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Liberalization and Organizational Restructuring of the Construction Industry in India

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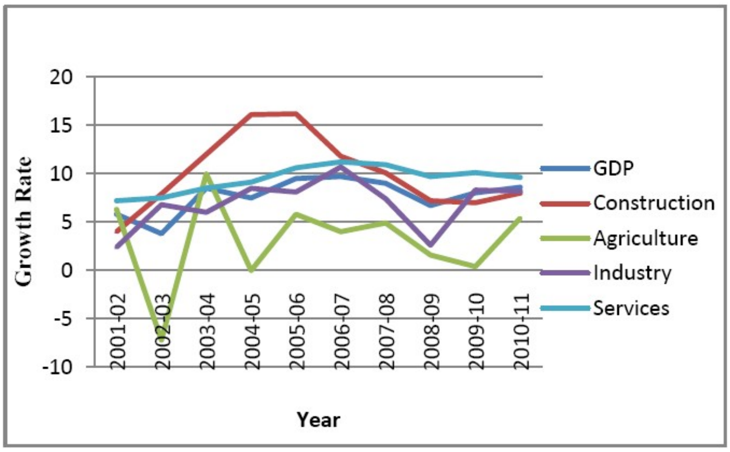
Abstract. With an upsurge in investment and robust macroeconomic fundamentals, India could unleash its full potential, provided it is able to create the infrastructure in required quantity and of desired quality. Thus, the government is playing a pivotal role in making Indian infrastructure sector an attractive investment destination for both domestic and foreign players. All of this has helped create world-class infrastructure, with phenomenal increase in volume, new collaborations being set-up between private players and government, as well as with well-established international firms in the field of construction, and high growth rates of major/minor infrastructure firms. While the present trends seem to be benefitting all, this paper aims to explore the positive & negative impacts, if any, that the influence of international players may be having on the indigenous infrastructure firms, the access to finance and superior technology, being their Achilles' heel. While the present scenario is bringing growth to all, in the long run, will the nation's need for superior infrastructure result in international players hampering the growth of indigenous firms?

Keywords: Infrastructure, Construction, PPP Models, Joint Ventures, Contracting, Construction Economics.

1. Introduction

The end of the twentieth century saw many developing countries undertaking trade liberalization in an effort to accelerate economic development. Globalization of these economies has led to massive structural changes in these countries, opening up new vistas of opportunity for economic development. India too has witnessed rapid transformation of its economy since the advent of globalization and like many other countries is undergoing rapid changes. India has recorded impressive growth since 2004 with real GDP growing by over 8 percent / year.



Source: Compiled from Economic Survey at Indiabudget.nic.in

Fig. 1: GDP and Sector-wise Growth rate 2001-11.

1.1. The Importance of Studying Construction Sector in India

Construction, which is one of the oldest of all industries, consists of building construction, engineering construction, and industrial construction. In India, it has retained its role as a core economic activity with its

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contribution to GDP at approx. more than 5%. By virtue of its nature, construction sector is very closely interlinked with other sectors of the concerned economy. The direct backward linkage of Indian construction sector is found to be 0.4870 and ranks 4th among the 14 broad sectors while the total linkage coefficient for the construction sector of India turned out to be 1.2581 ranking 3rd among 14 sectors, implying that the construction sector exhibits linkage effects that are much stronger than most other sectors.

Construction also: (a) creates job opportunities; (b) reduces cost and improve quality to contribute towards making the country an attractive place for foreign direct investment (FDI); and (c) its companies compete with foreign firms entering the markets in the era of globalisation (Ofori, 2001).

The construction sector is one of the largest employers in the country. In 1999-2000, it employed 17.62 million workers, a rise of 6 million over 1993-94. The sector also recorded the highest growth rate in generation of jobs in the last two decades, doubling its share in total employment (Tenth Five Year Plan 2002-07). The Eleventh Five Year Plan indicates a further growth of employment in this sector to 31.46 million, comprising engineers, technicians, foremen, clerical staff, and skilled and unskilled workers.

Recognising the importance and role of infrastructure in the growth and development of India, there has been considerable increase in investment in this sector during the tenth and eleventh Five Year Plans. While in almost every sector there is a doubling of investment, ports, airports and gas have witnessed 3 to 4 fold increase in investment, given the ambition to build world class ports and airports in all major cities as a consequence of rapid integration with the world economy. However, the government's current investment levels are not capable of meeting the financial requirement to overcome the shortfall in this sector. Hence, there is a need to develop an integrated approach for development in this sector, along with collaboration from the private sector and this is evident from the constantly increasing share of the latter in financial outlay from 2006-11. Improving macro-fundamentals, easier access to and attractive fiscal incentives for private and foreign capital, and greater ability to pay user charges as a result of improved economic growth, are boosting private investment in India's infrastructure (Mckinsey).

2. Evolution of Present Day Indian Construction Sector

Infrastructure development in India in the pre liberalization era was solely in the public sector with the government formulating and financing the infrastructure projects. The project was generally implemented through the Public Works Department which not only became responsible for designing, detail engineering, transportation and mobilization, actual construction process, resource and finance management, and operation of the project but also became the owner of the project. The PWD had its own set of resources and set of engineers to carry out the project, yet it always had the opportunity to sub-contract parts of the construction process to smaller private or public sector engineering, materials, manufacturing, transportation, or designing firms. (Fig. 2). While private players with resources, funding and expertise were always present, they were restricted by the number of licences and permissions required, thus the only option for them was to become sub contractors.

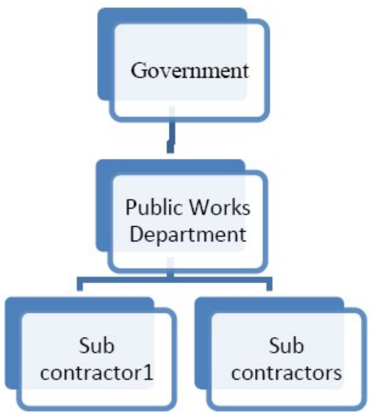

Fig 2: Organizational structure in government construction projects

2.1. The Post-liberalization Scenario

According to a report from the ILO (2003), given India's high growth rate and development, the need for infrastructure has been increasing with the result that the construction sector is constantly overloaded with projects of sizes bigger than before. Hence, the post-liberalisation phase has seen :

(1) The need to stay ahead of competition has motivated a number of construction companies to enter into partnerships with overseas construction companies, especially for capital intensive projects. Fig. 3 shows the emerging partnerships in road construction. Joint ventures are observed to overrule individual foreign participation as they provide expert localised opinions for all legislative frameworks.

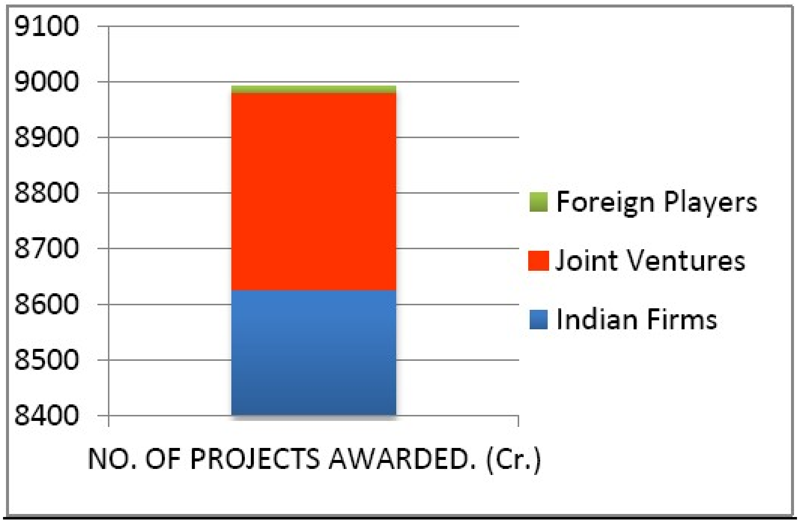

Fig 3:Number of ProjectsAwarded by NHDP till Phase V

(2) The competitive bidding and allotment procedure ensures optimum profit deals to the government as well as the developers and promotes business and growth opportunities.

(3) Greater transparency: Under the PPP mechanism, unlike the PWD model, each contract has different terms and conditions and these processes are done by multiple authorities. Hence the constant monitoring and transparency in each procedure leaves little chance for incompetence or venality to creep in.

(4) Novel ownership and management PPP models: BOT, BOOT, DBFO, DCMF, etc in which some or all of the parties depicted in Fig may be involved. Basically, the shift has been from hands-on carrying out of core functions to client-based functions, conceptualization and management.(Figure 4)

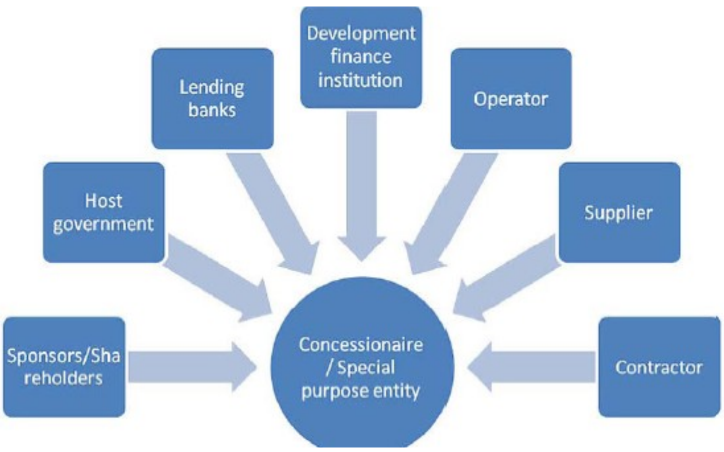

Fig. 4

(5) Multiple construction structures: On the one hand, the modern trend in construction design has been towards the integration of previously separated specialties, especially among large firms who offer themselves as "one-stop shops" for construction projects, that is the turnkey style projects. On the

other hand, there is also emerging trend to outsource work and procure building material, equipment and labour through other private subcontractors at more suitable conditions of contracts.

3. Analysis

3.1. Advantages

(1) In the whole value chain, overseas partners are desirable as they hold the advantage in terms of planning, design and estimation of costing of the projects, besides having greater level of experience gathered from execution of similar projects in their own or other countries. In India the recent call for bids for developing and implementing Airports in Delhi and Mumbai, saw prominent partnerships e.g. Bharti-Changi, L&T-Piramal-Hochtief, Sterlite-Macquarie-ADP, GMR-Fraport, GVK-ACSA, Reliance-ASA DS Construction-Munich.

(2) Foreign firms from developed nations have better access to finance at low cost as compared to their Indian counterparts. The interest rates on loans offered by American and European banks at 2-3% is much lower than that available from Indian banks, which are averaging around 12-13% in the present times, due to several factors such as the recent slow-down in growth rate and low inflation levels in the developed countries, the only risk being the currency risk. The LIBOR (London Inter-Bank Offered Rate)is the defining parameter here. The Libor is the average interest rate that leading banks in London charge when lending to other banks (fig .5)

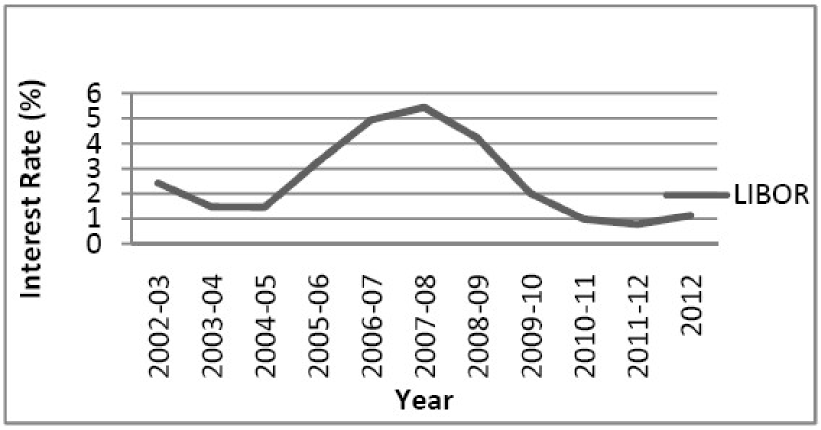

Fig.5

(3) Another option available to Indian firms is to borrow directly from international institutions, which is also relatively expensive. Due to higher risk involved, banks charge a higher rate of interest which is a sum total of LIBOR + premium for low credit rating of the country (at the time of writing, India is at B-) + in country rating (India has 3 rating agencies: Crisil (Indian affiliate of S&P), ICRA, (Indian affiliate of Moody); Fitch ratings) + cost of an Indian bank providing the guarantee signature on the behalf of the firm+ hedging (insurance for exchange/currency risk). Hence the effective interest rate again amounts to around 9%, which is considerably higher than the interest rate available to the foreign partners.

As it is clear from the graph (Fig.7), the LIBOR has hardly ever increased beyond 5% and flutters around 1% currently. On the other hand, the MIBOR (Mumbai Inter Bank Offered Rate) values start with 8% and are currently almost 9%.

Source: *Compiled from Money Café.com*

(4) The foreign players have new technologies and machinery to offer, while Indian companies had relied on traditional, economical but labor intensive equipment. Foreign partners have more sophisticated machines such as tower cranes, tunnel boring machines, crab crane, long wall

equipment, road header, shaft loader etc., which resulted in more productivity, better quality and were less labor intensive. Application of advanced technology such as "Smart" Database Creation, Web based team collaboration system, project management software, bid preparation software, better project monitoring via real-time monitoring softwares such as Enterprise Resource Planning (ERP) software and other construction streamlining techniques have been the critical contributors to project success, measured in terms of in-time and in-cost completion parameters.

(5) Apart from construction practices Indian firms have learnt to focus on and developed better practices in other prominent areas, including:

- Safety standards – reducing labour causalities and accidents
- Environmental disruption

All of the above stem from the fact that companies from the developed world generally operate with much higher safety standards for their own workers and show environmental sensitivity.

3.2. Disadvantages

However, this scheme is also facing several challenges:

3.2.1. Steep Learning Curve

Indian partners realized that they require lot of efforts and costs to work through the learning curve which is both long and steep before they can aspire to get into a relationship of equals.

3.2.2. High Cost of Operations

Despite the advantages associated with the organizational restructuring, Indian partners have refrained from undertaking the exercise as the high costs involved would dent their competitiveness. This becomes more relevant when the projects were bided out and Indian partner lost out in the bids because of high operational costs attributed to the foreign partners. In numerous partnerships this has soured the relationships.

3.2.3. Operating Environment & Client Preparedness

What was disconcerting to the foreign partners was the fact that their clients, mostly Government entities, were also ill prepared to handle projects of significant complexity and size, complicated further by lack of a speedy decision making process due to the administrative setup in the country. The difficulty of working in Indian political administrative environment has dissuaded a lot of foreign players more used to operating in a relatively more regulated and transparent environments, with scores of foreign firms rolling back their operations for this reason. This to a large extent has marred the credibility of the Construction industry as a whole and encumbered it with a 'not so easy to go into partnerships with' tag.

4. Conclusion

It is evident from the above discussion that the construction sector makes an important contribution to the growth and development of the country, directly or indirectly through its strong forward and backward linkages with other sectors of the economy. Globalization has enabled the free flow of men, material and finances between countries but has also given rise to fears of re-organisation of the industry in favour of foreign player dominance at the cost of domestic firms. However, apart from the advantages to local players in terms of easier, cheap funds; knowledge and expertise; technology and business growth, the better equipped foreign players don't serve as a threat to opportunities of the local players since contracting is a local phenomenon and foreign players don't have knowledge of the local restrictions, rules and procedures. Hence, their best shot is to collaborate with an Indian counterpart in a partnership. So an Indian player would almost always be involved. Moreover, the Indian economy has been growing at such a tremendous pace that there is no dearth of infrastructure projects. The rapid growth rate of the construction industry will ensure that both the Indian players as well as joint ventures of Indian and international players have ample opportunities to collaborate.

5. Acknowledgement

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