# Role of Capital Market in Financing Infrastructure Projects

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**Importance of infrastructure development for India**

The availability of appropriate infrastructure facilities is vital to the economic growth and prosperity of any country. Traditionally, infrastructure facilities like roads, water supply, sewerage and transportation services have been developed and provided by Governments. These services are looked upon as basic privileges of a citizen and thus have been accorded priority for government investment.

India is the world's eighth largest country with its population exceeding 900 million and in its size, the present infrastructure appears to be inadequate and will require massive incremental investment to sustain economic growth

The Indian government's fiscal position is further strained by multiple resource allocation avenues. In this context, the Government sought to embark on a liberalisation plan, which encouraged private sector investment in infrastructure sectors such as;

- Power & Energy
- Ports & Airports
- Roads & Bridges
- Water resources

## Infrastructure financing – issues and requirements

Infrastructure investment involves significant initial investment by its very nature, for instance a road or a port would require an upfront investment in construction and would recover its costs through charging a user fee over the life of the facility which would typically be more than 20 years. The benefits of this facility would be the convenience to society at large which would indirectly provide impetus to economic development. Keynesian economics has often advocated government spending on infrastructure projects as a tool for stimulating economic growth

However, the upfront funding requirements for infrastructure projects are singularly large and are typified by a lengthy payback period. To illustrate the point, let us take the case of a notional road project of say ten km which would require a Rs.45 crore investment (benchmark construction cost for a 4 lane road highway)

For a simple payback of 5 years, this road would require a daily traffic of over 12,500 vehicles with a toll levy of Rs. 20/- per vehicle. This basic calculation still leaves us with an absurd statistic of the road servicing over 8-9 vehicles a minute around the clock.

The viability for infrastructure projects is the consistent cash flow of 20-30 years which such projects could expect. The length of this period purports to provide investors and lenders with an acceptable rate of return over the life of the project

Traditional avenues for funding are loans from financial institutions and banks with maturities of 7-10 years and equity from sponsors, strategic investors and government agencies. However, funds available from these sources are restricted because of a number of factors:

**(1) Restrictive investment horizon :** Limited investment horizon for investors and lenders 7-10 years as against 10-15 years which would be the peak period for any infrastructure project

**(2) Limitations of exposure norms :** Constraints imposed by policies of limiting risk and exposure to projects for a single institution and/or collectively

**(3) Contradictions of traditional project financial evaluation parameters :** Conventional financial tools such as Project IRR are biased towards front-ending of project cash flows as against back-ended "balloon" cash flows arising out of infrastructure project

**(4) Multiple resource deployment avenues for Financial institutions & investors :** Corporate Lending, commercial credit, investment in growth industries such as software, agricultural credit, restrictions of priority sector lending

**(5) Cost of funds :** Cost of intermediation for resources mobilised from financial institutions could be prohibitive. Typically, these resources are deployed at a spread to cover risks and returns thus denying infrastructure projects access to funding at optimal costs

In order to overcome these structural contradictions, sponsors of infrastructure projects will have to access capital markets and the retail investors directly in order to achieve financial closure for infrastructure projects

## Why Capital Markets?

Capital markets is an effective and efficient mechanism for allocation of capital. Capital markets provides a forum for participation of all classes of investors which include foreign institutional investors, mutual funds and retail investors. Capital markets is going to be the key driver for mobilising infrastructure investment due to a number of reasons

**(1) Contribution in capital formation :** Capital markets have increasingly contributed to capital formation in the last few years. Consider these statistics

Rs. '000 crore

| | 1995-96 | 1996-97 | 1997-98 | 1998-99 |
|---|---|---|---|---|
| Capital Formation | 263 | 314 | 362 | 387 |
| Inc.in capital formation | 67 | 51 | 48 | 27 |
| Equity Raised | 20 | 18 | 14 | 5 |
| Debt Raised | 7 | 13 | 25 | 32 |
| Share of Equity (%) | 29.8 | 35.2 | 29.2 | 18.5 |
| Capital Formation as a proportion of capital raised | 2.48 | 1.64 | 1.23 | 0.73 |

*Source Data : Capital Formation from Economic Survey – Reserve Bank of India*
*Equity & Debt Raised – Economic Times article on Capital Markets*

As is evident, capital formation within Indian economy is increasingly funded by resource mobilisation from the capital markets.

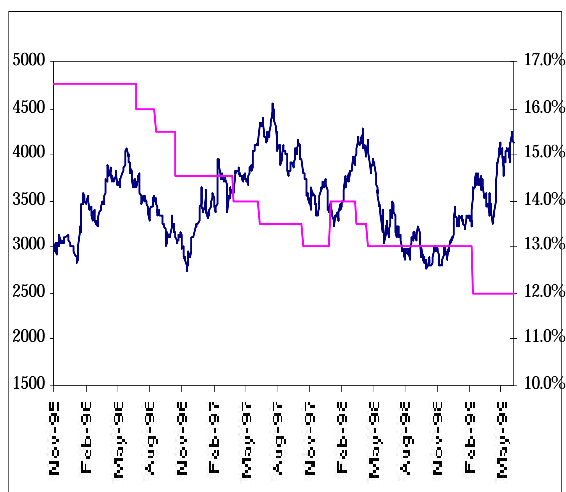
**(2) Depth in resource mobilisation – Alternative avenue for savings :** However, sceptics may question the movement of capital market resources towards infrastructure funding. Economic data aver that in the financial year 1998-99 the incremental bank deposits aggregated to Rs. 86,308 crore growing at a rate of 19% since 1997-98. As against this, the Rakesh Mohan Committee on infrastructure has estimated the overall resource requirement for infrastructure in India at Rs. 180,000 crore upto 2006. Presuming that a part of these requirements are to be mobilised through incremental savings in India, incremental bank deposits will have to be channelised towards infrastructure investment through the Capital markets.

**(3) Liquidity of investment :** Since, Infrastructure investment is long term in nature, investors and lenders with a short term horizon often shy away from investment opportunities. The constraints are often the tenure of holding rather than project risks. One of the elements of mitigating risk of long tenure holding is liqudity and tradeability of debt and equity capital

Stock exchanges impart liquidity to all forms of capital through a transparent trading mechanism. This will be one of the principal drivers for mobilising infrastructure funding through capital markets

**(4) Free Market to address economic deficiencies over the long term :** Developing economies are often accused of having a higher cost of capital as a result of a conventional view that indicates that capital is scarce in these economies and carries significant risks. However, historic data for Indian Capital Markets indicates otherwise.

In the last seven years, the stock exchange indices have shown a progressive increase implying adequacy of returns on secondary market equity (barring a few structural deviations in 1993 and 1997) For the same tenure interest rates in the Indian economy have shown a steady decline indicating a re-alignment towards a progressive rather than that of a developing economy




*Note: BSE - Sensex Data as representative of equity markets*
*SBI PLR as representative of interest rate movement*

On a long term basis, capital markets can be a source for raising debt and equity at optimal costs, thereby creating an appropriate format for resource mobilisation for infrastructure

**(5) Fiscal benefits for infrastructure projects :** There are a number of fiscal benefits that have been accorded to infrastructure projects which can be effectively utilised through the capital markets. These are summarised as under;

(i) Income Tax exemption under Section 10 (23)(g) for interest and capital gains income earned from infrastructure projects – Eligibility inclined towards

individual investors

(ii) Income Tax exemptions under Section 54 (EA/EB) for capital gains which can be reinvested in infrastructure project companies to avail of the exemptions

(iii) Deduction under Section 88 for individual investors

Furthermore, a number of expected benefits such as waiver of stamp duty on trading of debt instruments would provide further impetus to the capital markets

## Why has the capital market not been used effectively for mobilising resources for infrastructure projects?

In spite of a format which encourages capital mobilisation for infrastructure projects, we are yet to witness a plethora of ventures that will attempt to raise resources from the capital markets. There are a number of reasons that may explain this;

**(1) Ongoing depression in the IPO market for equities :** The market is presently undergoing a transformation after a boom period in the mid-90s which was misused by a number of companies and intermediaries. This market has been undergoing a recession of sorts partly since, the number of well-conceived projects sponsored by credible entrepreneurs have been few and far in between

**(2) Regulatory issues and Political uncertainty:** Since the last three years there has been an atmosphere of political uncertainty with the last two parliaments being dissolved well ahead of its tenure. This has slowed down the policy and structural reform in a number of sectors. A number of infrastructure projects have been on hold pending policy/regulatory clarification, and financial closure

## In Conclusion

Infrastructure development is vital to economic growth in India. This is a fact that has been universally acknowledged by corporates, various state governments and their agencies, financial institutions and mutilateral agencies. It is inevitable that the shift towards entrepreneural transition to infrastructure takes place. A number of private sector participants such as the A V Birla Group, Mahindras, Reliance , Larsen & Toubro, Tatas and Infrastructure Leasing and Financial Services Ltd have evinced interest in sponsoring projects in the infrastructure sector. Furthermore, the fiscal incentives offered for infrastructure projects will also incentivise a large investor and lender audience to participate in the IPO markets to part finance quality projects. The Indian retail investor will have the last word on this subject. The same investor who participated in the IPOs which funded the mega projects of yesteryears and today prefers technology stocks also invests his savings in deep discount bonds issued by financial institutions to mobilise long term money. This investor could well be participating in the IPO boom for infrastructure projects or subscribing to long term high yielding infrastructure debt