

Growth Prospects of Indian Infrastructure with developing Iron and Steel Sector

Ms. Suruchi Tripathi

Pursuing PhD from Dr. A.P.J. Abdul

Kalam Technical University, IET Campus, Sitapur Road, Lucknow, Uttar Pradesh, India

Dr. Shailendra Kumar Chaturvedi

Professor

Jhunjhunwala Business School, Faizabad, Uttar Pradesh, India

Abstract:

India's per capita income doubled again by 2006-07. If the current pace of growth is maintained, India's per capita income could further double by 2017-18 in next five years. While acceleration in India's recent economic growth is noteworthy, maintaining the pace, no doubt, will be challenging. India's economy is big and getting bigger. Liberalization of government regulations and a deliberate strategy on the part of the Indian Government to promote infrastructure spells opportunity for impressive economic development in India. Nearly all of the infrastructure sectors present excellent opportunities, with roads and highways, ports and airports, railways and power standing out as particular bright spots. The Indian economy is booming, with rates of Gross Domestic Product (GDP) growth exceeding 8% every year since 2003/04. This ongoing growth is due to rapidly developing services and manufacturing sectors, increasing consumer demand (largely driven by increased spending by India's middle class) and government commitments to rejuvenate the agricultural sector and improve the economic conditions of India's rural population. The production of industrial machinery has also been on the rise – and the increasing flow of goods has spurred increases in rail, road and port traffic, necessitating further infrastructure improvements. The Indian Government recognizes this imperative scenario. As per the Eleventh Five Year Plan, more than US\$500 billion worth of investment is planned to flow into India's infrastructure by 2012. Major infrastructure development requires a substantial influx of investment capital. The policies of the Indian Government seek to encourage investments in domestic infrastructure from both local and foreign private capital. The country is already a hot destination for foreign investors. As per the World Investment Report of the UNCTAD, India was rated the second most attractive location (after China) for global FDI in 2007. Reasons to invest in India: One of the world's fastest growing economies – and growth expected to continue at 7-7.5% despite the global downturn.

Key Words:

Infrastructure development, FDI, Globalization, Liberalization, Government Policy.

INTRODUCTION:

A nation develops based on the economic growth and permanence, one among the core industries is the steel industry. Steel industry plays an imperative role in India's economy. Steel industry has a conventional part in India's growth. The best example for the world is still found in Delhi known as Iron Pillar (Ashoka Pillar). The infrastructure development of a country depends on steel consumption. Relationship with steel manufacturing and consumption is an important economic indicator. The steel manufacturing is carried out with modern state of the art technology due to globalization. Steel production is full of innovation thanks to the development of automated technology in terms of mechanical metallurgical engineering. Steel products are exported and imported based on the predominance of the market demand. Steel Producers have largely extended globally. Often one could see the start of new Greenfield projects, mergers, Joint ventures, and acquisition of companies. Domestic steel producers face many challenges due to high cost of production, increased cost of raw materials, power, and highly skilled manpower.

Steel is all over the place in life. No other material has the same outstanding blend of strength, formability and flexibility. Steel surfaces are germ-free and simple to clean. Surgical and safety apparatus and marketable kitchens are all finished with steel. Every year approximately 200 billion cans of food are manufactured. Steel cans guarantee that food remains safe and healthy while saving energy as refrigeration is not needed. Steel utilization in any country is strongly linked to infrastructure development and economic growth. Current economic condition is persuasive steelmakers to appraise whether their capital structure is optimized for the new operating economic environment. Steel Industry must primarily evaluate the position of their asset portfolios with their business strategies. The main objectives for corporate is the optimal allotment of capital to maximize shareholder returns and attain the most productive capital structure. As an outcome, more companies are putting greater focus on the key drivers of efficient capital allotment. This objective is extremely suitable to steelmakers due to falling demand over supply in domestic markets have led to short-term liquidity challenges, that may challenge credit rating and debt covenants. Steel makers are challenged by weak global economic growth, need for structural change, limited availability of finance and high raw material prices. Weak market conditions mean that cost cutting activities are essential to help maintain steel makers for their continued existence and to maintain their position for future growth. Moreover, steel companies need to trust that cost reduction measures do not deviate from the organization's strategy and will not cause further value erosion. Due to increase in urban population globally, the necessity for steel to build skyscraper, public transport infrastructure has stable growth. Emerging economies will also continue to be a major driver of demand due to the huge amount of steel required for urbanization and industrialization. The demand for steel is thus expected to remain strong in the years to come.

METHODOLOGY:

This study is based on secondary data collection through banking books, journals, internet (websites), research papers etc. The Secondary data has been collected from various journals, Research Papers, Reports of various Study Groups, Newspapers, official web-sites, Books, Internet sites and other relevant sources on Steel and Infrastructure Industry.

STUDY OBJECTIVES:

1. To review the growth prospects for Indian Infrastructure sector.
2. To study the growth prospects of Infrastructure as a result of developing Iron and Steel industry in India.

FINDINGS:

The findings of the study is on the following points:

History:

During the mid-1950's to early 1970's the Government of India established large Integrated Steel plants under the public sector at Bhili, Durgapur, Rourkela and Bokaro. The same growth of Indian steel Industry was not maintained in late 1970's due to turn down in the economy.

Policy Reforms:

In the era of liberalization, deregulation and new economic policy of globalization the Indian Steel Industry has started recuperating and has shown vast improvements, and one can easily behold the swift growth in steelmaking capacity in private sectors. Foreign Investment, pricing control has made the industry competitive and challenging; due to globalization steel manufacturers have the choice of selecting the product or the option of importing the product. This has created a vigorous competition in terms of Quality, price and technology. Among steel companies almost all steel makers have adopted Global standards and norms. The year 1996 to 1997 witnessed constant slowdown in the Indian economy and hence, the growth rate of steel industry and their performance decreased to below average. To enhance the 47 performance of the industry and to improve market situation many guidelines and frame works were formulated. The National Steel Policy was framed in November 2005 the key vision was to create an international standard and to supply the global market. This policy mainly besieged the local market in order to increase the domestic consumption. Apart from satisfying the local demand the steel industry also intense on the global market. Now the efforts are on to enhance the growth of steel industry to attain the goal of 300mt per annum. There is no doubt that the state of infrastructure is poor in our country, and this distracts capital investment, especially the Foreign Direct Investment. Therefore, it is only just and legitimate to enhance the expenditure on infrastructure — irrespective of the 'Make in India' campaign! The infrastructure focus in the Budget is largely confined to the roads and railways.



From the diagram above it can be seen the increasing percentage share of infrastructure in GDP of our country.

The percentage share shows that infrastructure sector is one of the major sectors of our economy and rigorous policy and government reforms is required for the sector to grow.

Problems:

India's infrastructure presents a bleak image, but most of the problems are surmountable with adequate planning and investment. For some industries, the problems are just too numerous and the lack of infrastructure drives investors to China and Vietnam, despite rising labor costs, worker shortages and declining government incentives. For others, India's rock bottom wages and English-speaking workforce trump the infrastructure headaches. It is absolutely essential to plan for and budget the additional costs involved (such as a generator) from the beginning, or else India becomes a quagmire requiring ever more investment. If proper precautions are taken, however, India holds as much potential as China did ten years ago and the current lack of infrastructure should be seen as just another hurdle to overcome in outsourcing.

The Future Prospects:

The development of road infrastructure in India is witnessing great momentum. Robust demand, higher investments, attractive opportunities and policy support changed the face of the road sector in the country within three years. The Indian road network is the second largest in the world at 5.4 million km and with rapid growth in national and state highways, it is bound to grow exponentially.

Road infrastructure is one of the major priorities for the Indian government as the roads carry more than 60% of all goods and 85% cent of total passenger traffic. The government assessed the increasing road traffic and to boost the infrastructure, it allocated \$10.13 billion for development of national highways in its budget FY 17-18. The Road, Transport and Shipping Ministry led by Nitin Gadkari catered to the rising demand and came out with various schemes,

policies and business-friendly strategies to further develop the road sector. The government has already fast-tracked at least 24 roads and highways projects and is under planning to approve nearly 10,000kms of national highway. Moreover, the National Highways Authority of India (NHAI) plans to build 50,000 km of roads worth \$250 billion by 2022 as part of a long-term goal of doubling the length of the national highway network to two lakh kilometres. In a bid to fulfil the ambitious goal, the target pace of road construction has been increased to 23km a day, making way for greater connectivity in no time. The government is implementing various projects across the length and breadth of the country to solve woes of the common man. Here are some trends that are ensuring seamless travel, better infrastructure and connectivity:

Electronic toll collection: The NHAI is taking steps such as facilitating online sale of FASTags and offline sale through Common Services Centre (CSC) near toll plazas, to ensure availability of FASTags for Electronic Toll Collection

Different models: The type of PPP models used in road projects are Build Operate Transfer (BOT) toll and BOT annuity. During the next five years, investment through PPP is expected to be \$31 billion.

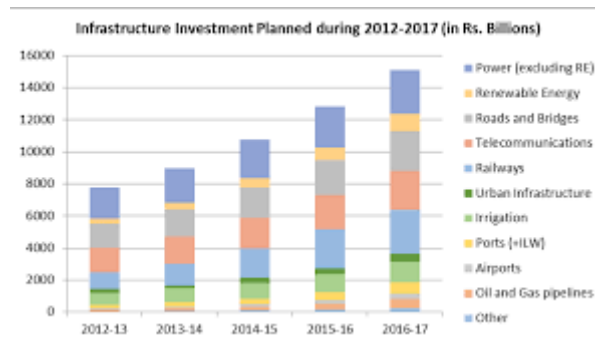
FDI in roads: Cumulative FDI inflows into the construction development sector, including roads and highways, stood at \$24.54 billion till June 2017. This is expected to grow as the ministry has come out with business-friendly initiatives.

Infrastructure initiatives: Programmes such as 'Bharat Nirman', JNNURM are designed to pursue nation-wide rural connectivity, linking all the unconnected villages with fair weather roads.

Tax sops: Companies enjoy 100% tax exemption in road projects for five years and 30% relief over the next five years. Companies have been granted a capital of up to 40% of the total project cost to enhance viability.

Recently, Gadkari said his ministry would make transport world-class in two years and with these strategic steps, the minister will surely walk the talk. India's railway network is recognised as one of the largest railway systems in the world under single management. The railway network is also ideal for long-distance travel and movement of bulk commodities, apart from being an energy efficient and economic mode of conveyance and transport. Indian Railways was the preferred carrier of automobiles in the country with loading from automobiles traffic growing 16 per cent in 2017-18.

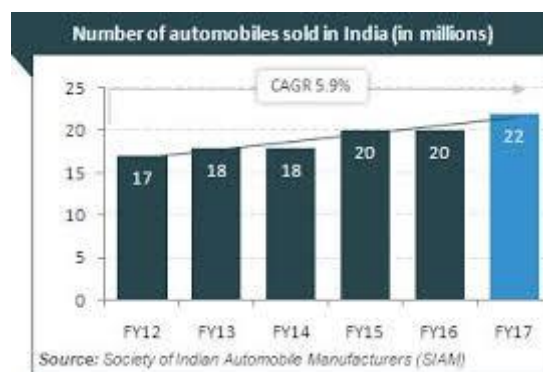
The Government of India has focused on investing on railway infrastructure by making investor-friendly policies. It has moved quickly to enable Foreign Direct Investment (FDI) in railways to improve infrastructure for freight and high-speed trains. At present, several domestic and foreign companies are also looking to invest in Indian rail projects.



From the diagram above it can be seen that the investment in infrastructure in India is continuously increasing. The investment pattern in the said sector shows its bright future and growth and development of the country as a whole.

Market Size

Indian Railways’ revenues increased at a CAGR of 9.66 per cent during FY07-FY18 to US\$ 27.71 billion in FY18. Earnings from the passenger business grew at a CAGR of 9.90 per cent during FY07-FY18 to reach US\$ 7.55 billion in 2017-18P. Freight revenue rose at a CAGR of 9.83 per cent during FY07-FY18 to reach US\$ 18.16 billion in 2017-18.



From the figure above it can be seen that the demand for automobiles is increasing in India. To meet this increasing demand there is a need for proper infrastructure development and assistance of iron and steel industry.

Investments/ Developments

Foreign Direct Investment (FDI) inflows into Railways Related Components from April 2000 to June 2018 stood at US\$ 920.21 million.

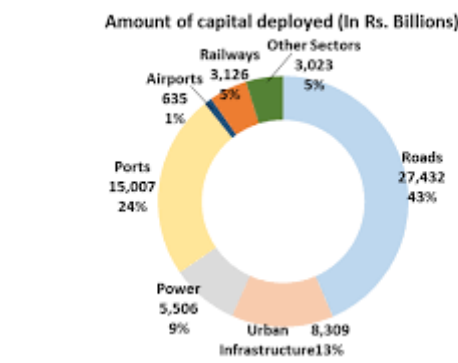
Following are some of the major investments and developments in India’s railways sector:

- In March 2018, Alstom completed production of the first all-electric locomotive at the manufacturing facility in Madhepura, Bihar.
- In May 2018, Parcel Cargo Express Train (PCET) commenced operations. The train connects the North-Eastern region with the coast as its initial and penultimate stops are New Guwahati in Assam and Kalyan in Maharashtra.

Government initiatives

Few recent initiatives taken up by the Government are:

- The Government of India is going to come up with a 'National Rail Plan' which will enable the country to integrate its rail network with other modes of transport and develop a multi-modal transportation network.
- A 'New Online Vendor Registration System' has been launched by the Research Designs & Standards Organisation (RDSO), which is the research arm of Indian Railways, in order to have digital and transparent systems and procedures.
- Indian Railways is targeting to increase its freight traffic to 3.3 billion tonnes by 2030 from 1.1 billion tonnes in 2017.
- The Government of India has signed an agreement with the Government of Japan under which Japan will help India in the implementation of the Mumbai-Ahmedabad high speed rail corridor along with a financial assistance that would cover 81 per cent of the total project cost.
- To enhance transparency in the processing and settlement of bills, Indian Railways has come up with a new bill tracking system for contractors/vendors of Indian Railways to track status of their bills.
- With the aim of boosting connectivity between India and Bangladesh, Mr Narendra Modi, Prime Minister of India, and Ms Sheikh Hasina, Prime Minister of Bangladesh, launched various connectivity projects including a new passenger train service between Kolkata and Khulna.



From the figure above it can be seen that the amount of capital deployment in infrastructure is much more than other sectors of economy. Amongst which roads and ports acquire the maximum percentage.

Road Ahead

The Indian Railway network is growing at a healthy rate. In the next five years, the Indian railway market will be the third largest, accounting for 10 per cent of the global market. Indian Railways, which is one of the country's biggest employers, can generate one million jobs, according to Mr Piyush Goyal, Union Minister for Railways and Coal.

In order to develop three new arms of Dedicated Freight Corridor (DFC) in the various regions of the country, Indian government is planning to invest Rs 3,30,000 crores (\$50.98 billion).

Also, Indian Railways is planning to invest in order to adopt European Train Control Systems (ETCS) which will help in the development of the infrastructural facilities.

REFERENCES:

1. GLOBALISATION AND THE DEVELOPMENT OF INDIAN INFRASTRUCTURE by Debdas Karmakar ("Constantin Brâncuși" of Tg-Jiu, No. 1/2008, Volume 1)
2. Report of Planning Commission of India (Twelfth five year plan)
3. Globalization and Structural Changes in the Indian Industrial Sector
<http://business.mapsofindia.com/globalization/india-industry/structural-changes-industrial-sector>
4. GDP statistics - countries compared - Nation Master Economy. (n.d.). NationMaster - World Statistics, Country Comparisons. Retrieved August 7, 2011, from http://www.nationmaster.com/graph/eco_gdp-economy-gdp
5. Ministry of External Affairs Publications
6. NBM Media; construction portal, April 2008
7. Baker M and Cagliarini A (2010), 'Economic Change in India', RBA Bulletin, September, pp 19–24.
8. Indian Bureau of Mines (2011a), 'Indian Minerals Yearbook 2010'. Available at <<http://ibm.nic.in/imyb2010.htm>>.
9. Indian Bureau of Mines (2011b), 'Iron & Steel – Vision 2020'. Available at <<http://ibm.nic.in/vision2020.htm>>.
10. Joint Plant Committee (nd), 'Steel Frame: Profile of the Indian Iron and Steel Industry'. Available at <<http://jpcindiansteel.nic.in/profile.asp>>.
11. A Brief Report on Iron and Steel Industry in India (July 2015) by Corporate Catalyst India (Pvt) Ltd.
12. <http://www.fibre2fashion.com>
13. www.ibef.org
14. <http://www.investindia.gov.in/steel-sector>
15. <http://www.pwc.com/e&c> publication
16. Datt, R. And Sundaram, K. P. M. (1999), Indian Economy, 39th Edition, S. Chand & Company, New Delhi.
17. Livemint: e-journal (Industry/Cabinet-clears-National-Steel-Policy-2017)
18. Banerjee, D., (2005). Globalisation, Industrial Restructuring and Labour Standards Where Indian Meets the Global
19. Bharti Bala, Y. and De, S. Steel Signs of Revival, The Analyst, November, 2009.
20. Burang, L.G., Yamini, S. (2010), "Competitiveness of the Firms in Indian Iron and Steel Industry". Working Paper UDE 33/2/2010. Department of Economics, University of Mumbai, India.
21. Chadha R. (1989), Key Sector of Indian Economy: A System View of Steel Industry, New Delhi: Concept Publishing Company

22. D'Costa, A.P., (1999), *"The Global Restructuring of the Steel Industry: Innovations, Institutions and Industrial Change"*, U.K: Routledge.
23. Bagchi, J (2005), *Development of Steel Industry in India*, New Delhi: I.K. International
24. Ghosh, A., Chatterjee, A., (2008) *"Iron and Steel Making- Theory and Practice"*, New Delhi: Prentice Hall of India Private Limited.
25. Government of India, 2003; *Annual Report, Ministry of Steel, Government of India*, New Delhi.
- [http://steel.nic.in/Annual%20Report%20\(2002-03\)/Chapter%20II.pdf](http://steel.nic.in/Annual%20Report%20(2002-03)/Chapter%20II.pdf)
26. Mazumdar Mitra, S., Ghosal, T. (2003), *"Strategies for Sustainable turnaround of Indian Steel Industry, Journal of the Institutions of Engineers, 84(1):64-78. New Delhi: Sage Publications India Pvt. Limited.*
- <http://www.ieindia.org/publish/mm/1003/Oct03mm2.pdf>
27. Mongia, P., Schumacher, K., Sathaye, J. (2001), *"Policy Reforms and Productivity Growth in India's Energy Intensive Industries"*, *Energy Policy*, 29(4): 715-724