



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

INFRASTRUCTURE FINANCING IN INDIA; A VAST LAND OF OPPORTUNITY

*VISHNU P, Research scholar, SD College Alappuzha, University of Kerala, India

**Prof. Dr. B Gopakmar, Principal NSS College, Cherthala, Alappuzha, Kerala, India

Abstract

India's economy is not only large but also continuously expanding. According to Price Waterhouse Cooper's estimates, India is projected to become the world's third-largest economy by 2050. The Indian Government has actively pursued the liberalization of government regulations and adopted a deliberate strategy to foster the growth of infrastructure investment companies. This favorable environment has created numerous promising prospects across various infrastructure sectors, including roads, highways, ports, airports, railways, and power. Astounding amounts of investment have been earmarked for these sectors, making them particularly attractive. The government's support for public-private partnerships (PPPs) has been instrumental in their increasing significance, with targeted PPP participation amounting to a staggering US\$150 billion. Companies with experience in structuring such deals can leverage their expertise effectively in the Indian marketplace. This paper delves into the opportunities for infrastructure financing in India, a rapidly expanding economy. Additionally, we shed light on the potential structuring opportunities while highlighting some challenges that overseas participants may encounter in this dynamic landscape.

Keywords: Infrastructure financing, Public-private partnerships

Introduction

“Expanding investment in infrastructure can play an important counter-cyclical role. Projects and programmes are to be reviewed in the area of infrastructure development, including pure public-private partnerships, to ensure that their implementation is expedited and does not suffer from the fund crunch.”

_Dr. Manmohan Singh, former prime minister of India

The Indian economy is experiencing a remarkable boom, consistently achieving Gross Domestic Product (GDP) growth rates of over 8% since 2003/04. This sustained growth can be attributed to the rapid advancement of the services and manufacturing sectors, a significant surge in consumer demand fueled primarily by increased spending from India's middle class, as well as the government's commitment to revitalizing the agricultural sector and enhancing the economic conditions of rural communities. Construction, emerging as the second largest economic activity in India after agriculture, has been expanding rapidly. Concurrently, the production of industrial machinery has witnessed an upward trajectory, while the flow of goods has prompted notable increases in rail, road, and port traffic, necessitating further improvements in infrastructure.

During the fiscal year that ended in March 2008, India witnessed a remarkable GDP growth of over 9%. Initially, this robust expansion was expected to continue into the following fiscal year of 2008-2009. However, in the summer of 2008, concerns arose among analysts due to a combination of factors, including a slowdown in Indian consumption, an increased domestic cost of capital, and restricted access to capital from international markets. In October 2008, India's Prime Minister, Mr. Manmohan Singh, reassured observers that the government maintained a realistic perspective, expecting a growth rate of 7-7.5% despite the global credit crunch. He emphasized the government's commitment to taking necessary measures to support businesses and financial markets if needed. Mr. Singh specifically highlighted the significance of infrastructure investment, recognizing its crucial role in sustaining India's economic progress. Even with a somewhat slower rate of growth, the Indian economy continues to expand significantly, necessitating substantial investment in infrastructure. The country's ability to embrace and benefit from new technologies and industries relies on the availability, quality, and efficiency of fundamental infrastructure elements like energy, water, and transportation networks. In certain areas, such as roads, rail lines, ports, and airports, existing capacities are already strained, making expansion a prerequisite for further economic development.

The Indian Government acknowledges the importance of addressing this matter. In accordance with the Eleventh Five Year Plan, investments worth over US\$500 billion are projected to be channeled into India's infrastructure by 2012. A significant portion of these proposed investments is allocated to construction projects, positioning the Engineering and Construction (E&C) sector as a major beneficiary of the infrastructure surge in India. The regulatory environment is being relaxed to attract additional foreign direct investment (FDI).

Private sector involvement holds a pivotal role in these plans. Public-Private Partnerships (PPPs) have been identified as the most suitable approach for project implementation and are rapidly emerging as the standard for funding. Approximately 30% (equivalent to US\$150 billion) of the total planned infrastructure improvements are expected to be driven by PPPs. Power and road projects take precedence, with substantial investments also targeted towards other transportation sectors such as railways, ports, and airports.

Companies seeking to capitalize on this situation must carefully devise their market entry strategy. It is crucial to have a deep understanding of the local market, including the selection of compatible local partners. Tax optimization plays a significant role in cost management, considering that infrastructure projects offer substantial tax benefits. Developers must be astute in structuring their contracts, as adept tax planning can have a decisive impact, particularly in competitive bidding scenarios, while simultaneously helping to prevent unnecessary legal disputes.

Foreign Direct Investment (FDI) and the Regulatory Environment

Significant investment capital is essential for major infrastructure development. The Indian Government has formulated policies aimed at encouraging investments in domestic infrastructure from both local and foreign private sources. India is already a highly sought-after destination for foreign investors. According to the United Nations Conference on Trade and Development's World Investment Report, India ranked as the second most attractive location (following China) for global Foreign Direct Investment (FDI) in 2007. Presently, India receives approximately US\$21 billion of FDI annually, which falls short of the targeted US\$30 billion. In order to bolster FDI inflows, particularly to stimulate investment and bolster infrastructure development, the Indian Government has implemented significant policy reforms. For instance, the government now permits 100% FDI through the automatic route in a wide range of sectors. This means that investors are allowed to invest without prior approval, with only certain post-investment intimation requirements in place. These reforms are aimed at attracting more foreign investment and facilitating the improvement of infrastructure in the country.

In a few sectors, prior approval is required for Foreign Direct Investment (FDI), which typically takes approximately 6-8 weeks. However, as part of ongoing policy reforms, the Indian Government is continuously simplifying the approval process by establishing various agencies to expedite FDI approvals. Further liberalization measures are anticipated as the government maintains its emphasis on infrastructure investment.

According to a press report in August 2008, Morgan Stanley expressed interest in investing a significant portion of its US\$4 billion global infrastructure fund in emerging markets, particularly India and China. In India, Morgan Stanley would face competition from other major players such as Australia's Macquarie Group, JP Morgan, Goldman Sachs, and Deutsche Bank, all seeking to channel foreign investors' funds into Indian infrastructure. While some of these planned investments may be reduced or delayed due to the current credit market conditions, India is still expected to attract substantial FDI, especially if its economy can sustain a robust growth rate amidst a global recession.

In terms of exchange control, India is moving towards full current account convertibility. Most revenue transactions are freely permitted, except for certain transactions like royalty and consultancy fees, which are subject to specific limits. Capital account transactions generally require prior approval, unless explicitly permitted.

To stimulate growth in the construction sector, the Indian Government has implemented relaxations in exchange control restrictions. Foreign citizens are now permitted to acquire immovable property in India, subject to certain conditions and procedures. However, there are still hurdles to investment. Despite India having a well-developed legal system, the existing legal and regulatory environment can sometimes impede the inflow of foreign private capital required for infrastructure development.

Major infrastructure projects operate under concession agreements signed between public authorities and private entities. The determination of tariffs and establishment of performance standards may vary across sectors. For example, in the roads and highways sector, tolls are generally set by the ministry. In major port projects and many electricity generation projects, tariffs are determined by an independent regulator. In the airport sector, a new independent regulator is planned for 2009, and it is expected to have a significant role in setting tariffs within concession agreements. In certain cases, the control exercised by ministries or regulators over potential revenues can discourage private infrastructure developers from investing.

Similar to many countries, India lacks a centralized regulatory authority responsible for formulating policies for all infrastructure projects. Furthermore, there is a lack of standardization in concession agreements across different infrastructure sectors. Consequently, the development of certain sectors in India may face obstacles due to inadequate and fragmented planning. Approved projects may encounter difficulties if related projects experience substantial delays. A notable example is the new international airport in Bangalore, which stands as one of the largest Public-Private Partnership (PPP) projects in the country. This project is currently facing challenges stemming from insufficient road and rail connections to the new facility, partly due to delays in high-speed rail and highway projects managed by other government bodies.

Prospects in India's Infrastructure Sector: An Overview

The Planning Commission of India has charted out ambitious plans for the growth and enhancement of infrastructure in various sectors, offering significant prospects for Engineering and Construction (E&C) companies. Notably, the roads and highways, ports, civil aviation and airports, and power infrastructure segments hold immense potential. India's road network is already heavily congested, and the situation is worsening. Projections indicate annual growth rates of over 12% for passenger traffic and over 15% for cargo traffic. To improve the country's road infrastructure, the Indian Government estimates that an investment of over US\$90 billion is required between FY07 and FY12. Moreover, the government has announced plans to increase investments in road infrastructure, aiming to raise funds from around US\$15 billion per year to over US\$23 billion by 2011-12. These programs will witness a significant surge in investment, surpassing the levels observed in recent times. The funding for such initiatives will be a mix of

public and private endeavors. The expansion plans extend beyond roads and highways, encompassing the development of ports, civil aviation, and airports, as well as the power infrastructure. These sectors offer lucrative opportunities for E&C companies to partake in large-scale projects and contribute to the growth and modernization of India's infrastructure landscape.

Roads and Highways

The Indian Government, through the National Highway Development Program (NHDP), is preparing to launch over 200 projects in NHDP Phase III and V, encompassing approximately 13,000 kilometers of roads. These projects offer significant potential, with an average project size ranging from US\$150 million to US\$200 million. Furthermore, larger-scale projects are expected to reach values in the range of US\$700 million to US\$800 million. Currently, around 53 projects, spanning a total length of 3,000 kilometers and estimated to cost around US\$8 billion, are in the pre-qualification stage. The procurement process prioritizes experienced players with strong financial capabilities. Moreover, the opportunities extend beyond NHDP projects. Over 10 states in India are actively planning the development of their highways. Although the average size of these projects may be slightly smaller than NHDP projects, they are still significant, ranging from US\$100 million to US\$125 million. Collectively, it is projected that over 4,500 kilometers of state, highways will be awarded by the end of 2010. These developments present promising prospects for companies looking to engage in road infrastructure projects, with both NHDP and state-level initiatives offering substantial avenues for growth and investment in the coming years.

Rail

Recognizing the existing infrastructure gaps and capacity limitations in the rail system, the Indian Government has devised a comprehensive plan for substantial investment over a five-year period, spanning from FY07 to FY12. The projected investments amount to a total of US\$65 billion, with the private sector expected to contribute around 40% of the funding. A prominent Public-Private Partnership (PPP) initiative is already underway, known as the Dedicated Freight Corridor project. This transformative project aims to address congestion on rail routes between Delhi and Mumbai, as well as Delhi and Kolkata, by constructing long-distance, cargo-exclusive rail lines. The estimated cost of this endeavor ranges from US\$6 billion to US\$7 billion.

Additionally, several other initiatives are in the pipeline. These include the establishment of manufacturing plants for rolling stock, with long-term procurement commitments spanning multiple years, and the development of logistics parks. Furthermore, plans are underway to introduce city metro systems to enhance urban transportation. The Mumbai Metro Project has already commenced, with the first corridor awarded to Reliance Infrastructure. The government has also invited final shortlisted companies to submit detailed financial bids for the second phase of the Mumbai Metro. Indian Railways is actively seeking private partners to modernize railway stations to world-class standards and to undertake projects focused on improving connectivity with ports. These ambitious undertakings present significant opportunities for

companies interested in participating in the expansion and modernization of India's railway infrastructure. The government's emphasis on private sector involvement and the implementation of PPP models demonstrate a commitment to fostering innovation, efficiency, and connectivity in the Indian rail network.

Ports and airports

India's ports are facing numerous challenges, including the need to enhance connectivity with inland transport networks, as the volume of goods transported continues to increase rapidly. By 2011-12, traffic is estimated to reach 877 million tons, with containerized cargo expected to grow at a compound annual growth rate (CAGR) of 15.5% over the next seven years. The existing ports infrastructure is insufficient to handle this surge, and cargo unloading remains inadequate even at modernized ports. To address these issues, an investment of approximately US\$22 billion is targeted for port projects from FY07 to FY12.

The National Maritime Development Programme comprises 276 projects that require an investment of about US\$15 billion over the next decade, with private investment targeted at around US\$8 billion. These projects, which include the construction of jetties, berths, container terminals, and channel deepening, offer significant opportunities for E&C companies. Recent deregulation in the sector allows 100% foreign direct investment (FDI), and the establishment of an independent tariff regulatory authority facilitates projects at major ports.

In the aviation sector, air traffic has seen rapid growth in recent years, although it slowed in 2007. Despite challenges faced by Indian airlines in 2008, passenger traffic is expected to grow at a CAGR of over 15% in the next five years. Cargo traffic is projected to grow at over 20% per annum. To cope with this increasing demand, the Indian Government has projected a need for approximately US\$8 billion in investments from FY07 to FY12, with private sector participation playing a crucial role.

Private participation has already been witnessed in airport infrastructure development at key locations such as Delhi, Mumbai, Hyderabad, Cochin, and Bangalore, complementing the efforts of the Airports Authority of India. The government's proposed establishment of the Airport Economic Regulatory Authority (AERA) aims to promote efficiency, competitive pricing, and customer-focused service. State governments are also facilitating the development of new airports, with a proposed investment of about US\$10 billion by 2012. New airport projects are planned in resort destinations and emerging metros, and the development of 35 non-metro airports is proposed. Opportunities exist for EPC contractors, with the prequalification of bidders already completed for certain projects.

As the number of airports increases, competition is likely to intensify, prompting a focus on corporate performance management. Airports will explore revenue diversification through the development of city-side infrastructure, while airlines seek technological solutions to maximize revenues and reduce costs. The demand for improved aviation infrastructure extends beyond new airports, as existing metro airports in Chennai and Kolkata require significant modernization and upgrading.

Power and Energy

India's increasing manufacturing activities and growing population are driving a significant surge in power consumption. With the fifth largest electricity grid globally, boasting a capacity of 135 GW, and the third largest transmission and distribution (T&D) network, there is a pressing need for substantial investments to meet the rising demand and ensure universal access to electricity. The policy and regulatory framework in the sector is pro-investment, shifting towards open market competition rather than negotiated and guaranteed arrangements. However, with increased competition, diversity, and opportunities, careful assessment and management of project and collaboration risks are crucial.

A projected investment of US\$167 billion is anticipated for electricity projects during the five-year period from FY07 to FY12. This substantial number and scale of potential projects have attracted new investors, lenders, and operators. All new project awards are now conducted through open and competitive bidding. This rush to develop new assets, harness natural resources, and attract global finance necessitates an industry focus and strategy to effectively capitalize on this opportunity. E&C companies may consider involvement in the construction of power stations and T&D networks, particularly if they can leverage sustainable building and generation technologies. The Indian Government is also keen to promote wind and solar power generation by offering generation-based incentives to companies that don't claim accelerated depreciation. Therefore, E&C firms with experience in building alternative energy projects, such as wind and solar, may find excellent opportunities in this sector.

Public private partnerships

India's ambitious program of infrastructure expansion, with a budget of approximately US\$500 billion over a five-year period, exceeds the capacity of total government funding. Therefore, policies have been formulated to facilitate maximum private sector investment. If the Indian Government achieves its targeted level of private sector involvement (around 30%), the funding required would reach a staggering US\$150 billion, surpassing the investment achieved in the past decade. Attaining this level of investment is indeed ambitious, but various frameworks and plans are already in place to facilitate the realization of these goals.

The public-private partnership (PPP) and private finance initiative (PFI) market in India is still in its early stages. However, over the past decade, both the central and state governments have increasingly embraced PPPs to address critical infrastructure gaps, yielding encouraging results. Establishing a PPP has become the default option for major infrastructure projects in sectors such as roads, railways, airports, ports, and other transportation segments. The PPP model is given first preference, and only when projects struggle to attract private sector interest do more traditional models come into consideration. This approach aims to attract private investment and expertise, leveraging the strengths of both public and private sectors for efficient infrastructure development. By fostering a favorable environment for private investment, India is poised to unlock the necessary funding to realize its infrastructure expansion plans. The PPP model will play a central role in achieving these objectives, ensuring the efficient delivery of critical infrastructure projects across various sectors.

India's infrastructure sectors are guided by comprehensive long-term plans and programs that outline the anticipated projects for development. Furthermore, key policy frameworks for procuring projects through public-private partnerships (PPPs) have been drafted. For instance, the National Highway Development Program (NHDP) provides a long-term plan for roads and highways, with defined phases, identified projects, and agreed-upon timelines and costs. The roads and highways segment has also witnessed success in implementing PPP models. The NHDP is overseen by a dedicated agency with clear funding sources to support the program. Similar plans exist for other sectors, and there has been a recent emphasis on expanding PPPs for urban infrastructure through a government program for nationwide urban renewal.

Unsurprisingly, international interest in Indian PPPs has surged, with over 50 international players expressing interest in various projects during the first three quarters of the year. Local players are also increasingly engaged, as the capacity of domestic developers and contractors in understanding and delivering PPP models has significantly improved. However, there are certain hurdles for engineering and construction (E&C) companies aiming to participate in this growing segment. The project design and preparation process still lean toward technical aspects, with limited consideration of overall financial and commercial risk issues. Information distortions in the market have led to significant bid variations during procurement. Moreover, the procurement process often tends to be prescriptive rather than participative, lacking room for innovative solutions and long-term partnership approaches. While the public sector dictates terms, it is often reluctant to share associated risks. The current concession structure focuses more on assets than service delivery, placing the considerable risk on private sector participants, including demand risk, with sometimes inefficient risk apportionment.

Financing PPP/PFI projects can also present a challenge, as long-term financing and instruments have been relatively scarce. Domestically financed PPP projects have mainly relied on conventional debt with low leverage, predominantly sourced from commercial banks with shorter tenures (approximately 50% of the concession period). The future of financing for PPP projects is uncertain, given the current global credit constraints. However, if India's growth continues to outperform other economies, it may emerge as a preferred investment destination.

While the need for increased infrastructure investment is evident, it is equally important to sustainably manage these investments. The success of India's infrastructure provision should be measured not just by the amount of funds invested but by how infrastructure contributes to the country's economic, social, and environmental objectives. Infrastructure investment should be seen as a means to an end, not an end in itself. Challenges in infrastructure provision are not unique to India and are faced by governments worldwide, including uncertainty, limited funding availability, and competing priorities. Sustainable management of infrastructure requires appropriate pricing, funding, and prioritization frameworks to maximize the benefits derived from India's significant investments in key social and economic infrastructure.

Conclusion

While navigating the diverse perspectives and opinions of local stakeholders may pose challenges, there is a vast opportunity for foreign contracting companies to invest in India's infrastructure sector. Contractors from Europe, Australia, China, Malaysia, and Korea have already made their mark in India, and infrastructure financing companies from Japan, Spain, France, and the UK are actively seeking entry into the Indian market. The potential to establish a significant business presence in India is highly promising for infrastructure financing companies that carefully select strong local partners, structure contracts strategically to maximize tax benefits when applicable, and adopt a long-term and sustainable perspective.

It is crucial for foreign companies to recognize the opportunity and act promptly to establish a lasting presence in one of the world's largest growth markets. Failure to do so may result in missing out on a critical opportunity for long-term growth. Therefore, foreign contractors and financing companies that embrace the potential of India's infrastructure market, forge solid partnerships, and approach the market with a forward-thinking mindset stand to benefit greatly and establish themselves as key players in this dynamic and expansive sector.

Reference

Abadie R., (2012), "The Future of PPP Financing", Presentation to the Joint EC-EIB/ EPEC Private Sector Forum, Brussels, 6th June.

Fitch (2014), "Private Infrastructure Investment in Developed Economies", Special Report, FitchRatings, December 2014.

Gatti, S. (2014), "Private Financing and Government Support to Promote Long-term Investments in Infrastructure", OECD Publishing, Paris.

Government of India. (2013). Scheme and Guidelines for India Infrastructure Project Development Fund retrieved from PPP.in/ NPBCPimages/ PDFs/IIPDF_ Guidelines_2013pdf.

Government of India. (2014, June). High Level Committee on Financing Infrastructure. Retrieved from ministry of infrastructure website: <http://www.infrastructure.gov.in>.

Helm, d. and Tindall, T. (2009), “The Evolution of Infrastructure and Utility Ownership and its Implications”, Oxford Review of Economic Policy, Vol. 25, No. 3, 2009.

Planning Commission, Government of India. (2014, June). High Level Committee on Financing Infrastructure. Retrieved from ministry of infrastructure website: <http://www.infrastructure.gov.in>.

World Economic Forum. (2014, Sep 2). Global Competitiveness Report 2014-15 retrieved from www.weforum.org/reports/globalcompetitiveness-report-2014-2015.

