurav Chopra, Executive Director, Payment Council of India. ■

# FICCI - IBA 17th Annual Banking Conference FIBAC 2018



(L-R)

Mr. Saurabh Tripathi, Senior Partner & Managing Director, BCG, Mr. Rajnish Kumar, Deputy Chairman, IBA and Chairman, State Bank of India, Mr. N S Vishwanathan, Deputy Governor, Reserve Bank of India, Mr. Rashesh Shah, President, FICCI and Chairman and CEO, Edelweiss Group, Mr. V G Kannan, Chief Executive, IBA

When the Indian economy and its banking sector emerged relatively unhurt from the global financial crash in 2008, the whole world was the envy of India's financial system. The banking sector in India, especially, which consists of 27 public sector banks, 26 private sector banks, 46 foreign banks, 56 regional rural banks, 1,574 urban cooperative banks and 93,913 rural cooperative banks had managed to not only to stay stable but also to grow at a healthy rate.

The Indian banking system has come a long way since then and despite its tumultuous ride, it has managed to expand with the more new-to-credit customers entering the formal financial system, both retail as well as small businesses.

Today, with the growth of the Indian economy and the increased importance of the country in the global economic system, banks have

a crucial role to play as facilitators of trade and business. It is essential that they prepare themselves to face global macro-economic-driven volatility through robust internal mechanisms that help them both mitigate and manage risks such as rising bond yields on government securities.

As per the World Bank statistics, 80 per cent of India is now financially included. This number was just 35 per cent in financial year 2010-11. Fuelled by demonetisation, financial year 2016-17 saw a steep rise in deposits in bank accounts.

The resulting uptick in digital adoption, albeit not entirely sustainable, saw the economy taking a step in the right direction. The growth in transactions at point-of-sale terminals continued in financial year 2017-18, and these transactions have almost tripled in the last two years.

The rising smartphone and internet penetration, combined with the rising 'e-literacy' set the tone for India to move from branch banking to electronic banking channels like mobile banking and internet banking.

Transactions through these digital channels have grown by 48 per cent in the financial year 2016-17, whereas branch-based and ATM transactions have degrown by 11 and 5 per cent, respectively. However, banks still need to work towards digitising the end-to-end customer journeys, right from sourcing customers, to underwriting, disbursement and servicing. Key initiatives around Aadhaar, GST and digital payments have created a significant push towards better adoption of digital, and the way we do business.

SMEs and MSMEs play a crucial role in this, they are an important

segment of the industrial and services sectors of India, due to their growth potential and employment-generation capacity, exports and their role in laying entrepreneurial seeds back in the India. Currently, India has about 36 million SMEs generating about 80 million employment opportunities, which thereby contribute 8 per cent of the GDP, 45 per cent of the total manufacturing output and 40 per cent of the exports of the country.

Spurred by the introduction of the Goods and Services Tax (GST), small businesses are increasingly getting formalised as well as digitised. MSME lending in the economy is at an inflection point, and can be the next engine of credit growth. Currently, digital lending accounts for only 4 per cent of total MSME lending. However, it is expected to rise to 21 per cent over the next five years.

With a high degree of variability in the quality of assets in the MSME segment and the small ticket size of advances, success in this market will belong to players who have the resources and capability for reliable credit underwriting, and a comparative cost advantage through end-to-end digitisation. The advent of advanced analytics along with the ever-increasing data sources can help build models for robust credit decision making for this segment, solving one of the most crucial roadblocks in lending to this segment.

To delve more into the opportunities in the SME and MSME lending, FICCI and Indian Banks' Association (IBA) organised India's largest conference on banking on 20-21 August in Mumbai. The theme of the two-day conference was 'Financial Services to SMEs in an Increasingly Digital Ecosystem', which was inaugurated

by NS Vishwanathan, Deputy Governor of Reserve Bank of India.

Vishwanathan stressed on the importance of financing to the MSME sector as they form a crucial cog in the Indian economy. 'The MSME sector plays an important role in any economy and India is no exception. Recognising this important role of MSMEs in the economy, whether as generators of exports or providers of employment, the Reserve Bank of India and Government of India have taken several affirmative measures over the last several years,' said Vishwanathan.

The RBI deputy governor also emphasised on the need for the credit bureaus, however, to do that, Vishwanathan believes that the government has to make some legislative amendments. 'We have taken several measures in that direction (strengthening credit bureaus). Some of measures are in terms of expanding the database that credit bureaus require, certain legal amendments and that is work in progress,' he said.

Vishwanathan, meanwhile, was pleased by the fact that today the credit to the MSME sector has clocked a healthy growth rate and that bankers today are keen in providing the credit facilities to the MSMEs. 'The credit to MSMEs has clocked a healthy growth. Banker grant to the MSME sector has clocked an impressive year-on-year growth of 8.9 per cent during the first quarter of 2018-19 reaching a level that was seen in the first quarter of 2015-16, indicating that credit to the sector has turned robust.

'In fact during the first quarter of 2018-19, the growth in overall advances from banks, NBFCs (Non-banking Financial Company) to

MSME firms with loan size below INR10 lacs and between INR10 lacs and INR 50 lacs has risen 30 per cent and 20 per cent. So, there is credit growth for SMEs and MSMEs,' he added.

Rajnish Kumar, Deputy Chairman, IBA and Chairman, State Bank of India, too, echoed similar sentiments as he said that SMEs are a major vertical for all banks. 'They (SMEs) are an important segment of the Indian economy, with their growth potential and capacity to generate employment. But they face challenges in accessing institutional credit. Some of the reasons for this are their lack of credit history and high-risk perception. There are a large number of unregistered enterprises. Recent policy developments have addressed many of these concerns,' he averred.

'Supply-chain financing is now replacing traditional methods of underwriting loans. Banks are exploring many of these options. Many banks have developed models for flow-based lending,' he added.

The SBI Chairman also pointed out several policy developments and availability of relevant information has more or less made bankers more secure while lending to SMEs and MSMEs. 'Ratings of the MSMEs are available by various rating agencies nowadays. To a large extent information is available – for INR 5 crore and above Reserve Bank of India is maintaining a click database, which is a very useful repository of the information enabling the banks to enhance lending to the MSMEs.

'The dedicated listing platform is also available for SMEs from 2010 in the stock exchanges. Listed SMEs have to meet several regulatory

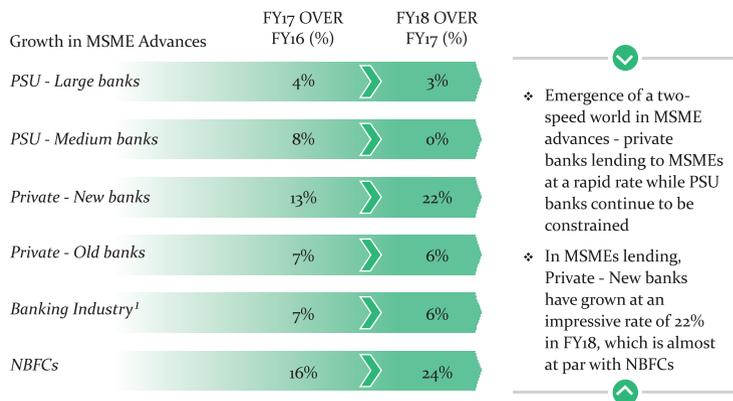
compliances, which, in turn, provides a lot of information and is a source of comfort to the banks,' cleared Kumar.

'Mudra banks are operational, which is refinancing the credit given by the commercial banks to the SMEs and MSMEs. Credit guarantee schemes, that is, Credit Guarantee Fund Trust for micro and small enterprises, popularly known as CGTMSE also exists. The RBI has also launched Trade Receivables Discounting System, popularly known as TReDs, a digital platform where small businesses can get access to capital by auctioning their trade receivables.

'TReDs offers a great opportunity for lending against receivables by the banks. Banks have certain regulatory and supervisory norms to observe and they have to work within those boundaries. In a tightly competitive finance world, innovation and creative lenders like NBFCs (non-banking financial companies) are using income surveys and cash-flow methods to assess the soundness of an SME client and take decisions accordingly,' he observed.

Rashesh Shah, President FICCI and Chairman and CEO, Edelweiss Group, was of the view that MSMEs face the biggest hurdle of timely availability of credit. 'Timely availability of credit has been the biggest issue for MSMEs. For long credit was not democratised but over the last 10 years there has been an evolution of information bureaus and an important role played by rating agencies. With massive digital footprints being created, we are looking at a dramatically changed scenario now. Technology will play a big role in the rapid evolution of the credit ecosystem over the next 5-10 years and is

### MSME advances: Private - New banks and NBFCs changing the game on MSMEs



expected to transform the Indian economy,' said Shah.

Archana Garodia Gupta, Chairperson, FICCI-MSME Committee and Director, Touchstone Gems and Jewellery, meanwhile rued that collateralised SME loans do not leave much for the business. 'Most SME loans in this country are fully collateralised or 100 per cent collateral is given to most business loans, which effectively means that the segment is getting no finance whatsoever from the banks. You only get finance to buy property and none of this is actually being utilised for the business. This segment is virtually unbanked for business,' said Gupta.

'So the policy has to look at giving discretion to banks to restructure, to support a genuine borrower who is in trouble. Just now it's become far more stricter and they are not looking at what is the real problem. If you want the segment to grow it has to be given credit and at the moment it is not getting any. So, you have to devise a collateral-free lending and documentation reduction system if you want to give credit to this sector,' she added.

Kumar countered it by saying that

collateral for certain sizes of loans was based on the balance sheet. In the case of SMEs, the lack of their own capital is also a big issue. But today things are changing. There is much more reliable information on cash flows. 'In the traditional method, the problem that the banks face is that it was mostly balance sheet lending and we know how reliable are the balance sheets. So in the absence of information or where the information is not correct then no wonder you have high NPAs (non-performing assests).

'But things are changing and SME financing is also moving towards risk mitigation. So welcome change of financing is happening with the availability of data and use of technology. Better days are in store for MSMEs and public sector banks will be able to comeback in the game,' he added.

Zarin Daruwala, CEO - India, Standard Chartered Bank, emphasised on the use of data analytics which has helped them immensely. 'We at Standard Chartered have been pretty active in the SME space. In fact, the stressed assets in the SME for us has been far lower than other segments,' explained Daruwala.

'The other areas where we have invested, and it has helped us grow in the MSME and SME space is the use of data analytics. We built our own in-house solutions working with FinTechs startups and that has helped us immensely in building a very robust MSME and SME portfolio. Besides GST is also helping us now to figure out the genuineness of the client,' she said.

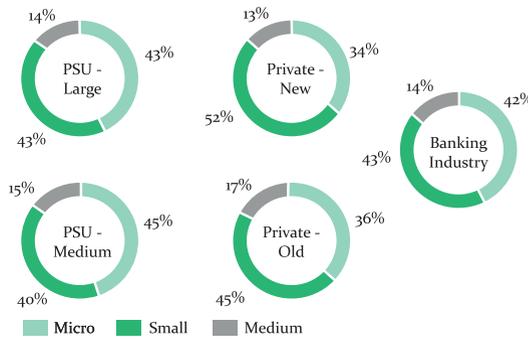
In a special address, Viral Acharya, Deputy Governor, Reserve Bank of India, said there is a need to enact a new law to bring the public credit registry (PCR) under its purview. Addressing the session, Acharya said that a new PCR Act will ensure transparency in data acquisition and dissemination through access rights by various users. 'It is desirable to have a special comprehensive legislation overriding the prohibitions contained in all other legislations on sharing of information required for PCR. Otherwise, all such legislations will have to be amended separately, providing an exemption for sharing of information with PCR,' said Acharya.

In a push to make credit available to the smallest of borrowers, Acharya was of the view that the Goods and Services Tax Network (GSTN) in tandem with the PCR will help take this step forward. This comes after the deputy governor observed that there has been a voluntary increase in the number of GST registrants and hence providing a wider database of credit information.

'Small B2C firms want to be part of the GSTN because they buy from large enterprises. In fact, 68 per cent of their purchases are from medium or large registered enterprises, giving them a powerful incentive to register, so they could secure input tax credits on these purchases,' Acharya added.

**MSME advances: Private - New banks focusing on small enterprises; PSUs landing more to micro enterprises**

Composition of MSME<sup>1</sup> advances in FY18 (%)



- Public sector banks are continuing their legacy of being the banks for the masses, with a large number of loans being sanctioned under the MUDRA initiative
- Public sector banks are showing a much higher exposure to micro enterprises, as compared to private sector banks

**New Ways of Credit**

With capital being the most crucial raw material for any business to thrive, the session on New Ways of Doing Credit delved more into what are financial institutions doing in order to evolve their model to reflect the maturity in technology and data availability. With SME space being taken by the next employment generators, the panel deliberated on how lenders can make the most out of this opportunity to take credit decisions quicker as well as more robust.

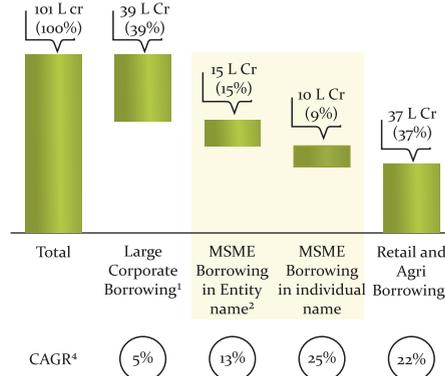
As the government is doing its bit to mobilise credit and funding for this critical sector, India's MSMEs and their business owners are

finding new-age digital startups and alternate lending platforms to be the most effective institution to disperse credit. According to the ICRA, the share of lending by NBFCs to MSMEs is projected to rise to 22-23 per cent by March 2022.

Satish Pillai, MD & CEO, TransUnion CIBIL, underlined the need for friction-less and customer experience-based underwriting. 'Earlier in 2007-08, just 5-6 per cent of unsecured lending was dispersed in the same day. That number is now three times and in three to five years there will be massive amount of dispersal in real time. So, you are getting access to your fund pretty

**MSMEs account for - 25% of formal credit in India**

Total formal credit (in Rs. lakh crores)



- Formal MSME borrowing accounts for ~25 L Cr which is ~25% total credit in the country
- There are two forms of MSMS borrowing from formal channels - borrowing in the name of the entity (~15 L Cr) and borrowings in the name of the individual (~10 L Cr, mostly) which is then channeled to support business needs
- MSME borrowing in the individual name are significant in the lower turnover segments and often use gold and family property as security

much the same day and faster than the thing that you are looking to buy,' said Pillai.

'From an underwriting perspective, the banks or the lenders have generally figured out how to say no faster. So right now the entire industry has become commoditised and when customer experience becomes common, loyalty becomes common and in effect it gets commoditised. Having said that, MSMEs are still at an early stage where you don't have lending,' he added.

Manish Jaiswal, MD & CEO, Magma Housing Finance Ltd, stressed on the importance of data integration and felt it is the need of the hour. 'Today data integration is imperative, it is absolutely an imminent need from all perspectives considered for any business to survive in the long run,' he said.

Vivek Kannan, COO, Dewan Housing Finance Limited, said, 'If we have to look at the MSMEs, the right mix has to be the sweet spot between the predict quality, customer experience and the cost of operations. Even now, the continuum between manual to digital is work in progress, but one that has become more robust is the external data pertaining to industry sub-segment - the GST penetration going up, the banking information going up and it has helped to make informed decision-making process easier.'

## Converting Challenges into Opportunities

The digital transformation that has upended industries from retail and media to transport and business-to-business commerce is now sweeping the financial services industry. While disruptive market innovations and emerging trends

in the value chains are all positive signs, the banks are not unaware of the challenges that stare at them along the way.

Asset Quality Deterioration, Low Credit Offtake, the new Bankruptcy Code, and FinTechs working with banks are some of the challenges that stare at the banking system, but at the same time it presents a wonderful opportunity to be cashed-in.

In a panel discussion on Bank Transformation Roadmap - How best can banks convert challenges into opportunity, Vishwavir Ahuja, MD & CEO, RBL Bank, deliberated on the challenges faced by various new-age banks and how they are challenging the traditional method of banking.

For Ahuja partnership and collaboration has become the model of modern-day banking. 'We are partnering with NBFCs, FinTechs and our largest partnership on the card side is with one of the best-run NBFCs in the country - Bajaj Finance. So, partnership and collaboration have become the model,' he explained.

MS Mahabaleshwara, MD and CEO, Karnataka Bank, was quick to point out that the future of banking will be based on technology and the one that adapts will survive. 'In future, banking will be redefined, we will have more digital touchpoints but the big question is how many banks and how many touchpoints. In essence, it is pretty clear that technology will drive future banking. In fact, banking sector has seen the first IT-based revolution when we embarked upon CBS (core banking solutions) for banking solutions. The next question is are we ready for the second IT revolution wherein, all our credit decisions are driven by IT?' elaborated Mahabaleshwara.

## Cyber Security and Risks

The threat of cybercrime on the global banking and financial services industry is apparent with a massive increase in the number of cases in the past few years. The worrisome fact is that not only these attacks have become highly targeted but the cyber criminals, armed with high-end technology have been targeting financial institution far too often.

The disruptive force of technology has proved to be a double-edged sword, as a cyber attacker has to get it right only once, but banks often grapple with the costs and investment to buy more robust technologies in order to ensure they keep cyber attackers at bay, thereby, often making them more vulnerable.

According to NASSCOM, by 2020 we will require one million skilled security personnel that India needs to counter cyber attackers and against this number there are less than 100,000 skilled people at this point of time. S Ganesh Kumar, ED, Reserve Bank of India, was of the view that technology in cyber space is something far more important than what banks are used to.

Addressing the audience during a panel discussion on Cyber Security - Going Digital - Are we prepared? Kumar said while one does need to assess the threat of cyber space, but it is important not to go overboard with it. 'If you looked at the potential threat that is there in the banking space actual amount of threats that are happening today, and I'm talking about the cyber space where it is there, while it does require an immediate action to be taken by all of us, it is important to realise not to go overboard with it,' said Kumar.

Kumar, however, did agree that one of the challenges that banks today face is information on cyber security breaches and lapses travels a lot faster than the security measures that we take and banks must take measures in order to counter that challenge. 'Today's hackers, in my view, are people who know much more about banking than many of the bankers. They know exactly how a transaction is processed, they know how much time does it takes between a transaction and its process and they exploit that with the technology that they have and they finally commit the fraud

'Therefore, we as regulators need to expand it to S for safety, E for evangelise in the right way, C for convergence, U for ubiquitousness, R for responsiveness, I for innovation, T for territory and Y for youthfulness,' he added.

Sanjay Bahl, Director General, Computer Emergency Response Team (CERT-in), described the current ecosystem as 'volatile, uncertain, complex and ambiguous' and every bank must have a crisis management plan. 'The risks in terms of banking are mainly technology and process risks. Process risks basically arise because traditional transactions have moved to the digital platform. The attackers seem to know much more. They are exploiting the loopholes.

'Various things need to be done to minimise damage. The Chief Information and Security Officer of a bank must be given very clear roles and responsibilities. PSU banks are now required to spend 10 per cent of their budget on security,' he said. Bahl hoped the private sector banks would do the same.

Mukesh Malik, Chief Operating Officer, Aditya Birla Capital Ltd,

stressed on the importance of startups and fintechs to thwart any cyber threat. 'They (startups and fintechs) are small, innovate faster, and are specialised; they can bring about differentiation. At the same time they are vulnerable, and bring in some risks because of their smaller scale and inability to build in security. 'Some of them are amoeba-like structures, they get transformed so fast,' he further observed.

'So, there are a number of risks we live with. He called for a change in the culture of organisations, where there is intolerance towards security breaches. Every company should have a document to spell out what happens in case of a breach. That will bring in preparedness,' he added.

Vikas Varma, SVP, Account Management, South Asia, MasterCard, pointed out that organisations in our part of the world are rapidly realising that a lot of cyber security incidents are attributable to insiders.

'Forty-four per cent of all breaches are attributable to insiders. That will go up as the ecosystem evolves and leapfrogs. He suggested that the problem can be addressed by monitoring endpoints of networks; authentication of users; validating patches and certificates; good IP management; network management; and, testing of the organisation's own system for vulnerabilities and readiness. These are some of the measures being taken by MasterCard,' said Varma.

Rakesh Kharwal, Country Leader & Business Unit Executive - IBM Security, IBM India and South Asia, suggested a broad focus on two things: proper checking of identity assurance and stopping malware fraud or breaches. 'A lot of work

is happening, but it continuously needs to keep improving. There are now systems such as behavioural biometrics, which can monitor mouse-click patterns or keystroke patterns. Even if a hacker enters the right information, the system can use artificial intelligence to ascertain whether he is the authorised person or not. 'Similarly, machine learning is critical in security analysis that data can be incorporated into the system to identify the user,' he pointed out.

### The Road Ahead

With the India's banking sector sufficiently capitalised and well regulated, banking is on the threshold of change, propelled by industry trends, technology, competition, and more empowered customers. Technology is expected to play a much bigger role in aspects such as customer acquisition, new payment methods and recognition of the possibilities of big data.

During the FY16-17, deposits grew at a CAGR of 12.03 per cent and reached 1.54 trillion. With the government giving a big push to Digital India, we are witnessing digital disruption in every business and the banking industry is not left behind.

Therefore, the financial services will need to be fundamentally reimaged and reconfigured around the demands of the nation in the coming decade. The Indian macro environment will be structurally unique - data rich country with young demographic, a market that is still under-penetrated in terms of credit, digitally savvy and yet going through the pangs of migrating from informal to formal economy. This will require financial institutions - banks, non-banks - to develop new financial muscle



**Building the Right Capabilities to Serve MSMEs**  
*“Strengthening the real backbone of the Indian economy”*



**Leveraging the Real Power of Digital**  
*“Using digital to transform end-to-end customer and employee journeys”*

**Strengthening the Credit Management Muscle for the Next Credit Cycle**  
*“Keeping your house in order”*



**Understanding the DNA of the Indian Digital Banking Consumer**  
*“Keeping pace with changing consumer preferences”*



The industry feels banking in future will be more transaction-based giving strong support to the traditional brick and mortar banks.

Sunil Mehta, MD & CEO, Punjab National Bank, in the valedictory session on Building Indian Financial Services for the next decade identified that the three key areas of the future will depend on three key parameters. ‘Future of banking is going to be much different than what it is today. The banking has already undergone a major transformation, but what I can foresee from the changing landscape of banking is that in future banking will be around four to five major banks operating in the country to provide universal banking solutions. These will be differentiated banks for MSME lending, agriculture lending, there will be transaction-based banks –

and there will be service providers – utility-based banks, which will be providing special service,’ elaborated Mehta.

‘And, finally, with the Internet penetration, the future of banking will change from the brick and mortar to hybrid to virtual in the long term. Another thing that is expected to change is that in the future banks will shift to transaction-based banking,’ said Mehta.

While the trend is to move from physical to digital, Rajkiran Rai, MD & CEO, Union Bank of India, believes traditional brick and mortar banks will be there at least for the next decade. ‘When you look at the next decade, you have to look at how the customer will behave and how the institutions will change. I believe mobile applications will be one of the

biggest game changers in the time to come. But the data shows that almost 80 per cent of it prefers both digital as physical mode of banking.’

‘So physical banking will not change in future and, in the next decade at least, we can hope that the physical infrastructure will be in place, but at the same time we are going to add digital aspect to that as well,’ he said.

PK Gupta, Managing Director (Retail and Digital Banking), State Bank of India, says he will put the next decade in three baskets that of customer centricity, digital and fintech space and last is the regulatory landscape.

Jaspal Bindra, Chairman, FICCI Maharashtra State Council and Executive Chairman, Centrum Group, meanwhile said, ‘I think in the next decade the single-most

significant change in the landscape would be consumer credit and MSME credit. If we look at data and lending institutions it will be single largest opportunity as well as the challenge.'

Rajeev Agrawal, Founder and CEO Innoviti Payment Solutions, believes that banking will be more

reputation based and there will be a huge change in the way users or customers demand a particular service.

'The access to data and internet is going to democratise the access of financial service for everyone. So way people ask for services will change and probably the users

are going to use services from a bouquet of financial services. So, reputation of banks will be towards privately owned and publically owned and that in the next three to five years will bring about a dramatic difference in the way financial services are made available,' he said.

## Eastern, Southern States Lead the Way in Adopting Digital Banking

Telangana and Manipur are leading the way when it comes to internet banking, although mobile banking now seems to be the preferred mode among digitally-active users.

According to the FICCI-BCG report, 'Providing Financial Services to SMEs in an Increasingly Digital Ecosystem,' in Telangana, 21.7 per cent of the total active savings banks accounts carried out at least one financial transaction through internet banking in the last six months of 2017-18.

Likewise, 21.4 per cent of the total active savings banks accounts in Manipur carried out at least

one transaction through Internet banking against the national average of 11.3 per cent. Mizoram (20.4 per cent), Andhra Pradesh (18.2 per cent) and Puducherry (16.4 per cent) make up the other top three States that are high on using Internet banking services.

Transactions through these digital channels have grown by 48 per cent in 2016-17, while branch-based and ATM transactions have witnessed degrowth of 11 and 5 per cent, respectively.

The report also noted that there now seems to be a shift in

preference from Internet banking to mobile banking for digital customers across bank categories. In private banks,

21 per cent of all active savings bank accounts had mobile banking activation in 2017-18, while for PSBs, it was still minuscule at 3 per cent.

The report indicated that the MSME segment has a huge untapped potential for credit and digital lending to the sector, and could become an INR15-lakh crore opportunity for lenders over the next five years. ■

## FICCI - IBM Roundtable on Exploring the Unrealized Potential of AI in Financial Services Industry

FICCI along with IBM organised a roundtable on the subject 'Exploring the unrealized potential of AI in Financial Services industry' on the side-lines of the FIBAC 2018 on 20th August 2018. Financial services companies are aggressively assessing & deploying Artificial Intelligence capabilities to service, retain & capture new customers & to help transform their business. From using AI-augmented & machine learning technology to improve contact center capabilities, cognitive process automation, detecting frauds & sophisticated threats, claims management in Insurance, cognitive solutions for human resources reinvention, to driving personalized customer engagement across channels – AI



is now ubiquitous for Banks & Financial institutions.

In the Round Table session, around 20 industry representatives learnt how the industry is using AI capabilities to discover insights

previously beyond the abilities of programmed computers – and use these insights to create new business models and revenue streams while delivering better experiences. ■

## FICCI - BCG Masterclass Session on Science of Value Acceleration



FICCI along with BCG organised a masterclass session on the subject

'Science of Value creation' on the side-lines of the FIBAC 2018 on 20th

August 2018.

The masterclass focussed on exploring how companies in financial services can proactively drive shareholder return by focusing on key levers of transformation and value enhancement and discussed issues such as change in equity ownership and growing popularity of ESOPs; increasing focus on shareholder returns.

The masterclass was attended by over 25 participants from fintech start up fraternity and other solution providers. ■

## FICCI's 15th Capital Market Conference CAPAM 2018



Ajay Tyagi, Chairman, SEBI (right) with Rashesh Shah, President, FICCI.

FICCI organised its 15th edition of FICCI's annual flagship Capital Market Conference - 'CAPAM' on 11 September, 2018 in Mumbai, wherein SEBI chairman Ajay Tyagi stressed that the overall vision for the market regulator should be to have bigger, cleaner and safer markets.

Addressing the inaugural session, the SEBI chairman said, 'SEBI is committed to facilitating further growth of markets. SEBI is equally committed to ensuring clean and safe markets. We are duty-bound to ensure that the market mechanism is not misused or manipulated by unscrupulous elements. It is but natural to keep focus on safety issues, including systemic risks.

'Continued investor confidence is a crucial factor in attracting more investors to the securities market. Right governance framework and a transparent and clean market go a long way in meeting these expectations.' 'SEBI will continue to focus on further enhancing the overall governance standards in the market, be it for

issuers, intermediaries or market infrastructure providers,' he added.

The theme of the conference was 'Blueprint for Capital Market in New India 2022'.

'Indian securities markets exhibited positive trend during 2017-18 with increased resource mobilisation through issue of equity as compared to the previous financial year. And the current year promises even more action,' he said.

This success could be attributed to stable macro-economic fundamentals, political stability and the structural reforms that the present government has been endeavouring towards over the last couple of years. Backed by strong inflows and increased participation of retail investors, the Indian IPO market witnessed heightened activity in the previous year.

He further added in order to improve the corporate governance framework, several recommendations of the committee chaired by Uday Kotak have been implemented, such as

enhanced role of the Nomination & Remuneration Committee, separation of the roles of the Chairman and CEO and enhanced focus on independent directors. It is believed that these measures would further strengthen governance, leading to increased investor confidence, some of the mainstays of SEBI.

With technology playing as key role in day-to-day activities, Tyagi said that SEBI is strengthening its own technology and enhancing that of market intermediaries.

He further added that SEBI is focussed on enhancing its in-house analytics capability and its surveillance systems.

'Going forward, increase in use of machine learning and artificial intelligence among other technologies, in the capital markets is a writing on the wall. The complexities in the capital markets are only going to increase with time. SEBI needs to quickly upgrade its regulatory capacity to properly comprehend the nuances of technological changes with a view to staying ahead of the curve,' said Tyagi.

CAPAM's discussion agenda highlighted the need for alignment of the capital market policy framework with the structural reform agenda being proposed by the government for New India 2022 and the critical role of issuers, investors, banks and rating agencies in the process.

Rashesh Shah, President, FICCI and Chairman & CEO, Edelweiss Group observed that, 'Indian capital markets have achieved a lot

in the last 25 years and today are as good as anywhere in the world.' He said that capital markets are now complementing the banking system. With the expansion of asset class which includes bond markets, currency futures and the commodities market, they are poised to become multi-asset class.

To achieve the vision of capital market in New India 2022, he highlighted that we must have a credit market, which is equally developed as the equity market. Decrease in intermediation cost is indispensable for this to happen. Shah also mentioned that due to

increase in regulatory requirements, the strategy function of boards has been subsumed in their enhanced compliance functions which affects the competitive edge of Indian businesses; stressing on the need to strike a balance between the need for higher reforms and the costs and efforts involved.

In his theme address, Sunil Sanghai, Chairman, FICCI Capital Markets Committee, emphasized some of the critical factors which would play an important role in the growth of capital markets in the next couple of years. These include facilitative regulatory framework,

enhanced governance, availability of capital and a vibrant bond market to meet funding needs of the economy.

Shilpa Kumar, Co-chair, FICCI Capital Markets Committee & MD and CEO, ICICI Securities Ltd. said that we are at an inflection point for transformative change and need to effectively balance capital management, risk and regulation for growth of the market.

Himanshu Kaji, Co-chair, FICCI Capital Markets Committee and Executive Director & Group COO, Edelweiss Financial Services Limited, offered the concluding remarks at the inaugural session. ■

## Interactive Session of FICCI Fintech Committee with Mr. K Rajaraman, Additional Secretary, Department of Economic Affairs, Ministry of Finance

FICCI fintech committee members had an Interactive session with Mr. K Rajaraman, Additional Secretary, Department of Economic Affairs, Ministry of Finance on 5th October

2018, at North Block, New Delhi. The members briefed him about the committee's work and shared suggestions on role of Fintechs in promoting MSME financing,

enhancing Digital Payments, issues around Data Privacy and Data Protection, implications of Supreme Court Aadhaar Judgement and the proposed Fintech Policy. ■

## Meeting of FICCI Fintech Committee

At this meeting, members discussed the following subjects, role of Fintechs in promoting MSME

financing, enhancing Digital Payments, issues around Data Privacy and Data Protection,

implications of Supreme Court Aadhaar Judgement and the proposed FinTech Policy. ■



## Session with Dr Sajjid Chinoy Chief India Economist, J P Morgan

FICCI organised a (Special Session with Sajjid Chinoy, Chief India Economist, JP Morgan), on 18 September 2018 at its headquarters in New Delhi. Sajjid Chinoy is an eminent economist and has a varied experience in policy making.

While the Indian economy has exhibited good growth in the recent past, there are several headwinds that it faces, and which could have a bearing on the growth performance going ahead. Developments such as the rising international oil prices, ongoing trade war, tightening financial markets and the volatility in the currency markets are attracting increasing attention and keeping the policy makers engaged to limit the impact on the economy.

At this special session, Sajjid Chinoy shared his views on the current economic situation and made a presentation. The presentation broadly focused on answering why have Indian exports slowed so precipitously in recent years? Three set of related questions dealt by him in the presentation were: (a) What typically drives India's exports growth - global growth or/and exchange rate, (b) How heterogenous are these elasticities across sectors and time, and (c) How can these explain the current slowdown in India's exports?

### Some key points of the presentation are:

- Exports have been one of the key growth drivers of India's GDP growth in 2000s. In fact, export to GDP share for India increased steadily during the first eight years of 2000s. Even the investment growth was high during this period, with expectations of higher demand through rising exports. Exports registered an average annual



real growth of 15.3 per cent from 2000-11.

- The export basket of India has also seen a significant shift and become broad based, with rising share of new-age products like engineering goods and pharmaceuticals in total exports as against the traditional export items like textiles, leather and gems and jewellery. Another interesting trend in India's exports has been the decline in the ratio of domestic value added to gross exports, primarily due to rise in the import component of exports (with greater integration in the global value chain).
- Over the last six years (since 2012), real annual growth in exports has slowed down to 4.1 per cent (2012-2018) and this was seen across manufacturing as well as services sector exports. If GDP growth is mapped the export growth, the slowdown in GDP growth from 2012 onwards can very well be explained by the slowdown in growth of exports. In fact, the study done by Chinoy shows that average GDP growth slowdown of 2 per cent can be attributed to the slowdown in exports.
- A key reason for slowdown in Indian export is the slowdown in global export growth. However, it has been observed that while the average world export growth dropped by 40 per cent from 4.2 per cent during 2004-2011 to 2.4 per cent from 2012-2018, the corresponding decline in India's export was to the extent of 85 per cent. In other words, India's FICCI's News-makers of the Month Upfront Sajjid Chinoy, Chief India Economist, JP Morgan (left) with RV Kanoria, Past President, FICCI export slowdown cannot be explained by de-globalisation itself.
- In fact, the recent export lift also does not commensurate with improvement in global growth. While there has been a 25 per cent increase in global growth rates between FY17 and FY18, the growth in India's export has been much lower.
- To explain the recent slump in exports, Chinoy highlighted the role of global growth as well exchange rate in the growth of exports. According to a study by Chinoy, it was revealed that longrun elasticity of global growth was around 2.6 per

cent. In other words, a 1 per cent global growth enables non-oil exports to grow by 2.6 per cent. Likewise, a significant correlation was found between Real Effective Exchange Rate (REER) and exports growth. As per the study, for every 1 per cent real appreciation in Rupee, the non-oil exports decline by 1.4 per cent. In all, Chinoy emphasized that India's exchange rate has been a big driver of India's non-oil exports during the last 15 years.

- However, over the last six years, the importance of both global growth and exchange rate factors has somewhat diminished when compared to the previous years. This has been due to deglobalisation post the financial crisis, and due to increased import content in India's export, which becomes a natural hedge for exchange rate variations. Nevertheless, despite the income and price elasticities of exports coming down over the years, they still matter though there is wide dispersion across sectors. The new-age exports were found to be much more sensitive to changes in price, driven by exchange rate appreciation, as compared to traditional exports. Thus, a 20 per cent appreciation in Real Effective Exchange Rate (REER)

from 2014-17 was a substantial drag on exports as it made India's exports less competitive.

- Chinoy related this real rupee appreciation to the Dutch Disease phenomenon, which was triggered due to the significant fall in oil prices. Due to the fall in global oil prices from 2014-17, there was huge windfall income gain to the country due to a positive terms of trade shock, which in turn led to an increase in public and private spending in the country. Generally, if any windfall gain is completely spent, it leads to an appreciation in exchange rate. Moreover, when a country's currency appreciates vis-à-vis other currencies, the exports become expensive and imports become cheaper, rendering domestic industry less competitive.
- In fact, this was also observed through the trend in Current Account Deficit. While India experienced a lower current account deficit in last few years due to lower oil imports following the low oil prices, however the underlying current account surplus (excluding oil and gold) had worsened. During the four years 2014-2017, India's Current Account Surplus (ex oil and gold) has deteriorated by 3 percentage points, but this was
- not visible as Current Account deficit was much lower due to lower oil imports.
- Now with the rise in global oil prices in recent times, India's CAD is forecasted to reach USD 80 billion in FY19, at 2.9 per cent of GDP. India usually has a secured cushion of USD 50 billion from FDI and NRI deposits. Financing additional BOP gap of USD 30 billion may prove challenging in a global liquidity tightening scenario given the risk of US Fed potentially increasing Fed Funds Rates to control overheating of the American economy.
- Now, the widening of the CAD due to the negative Terms of Trade shock. India's REER has depreciated 6.5% in 2018 (Jan- May 2018). However, from January 2018 levels, INR has depreciated by only 5% vs USD; far less than Chinese Yuan (6%), Turkish Lira (10%), Brazilian Real (12%) and Argentine Peso (25%) as of June 2018.
- If we compare external macro indicators during 2013 and 2018, the situation is far better today - Forex reserves are significantly higher, twin deficit of Fiscal and Current Account (as % of GDP) are much below that of 2012 and 2013. Additionally, CPI inflation is much lower than that of 2013. ■

## Policy Implications

- Rupee depreciation is an equilibrium response to reversing terms of trade shock from higher oil prices and will help mitigate loss of competitiveness.
- Given the macro indicators today, there is no cause for panic/crisis response reactions.
- While slowing down of Rupee depreciation using intervention should be considered but there is no need to protect levels.
- Use monetary policy tools to counter hardening inflationary expectations
- Government to stick to fiscal consolidation path; fiscal expansion will lead to more real appreciation, offsetting rupee depreciation.
- India needs to dramatically improve underlying trade competitiveness by investing in infrastructure, integration into global value chains and improving labour productivity.
- Identify new growth drivers to accelerate beyond 7 per cent growth rate per annum. ■

## Policy Recommendation

- **FICCI Submission to MCA on the proposal for Databank for Independent Directors**

Based on suggestions received from industry, FICCI has made a detailed submission to the Ministry of Corporate Affairs against the proposal to introduce additional eligibility criteria for IDs such as minimum educational qualification for IDs, online databank to be maintained by IICA, mandatory qualification of 'Independent Director Certification Course' conducted by IICA etc.

- **FICCI Submission to MCA and the SEBI on the amendments to (Listing Obligations and Disclosure Requirements) Regulations, 2015**

On the basis of requests from industry, FICCI has submitted a detailed representation to MCA and the SEBI on some of the amendments made to the LODR Regulations based on recommendations of the Kotak Committee Report on Corporate Governance. These include restriction on royalty payments by listed companies, enhanced disclosure requirements etc.

- **FICCI Submission to MCA on Dematerialization of Securities of Unlisted Public Companies**

FICCI has raised concerns on the possible issues associated with dematerialisation of securities for all public

companies when the proposal was just floated by the Ministry, pertaining to huge cost impact, transferability of shares, enforcement of shareholders' rights, due diligence etc. and specific exemptions were sought for closely held companies.

- **FICCI Submission to MCA and SEBI on Circulation of Financial Statements**

On the basis of feedback from industry, FICCI has made a detailed representation to the MCA and SEBI highlighting challenges with respect to circulation of hard copies of financial statements with a request to dispense requirements of sending hard copies of statements and publication of financial results in newspapers.

- **FICCI Submission to MCA on Significant Beneficial Holdi**

On the basis of concerns highlighted by industry, FICCI has made a detailed representation underlining major concerns on key aspects such as Concept of significant influence, indirect shareholding and control, Applicability of the Rules on PE Funds, Trusts etc., Minimum threshold for determining significant beneficial holding, exemption for listed companies etc.

- **FICCI Submission to SEBI on Report on the Settlement Mechanism**

SEBI has released the 'Report on the Settlement Mechanism', submitted by the High Level Committee under the Chairmanship of Justice A.R. Dave (retd. Supreme Court). On the basis of inputs from members, FICCI made some key recommendations pertaining to scope of settlement proceedings, application for settlement, rejection of application, confidentiality provisions, revocation of settlement order etc.

- **FICCI Submission to SEBI on Report of Committee on Fair Market Conduct**

SEBI had issued a Report of Committee on Fair Market Conduct, chaired by Mr T K Viswanathan, Former Secretary General, Lok Sabha and Former Law Secretary. FICCI made some important suggestions on recommendations proposed under Insider Trading Regulations, one of the key focus areas of the Report.

- **FICCI Submission to the Ministry of Finance on Know Your Client Requirements for Foreign Portfolio Investors**

On the basis of inputs from industry, FICCI has made a representation to the Ministry of Finance on the challenges with respect to Know Your Client requirements for Foreign Portfolio Investors requesting for relaxation of norms.

■ **FICCI Submission to the Ministry of Finance on use of Depository Interest as an instrument for raising foreign capital by Indian unlisted companies**

On the basis of request from members, FICCI has made a representation to the Ministry of Finance for enabling unlisted companies to issue Depository Interest to raise funds overseas.

■ **FICCI Submission to DIPP on Corporate Bond Market**

FICCI has submitted its recommendations to the DIPP to enhance the growth

of Corporate Bond Market in India. These pertain to credit rating profile of issuers, issuers and issuance types, rationalisation of stamp duty, repo in corporate bonds, electronic trading platform, market making, increasing retail participation etc.

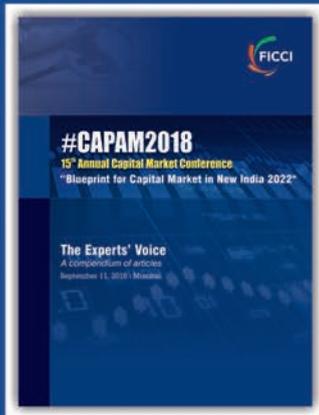
■ **FICCI Submission to MEITY on the Draft Personal Data Protection Bill 2018**

Based on the suggestions received from Industry members of financial services / fintechs, FICCI made a detailed submission to MEITY on the

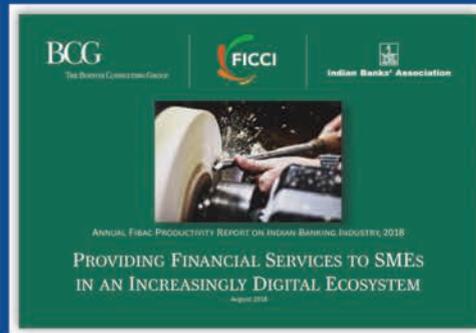
Draft Personal Data Protection Bill 2018.

■ **FICCI Submission to Shri Ratan Watal, Principal Advisor, NITI Aayog and Member Secretary, EACPM on recent Supreme Court judgement on Aadhar**

The Members of FICCI Fintech committee called upon Shri Ratan Watal, Principal Advisor, NITI Aayog and Member Secretary, EACPM on 17th October 2018 and submitted Industry views on the recent Supreme Court judgement on Aadhar. ■



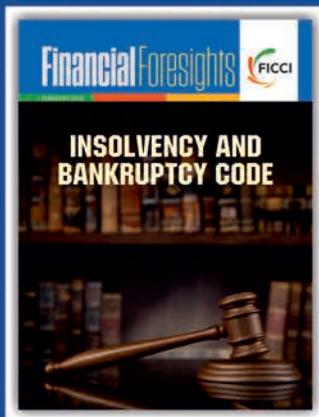
CAPAM Knowledge Paper: The Experts' Voice A Compendium of articles September 2018



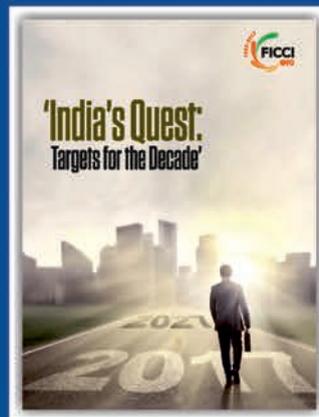
Providing Financial Services to SMEs in an Increasingly Digital Ecosystem August 2018



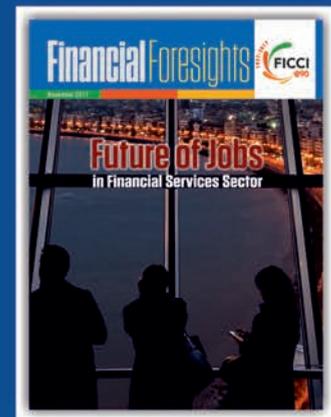
Financial Foresights: Evolving Contours of MSME Lending in India May 2018



Financial Foresights: Insolvency and Bankruptcy Code January 2018



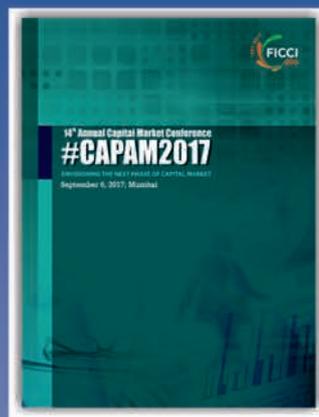
'India's Quest: Targets for the Decade' December 2017



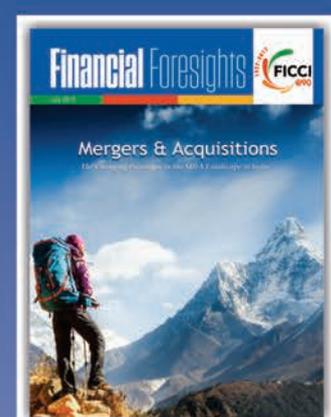
Financial Foresights: Future of Job in Financial Services Sector November 2017



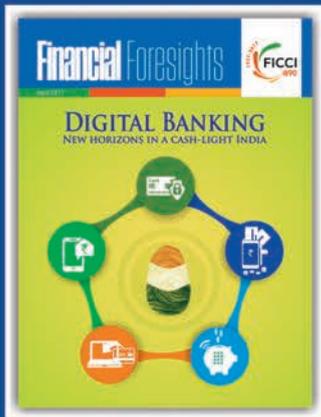
Productivity in Indian Banking 2017: Hidden Treasure- How Data Can Turn The Fortunes For Indian Banks November 2017



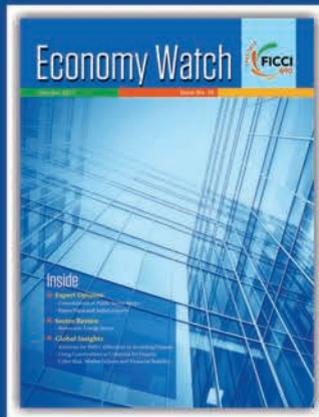
CAPAM Knowledge Paper: The Experts' Voice - A compendium of articles September 2017



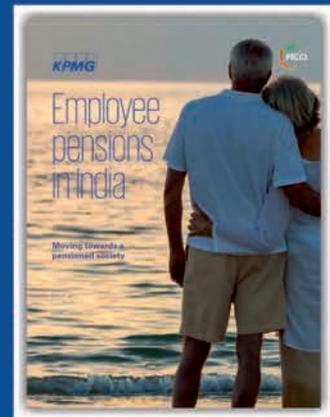
Financial Foresights: Mergers & Acquisitions The Changing Paradigm in the M&A Landscape in India July 2017



Financial Foresights: Digital Banking  
New horizons in a Cash - Light India  
April 2017



Economy Watch  
October 2017



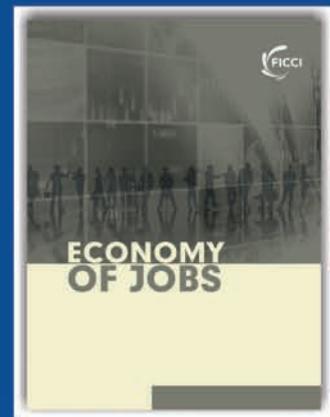
Employee pensions in India  
Moving towards a pensioned society  
March 2017



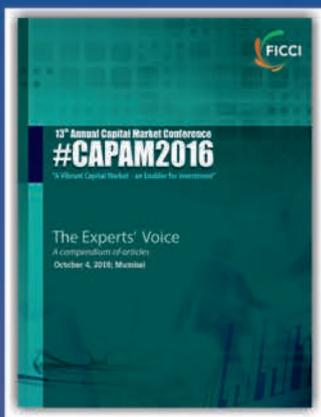
18th Annual Insurance Conference  
FINCON 2017 proceedings  
"The Changing Face of Indian Insurance"  
March 2017



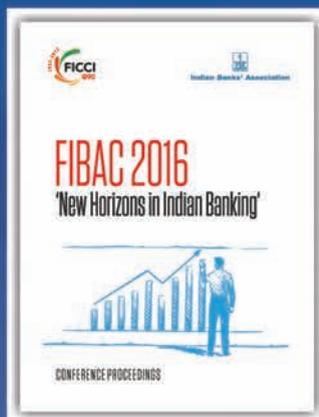
Financial Foresights:  
Leveraging the FinTech  
Opportunities in India  
January 2017



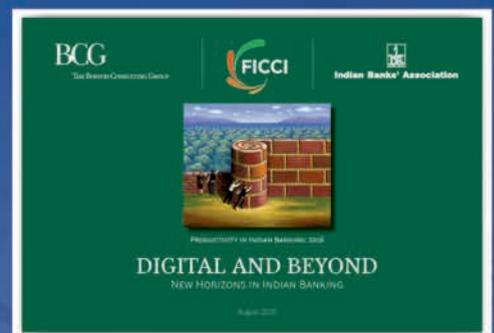
Economy of Jobs  
December 2016



CAPAM Knowledge Paper:  
The Experts' Voice - A compendium of articles  
October 2016



FIBAC 2016 Proceedings –Digital and  
Beyond: New Horizons in Indian Banking  
August 2016



Productivity in Indian Banking 2016  
Digital and Beyond:  
New Horizons in Indian Banking  
August 2016



# #PICUP Fintech 2019

PLATFORM FOR INNOVATION AND COLLABORATION  
WITH UPCOMING AND PROMISING FINTECH

Mumbai | 25 February 2019

## PICUP Fintech is unique

2017 witnessed first of its kind, exciting and engaging PICUP event that brought together disruptive fintechs, leading bankers, technology experts and policy makers on a common platform.

Over 500 people participated in the event, which gave fintech's the opportunity to showcase their products, while the other stakeholders in financial services ecosystem appreciated the potential opportunities for partnerships and investment.

In 2019, we are excited to build on the initial success of the inaugural event and organize a bigger and better PICUP with even more exciting discussions, stimulating demos and insightful debates.



### Product Demonstrations by Pathbreaking Fintechs

Handpicked fintechs will showcase their latest technological innovations.



### Power Packed Panel Discussions

Opportunity to hear from the top experts (bankers, policy makers, VCs and incubators) on topics that are set to become break-out trends.



### High Impact Networking Session

Participants will get an opportunity to interact and build connect with the most influential people in the industry.

## 2019 Agenda Themes

### Plenary Sessions

- Defining the Future of Finance with Digital Attackers
- Fintech and Financial Inclusion

### Fireside Chat

- Lending – Increasing the Credit Reach
- Payments – The Path to Ubiquitous E-Payments
- Artificial Intelligence – Real Solutions
- Wealth Tech and Robo Advisory
- Data Analytics – The Potential of Big Data

Each fireside chat will have panel discussion followed by product demonstrations by select fintechs

## Participation Proposition for Fintechs



### Make product demonstration at the event

Most promising fintechs will get to present their product innovation to the esteemed gathering, comprising top decision makers from the banking and investment community alike.



### Exhibit at the market place

Startups can use a kiosk to showcase their ideas, talk about the implications of their innovations and give a first hand product demonstration to all participants.

## Event participants

- Fintechs • Leaders of Banking and Financial Services Sector • Policy Makers and Regulators
- Innovators and Entrepreneurs • Angel Investors • Private Equity and Venture Capitalists
- Chief Technology Officers/ Chief Innovation Officers • Incubators and Accelerators
- Educational Institutions

Knowledge Partner



## CONTACT

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## Financial Foresights Distribution & Readership

The publication is presently disseminated online to a large set of audience of over 5000 people.

The readership mainly comprises:

- FICCI members across the country
- Economists & academicians
- Senior government officials
- Members of the diplomatic community (India and abroad)
- Policy experts

The electronic version of the publication is also disseminated globally through FICCI's international offices.

### Partnership Opportunities

There are various options available for partnering with FICCI's quarterly publication Financial Foresights

#### Principal Partner (6 Lakh INR) - Benefits

- Inside front cover page advertisement in each issue
- 5 complementary delegate passes in any three of the financial sector conferences (Banking, Fintech, Capital Markets, Insurance & Pensions)

#### Co-Partner (3 Lakh INR) - Benefits

- 1 full page advertisement in each issue
- 3 complementary delegate passes in any three of the financial sector conferences (Banking, Fintech, Capital Markets, Insurance & Pensions)

### Advertisement in Financial Foresights

Advertisements for print & online version per issue of the publication

Special positions - colour advertisement	Rate (Rs)
Inside front cover/inside back cover	1,50,000
Full page (other than inside front/ inside back cover)	1,00,000
Half page (other than inside front/ inside back cover)	60,000

## Partnership Benefits

#### 1. Strong brand image

FICCI is the largest and oldest apex business organisation in India with a strong brand image. Association with FICCI would therefore help in creating a stronger brand image for the partner.

#### 2. Large reach

FICCI has an extensive membership base across the country including various regional chambers of commerce in India. This would enable the sponsor to increase its brand reach manifolds and target the key decision makers in the field of business, finance and economy.

#### 3. Activity throughout the year

As the publications are circulated every three months, the partner would be able to enjoy repeated visibility through the year.

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