Financing the Future of Indian Infrastructure

The task of a finance professional in an infrastructure company is probably the toughest of all finance jobs because of the constant regulatory changes in this sector, along with concerns like increasing inflation and rise in the cost of raw material. Most banks, therefore, do not want to look beyond the five to seven year horizon when they are lending to an infrastructure company. Additionally, there are a series of legal, environmental, and labour related issues. True, the infrastructure sector is a challenging sector anywhere across the globe. However, in India the challenges are quite unique because of a range of factors. However, a competent Chartered Accountant (CA) can convert these challenges into opportunities. CFOs and CAs have their job cut out as the country gears up for an unprecedented level of infrastructure spending. Read on to know more…

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In India, escalating infrastructure spending is inevitable. The rapid growth of the economy has put a lot of strain on infrastructure areas like power, railways, roads, ports, airports, irrigation and urban/rural water supply. The pattern of inclusive economic growth projected for the 11th plan, with GDP growth averaging 9% per year, can be achieved only if this infrastructure deficit is overcome and adequate investments are in

place to support the growth. What we also need is an improved quality of life for both our urban and rural populace. Let us look where we are at, as a nation with our infrastructure targets.

11th Plan Targets

In the 11th plan up to FY10, approximately ₹11 trillion has been spent on infrastructure, with the remaining ₹9 trillion estimated to be spent in FY11-FY12.

Target and Achievement in the Eleventh Five Year Plan:

Sector	Target	Actual achievement in 2009-2010	Likely Achievement	Gap	Gap as % of target
Power (MW)	78,700	19,092	62,374	16,326	20.75
Roads (NHDP) (km)	54,454	17,528	33,454	21,000	38.56
Ports (mt)	1,016.55	112	511.8	505	49.65
Water supply (% coverage)	100	40	70	30	30.00

Source: India Infrastructure Research 2011

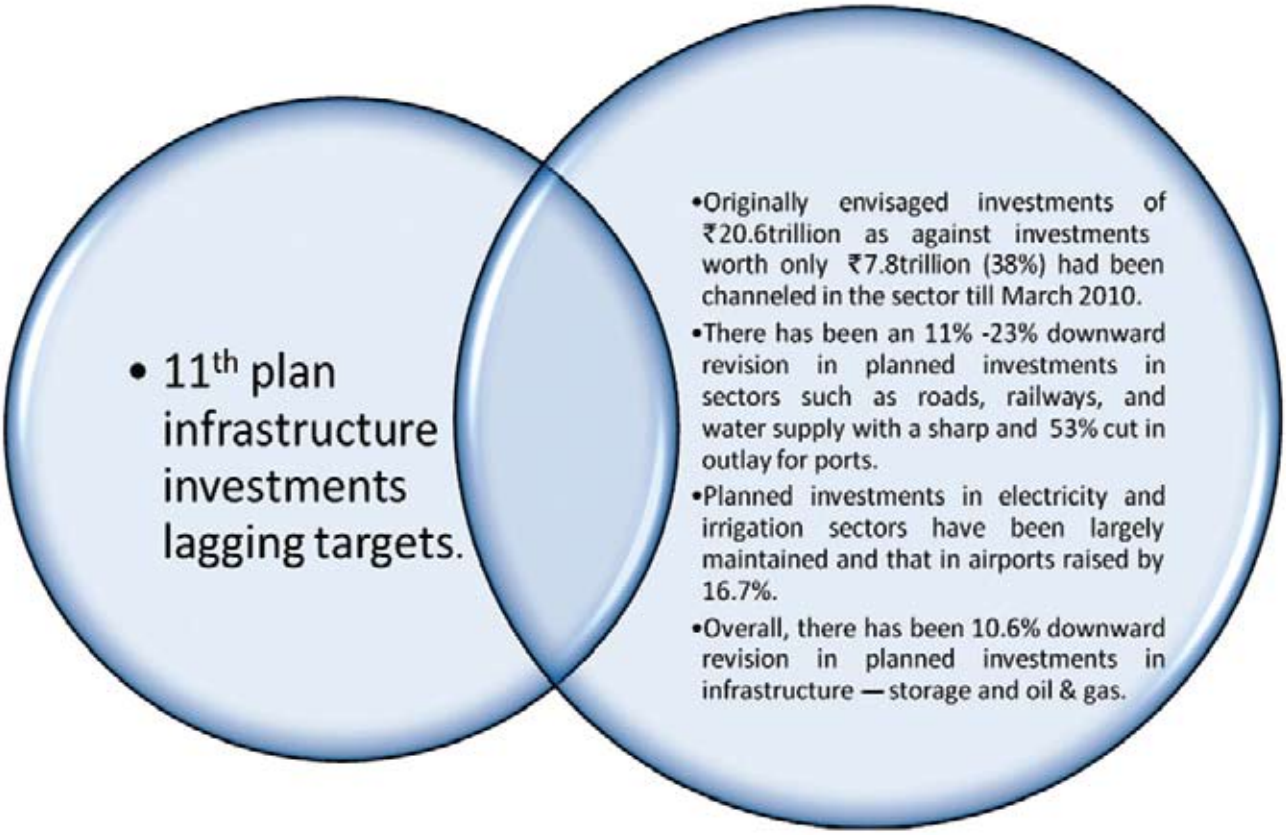
Delay in Completing Projects in 11th Plan

Award and execution of projects in the 11th Plan has been slow mainly because of the issues related to land acquisition, environmental clearance, restrictive regulations and consequent litigation, as well as restrictions on the issue of visas, especially in Ports sector.

The major delays in the Roads sector stemmed from frequent management changes, capacity constraints at NHAI, finalisation of MCA, restrictive policy frameworks, instances of single-bid projects not being awarded, conflicts of interest, termination clauses, and caps on the number of bidders that led to considerable litigation. The law and order problem in certain eastern and north-eastern states also contributed to the delays.

Rise in Infrastructure Spending Inevitable

With the Government of India proposing to invest in infrastructure projects worth ₹41 trillion in the 12th Plan period, growth prospects are strong for EPC players. However, to turn promise into reality, we will need access to equity capital, improvement



in liquidity and focused efforts from the Government to channel long-term investments to the sector.

Spate of Reforms Across Infrastructure Sectors

Road sector: India has one of the largest road networks in the world. The national highways, though shorter in cumulative length than state, district and rural roads, carry the bulk of the traffic in the country. However, most of our roads are in deplorable condition and suffer from under-capacity.

Indian Road Network

	Length (In Km)
National Highways	70,548
State Highways	131,899
Major District Roads	467,763
Rural and Other Roads	2,650,000

The government has brought about substantial reforms in the Roads sector to make projects attractive to bidders.

The BK Chaturvedi Committee has suggested major reforms in the Roads sector, recommending on all the three modes of delivery: BOT (Toll), BOT (Annuity) and EPC (item rate contract) concurrently rather than sequentially. A road project not found *prima facie* suitable for BOT (Toll) can be implemented directly on BOT (Annuity) subject to the overall cap as envisaged in the work plan. And if BOT (Annuity) bids are unacceptable, then only the project can be awarded on EPC basis.

Typically, Annuity bids translate to an Equity IRR of up to 18%. However, in the event of bids exceeding the equity IRR of 18%, the same will be bid out on EPC. In sensitive areas with law and order problems, or affected by inhospitable terrain, a bid working out to an Equity IRR of up to 21% will be acceptable considering a risk premium of 3% on a case-to-case basis.

Additionally, lenders should be allowed to create a charge on the project escrow account so that they have greater security. The recommendations also suggest that developers to be paid the entire grant amount (40% of project cost) during the construction period. Concessionaires will be allowed to completely exit projects two years after COD and the conflict of interest threshold will be increased to 25% from 5% earlier. Also, prequalification must be made an annual exercise and not be conducted for each project separately.

These measures were aimed at attracting investments to the Roads sector, cutting down on procedural delays, doing away with the need for rebidding for projects. This will enhance the equity IRR's of developers. Bidders can access to debt and marginally lower interest rates. For bidders and developers, this boosts participation, encourages healthy competition and saves considerable time and effort.

PMGSY instituted for upgrading rural roads: The Pradhan Mantri Gram Sadak Yojna (PMGSY) was instituted to provide all-weather access in rural areas, thus promoting access to economic and social services, and generating increased agricultural incomes and productive employment opportunities. About 2,80,000 kms of projects have been completed while about 1,20,000 kms of projects worth about ₹460 billion are either in the implementation stage or yet to be given out for construction.

Metro rail projects: The government has undertaken development of rail-based Mass Rapid Transit System (MRTS) in major cities like Mumbai, Bangalore, Hyderabad, Chennai, Kolkata (expansion) and Delhi (Phase II). The total investment outlay towards rail based MRTS in the 11th plan is likely to be $4 billion. In the near future, we see the Kolkata East – West Metro Corridor project, Hyderabad Metro Rail project and the Bangalore High Speed Rail Link project as potential opportunities for EPC and Infra developers.

Ports sector: Ports play a vital role in the overall economic development of the country. There are 12 major ports and about 200 non-major ports along India's coastline. The 12 major ports are under the direct administrative control of the Central Government while the non-major ports are under the jurisdiction of the maritime boards under the respective State Governments.

The National Maritime Development Programme (NMDP) envisaged investments of ₹870 billion in the 11th plan period to increase capacity of major ports to 1,016 MMTPA. However, projects worth only ₹57 billion have been completed till recently and projects worth ₹165 billion are under construction. It is a known fact that delays in awarding projects were caused mainly because of restrictive regulations and consequent litigation.

The FII limit for investment in corporate bonds, with residual maturity of over five years issued by companies in infrastructure sector, has been raised by an additional limit of $20 billion taking the limit to $25 billion. This has raised the total limit available to the FIIs for investment in corporate bonds to $40 billion.

As a result of these delays, there has been a sharp 53% revision in the planned outlay in the ports sector — to ₹460 billion. Major domestic ports are currently operating at more than 90% utilisation; their poor rail-road connectivity to the rest of the country has led to congestion. Also, unavailability of storage infrastructure has led to capacity shortage at most of the major Indian ports. At the 12 major ports that are under Central Government jurisdiction, the government has undertaken projects worth ₹288 billion. Another ₹206 billion worth of projects are currently in the pipeline. Most of these projects will involve improving capacity by building new berths, improving productivity by replacing old equipment, improving draft and developing associated infrastructure.

Going forward, we expect the pace of awarding projects in the Ports sector to pick up, attributable to policy reforms, such as easing of restrictive clauses in the bidding process and formalisation of the MCA for the Ports sector. Already, several large projects have been cleared by the apex bodies — the Private Partnership Advisory Committee and Cabinet Committee on Infrastructure — and they have entered the bidding stage. In FY11, the Ministry of Shipping aims to award 21 projects that will add a capacity of 200 million tonnes and will require an estimated capital investment of ₹140 billion.

Airports sector: The development of airports is vital to support the growth in air travel. Passenger traffic in airlines has grown from 73 million in FY06 to 124 million in FY10. With rising incomes and the declining cost of air travel, we can expect a larger number of people using air transport for travelling around the country and overseas. Air cargo traffic, too, has risen from 1.4 MT in FY06 to 1.9MT in FY10. With a view to create world-class airport infrastructure to support this rise in traffic, Airport Authority of India (AAI) has undertaken up gradation/modernisation of a number of metro and non-metro airports in association with joint venture companies in some cases.

Airport modernisation programme: Of the 35 non-metro airports, the government spent ₹15 billion on the development and modernisation work in 12 airports (Vizag, Mangalore, Trivandrum, Aurangabad, Nagpur, Amritsar, Jaipur, Udaipur, Agra and Dehradun) in FY10. Of the remaining 23 airports, work at 14 other airports (Raipur, Ahmedabad, Ranchi, Bhopal, Indore, Khanjuraho, Pune, Imphal, Dimapur, Coimbatore, Madurai, Lucknow, Varanasi and Chandigarh) are nearing completion. The modernisation projects at five airports (Port Blair, Goa, Bhubaneshwar, Jammu and Vadodara) are in the offing; AAI has already started the detailed planning and engineering.

Investments in the 12th plan period are likely to be equally shared between the government and private sources. While Central and State governments are expected to fund 22.5% and 27.5%, respectively, the private sector is expected to pump in the remaining 50%.

Withholding tax rate has been reduced to 5% instead of the current rate of 20% on interest payment on borrowing infrastructure debt funds and also exempt the income of the fund from the tax. To promote savings and raise funds for infrastructure, an additional deduction of ₹20,000 for investment in long-term infrastructure bonds extended by one more year.

Power sector – Shedding the lethargy: In the revised 11th Plan, power generation capacity is likely to increase by 62,374 MW with planned investment of ₹6.6 trillion (42% of total investment) in the power sector. So far, 21,221 MW of capacity has been commissioned as part of the 11th plan. Apart from this, 100,000 MW additional capacity is targeted in the 12th plan though ordering is yet to commence for 53,000 MW of power projects. To keep pace with the capacity addition in the generation sector, investments in the transmission and distribution sector too are expected to accelerate. PGCIL (Power Grid Corporation of India Limited) is likely to incur capex of ₹220 billion over FY11 and FY12. The government plan to undertake large transmission projects through the PPP mode will add to opportunities like ultra-mega transmission projects.

PGCIL spending to rise in FY2011-12: PGCIL is the central nodal agency for maintaining the national/regional transmission grids and adding new transmission capacity. PGCIL has a capex plan of ₹550 billion that needs to be spent over the 11th Plan. PGCIL has awarded projects worth ₹277 billion in the first three years of the 11th Plan. Historically, PGCIL has accelerated its capex spending in the last two years of the Plan.

Trends in Infrastructure Financing

Over the five year period between 2005-2006 and 2009-2010, the infrastructure segment has seen funds pouring in from the debt and equity markets, as well as FDI.

Infrastructure Funding in India through Debt and Equity Markets (in ₹ billion)

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
FDI ($ millions)	955.10	1902.10	6600.60	6665.40	8030.40
Debt					
Commercial Banks	338.54	302.86	622.20	646.36	1099.16
NBFC's	321.82	440.31	551.07	652.37	845.18
International Development Funding Institutions	144.91	135.62	574.45	244.58	371.27
ECB's	286.04	585.16	696.83	561.05	523.57
LIC	93.87	133.28	128.30	150.41	167.74
IIFCL			16.84	34.70	24.15
Equity					
IPO	50.61	203.58	219.72	8.31	179.31
FPO	2.16	4.67			118.50
QIP		10.22	94.08		66.07
Private Equity	61.65	101.88	193.62	108.05	86.53
Project Equity	0.47	0.97	5.32	7.46	9.42

Budgetary Reforms

In the last budget, our Finance Minister has announced major policies to enhance the flow of funds into the Infrastructure Sector:

- The FII limit for investment in corporate bonds, with residual maturity of over five years issued by companies in infrastructure sector, has been raised by an additional limit of $20 billion taking the limit to $25 billion. This has raised the total limit available to the FIIs for investment in corporate bonds to $40 billion.
- For 2011-2012, an allocation of over ₹2,14,000 crore was made for this sector, which is 23.3% higher than the allocations in 2010. This amounts to 48.5 % of the gross budgetary support to Plan expenditure.
- Allowed tax free bonds of ₹30,000 crore to be issued by various government undertakings in FY2011-12, like IRFC, NHAI, HUDCO and Ports.
- To attract foreign funds for the infrastructure financing, SPV's in the form of notified infrastructure debt funds.
- Withholding tax rate has been reduced to 5% instead of the current rate of 20% on interest payment on borrowing infrastructure debt funds and also exempt the income of the fund from the tax.
- To promote savings and raise funds for infrastructure, an additional deduction of ₹20,000 for investment in long-term infrastructure bonds extended by one more year.

With improved access to long-term capital and reduction in borrowing rates, bankers have started lending to infrastructure projects.

Budgetary support accounts for nearly 30% to 40% of the total infrastructure investment. Of the total non-budgetary investment in infrastructure, nearly 70% is in the form of debt. Lending is typically provided in the form of term loans, ECB's, bonds, debentures or private placement issues. Loan products are structured to suit the needs of both customer and lender.

Investment Requirements

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Funding Sources and Structures

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Commercial banks, for instance, lend in the form of term loans and working capital finance. NBFCs finance infrastructure projects through loans, subordinated debt, mezzanine finance and equity, and also providing leasing and hire purchase loans for equipment purchases.

Debt financers are facing a risk due to the non-recourse or limited recourse nature of infrastructure financing and the lack of tangible security. Reserve Bank of India now allows bankers to treat toll receipts and annuities from road projects as tangible securities.

Risks and Challenges

Infrastructure projects are highly capital intensive and have a huge requirement in terms of labour, material, machinery and land. Any infrastructure project, therefore, takes three to five years before generating revenues. Banks have been the largest source of funding for this sector, but they have faced problems like asset-liability mismatch, flexible interest rates and shorter tenors.

- In the global market, insurance and pension funds are the major sources of long-term debt for infrastructure projects. However, in India, insurance and pension funds have had limited presence in infrastructure financing because of regulatory restrictions as well as its own inherent drawbacks.
- ECB (External Commercial Borrowings) flows are also restricted in tenor and by the government's foreign exchange management policies.
- Bonds are a good source of low-cost, long-tenor funds and are most suitable for financing infrastructure projects. However, the Indian bond markets are underdeveloped and illiquid.
- It is very difficult to structure financing proposals because of regulatory issues, restrictions, transparency in documentation; many projects are suffering from clear-cut implementation schedules and targets. Most projects are delayed and frequent cost overruns increase project costs significantly.
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- Infrastructure projects may consist of financing from domestic or foreign sources, or both. Given the long-term nature of the projects, risks like interest rate fluctuation as well as currency exchange rate risk abound. At the same time, one needs to consider hedging cost as well.
- Over the lifetime of a project, regulatory changes, alteration in the tax regime, monetary and economic developments may also affect the revenues and returns.

CFOs and CAs in public and private companies have been playing a crucial role in developing financing structures that are better suited to the long-term nature of infrastructure projects. Some of these, like subordinated debt and convertible debt instruments, are being used to fund key infrastructure projects in India.

Infrastructure financing trends show that most of private funding has gone to the power, roads and telecom sectors. Investment in other sectors will start flowing only after significant reform of the policy framework.

At the same time, funding requirement in other sectors, like power, roads, ports and airports, will continue to increase because of the investment deficit in these areas.

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(Source; information collected from India Infrastructure Research — Infrastructure Finance in India - 2011) ■