

GROWTH OF STEEL INDUSTRY IN INDIA

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ABSTRACT

India has become the world's fourth-largest producer of crude steel. The country is slated to become the second-largest steel producer by 2015 as large public and private sector players strengthen steel production capacity in view of the rising demand.

The total market value of the steel sector in India stood at US\$ 57.8 billion in 2011 and is expected to touch US\$ 95.3 billion by 2016. Total crude and finished steel production grew at a compound annual growth rate (CAGR) of 6.6 per cent and 4.2 per cent over FY08-11 to reach 69.6 million tonnes (MT) and 66 MT respectively.

Steel consumption is expected to grow at an average rate of 6.8 per cent to reach 104 MT by 2017 driven by rising infrastructure development and growing demand for automotives. The infrastructure sector is India's largest steel consumer, accounting for 63 per cent of total consumption in FY11. Attracted by the growth potential of the Indian steel industry, several global steel players have been planning to enter the market. The Government of India (GOI) has allowed 100 per cent foreign direct investment (FDI) in the sector through automatic route in order to attract foreign investments.

KEYWORDS: Government of India, Foreign Direct Investment and Five Year Plan

INTRODUCTION

Latest figures by World Steel Association (WSA) has revealed that India's steel production increased by 3 per cent to 59.62 million tonne (MT) in the first nine months of 2013, as against 57.90 MT in the corresponding period last year. Moreover, the data showed that India's rate of production growth was the second-best following China among the major global producers.

The country's steel output grew to 6.54 MT in September 2013 from 6.24 MT during the same month in 2012. Global steel production grew enormously in the 20th century from a mere 28 million tonnes at the beginning of the century to 781 million tonnes at the end.

WORLD STEEL PRODUCTION IN THE 20TH CENTURY

Over the course of the 20th century, production of crude steel has risen at an astounding rate, now fast approaching a production level of 800 million tons per year. Today, it is difficult to imagine a world without steel.

During the 20th century, the consumption of steel increased at an average annual rate of 3.3%. In 1900, the United States was producing 37% of the world's steel. With post war industrial development in Asia that region now (at the start of the 21st century) accounts for almost 40%, with Europe (including the former Soviet Union) producing 36% and North America 14.5%.

Steel consumption increases when economies are growing, as governments invest in infrastructure and transport, and as new factories and houses are built. Economic recession meets with a dip in steel production as such investments falter. After being in the focus in the developed world for more than a century, attention has now shifted to the developing regions. In the West, steel is referred to as a sunset industry. In the developing countries, the sun is still rising, for most it is only a dawn.

Towards the end of the last century, growth of steel production was in the developing countries such as China, Brazil and India, as well as newly developed South Korea. Steel production and consumption grew steadily in China in the initial years but later it picked up momentum and the closing years of the century saw it racing ahead of the rest of the world.

China produced 220.1 million tonnes in 2003, 272.2 million tonnes in 2004 and 349.36 million tonnes in 2005. That is much above the production in 2005 of Japan at 112.47 million tonnes, the USA at 93.90 million tonnes and Russia at 66.15 million tonnes. For details of country-wise steel production see Steel production by country.

INDIAN STEEL INDUSTRY: EVOLUTION AND GROWTH

Steel making in India can be traced back to 400 BC. The foundation of modern steel industry in India was led down in 1874 by establishment of steel making facility of Bengal Iron Works (BIW) in Kulti (West Bengal). Beginning of large scale steel production started with establishment of Tata steel plant in 1907 in Jamshedpur, which started production in 1912. Later large steel plants in India were established in Bokaro, Durgapur, Bhilai, Burnpur and Bhadravati. Except Tata Steel, steel production in India was confined to public sector companies under control of SAIL till 1990s. Post liberalization (1991) large scale development in steel industry was witnessed due to participation of private players and huge influx of foreign investment in steel industry of India.

STEEL PRODUCTION TREND IN INDIA

Post independence steel production in India showed a considerable growth in capacity. Finished steel production increased from 1.1 MT in 1951 to 14.33 MT in 1991-92. Post liberalization the growth trend continued however at a higher pace and finished steel production reached 73.7 MT (provisional) for 2011-12. During the period FY 07 to FY 12 crude steel production has attained growth at CAGR of about 7.7 %. While the average capacity utilization remained near 89 percent of the total production capacity. During the twelfth five year plan crude steel production is estimated to grow at CAGR of about 11.3 % due to large scale capacity addition plans for steel production during this period.

INDIAN STEEL INDUSTRY VS GLOBAL STEEL INDUSTRY

Global crude steel production reached 1527 MT in 2011 showing a 6.8 % growth over 2010. India has emerged as a leading player in global steel industry contributing to about 4.7 % of global crude steel production in 2011. Large scale infrastructure expansion plans for twelfth five year plan (FYP: 2012-17) and raising per capita steel consumption in India promises unprecedented growth potential of Indian steel Industry during next 10 years.

CONTRIBUTION OF INDIA'S ECONOMY TO GLOBAL GDP

India ranked as the third largest contributor (5.65%) to global GDP in 2011 in terms of PPP ranking, only behind US and China. India's economic growth has slacked during past three years due to worldwide economic slowdown however during next five years it's GDP is expected to grow in 6-8 % range. The sectors with high growth potential like

manufacturing and construction sectors which account for about one fourth (FY 12) of India's GDP will be the key growth drivers for the Indian Steel Industry

INDIA & THE LEADING STEEL PRODUCERS IN THE WORLD

India is the largest producer of sponge iron and fourth largest producer of crude steel in the world. India registered a 5.7 % growth in crude steel production in 2011 against 2010. Japan was the only nation among top ten crude steel producers in the world posting negative growth of minus 1.8 % for crude steel production in 2011 against 2010. Indian steel industry which is not technologically as mature as steel industry of developed economies is implementing latest technology, adapting backward integration and improving efficiency in steel production to reduce cost, increase production and become competitive globally.

INDIA'S SHARE IN GLOBAL STEEL CONSUMPTION

India's per capita steel consumption is only 57 kg against global average of 215 kg. This shows a broad scope for increase in per capita steel consumption in India and potential unprecedented expansion of steel industry in India. Global crude steel consumption for 2011 reached about 1373 MT

COMPETITIVENESS OF THE INDIAN STEEL INDUSTRY

Abundance of raw materials, iron ore and cheap workforce makes Indian steel industry competitive. However dependence on imported coking coal, low production efficiency, inadequate infrastructure & technology and delays in regulatory clearances & approvals are major hindrance to growth of Indian steel industry

LEADING STEEL PRODUCERS IN INDIA

Steel making in India is concentrated along mineral rich belt of India, as vicinity to supply of raw materials like iron ore and coal provides considerable economic advantage. Most of the large scale steel making facilities are concentrated in state of Jharkhand, Orissa, West Bengal, Chhattisgarh and Karnataka. Steel production in India is led by SAIL, Tata Steel, JSW and others, while SAIL continues to be the largest steel producer in India. Steel production in India which was primarily reserved for government companies till liberalization now sees dominance of private companies in terms of production share. Share of private sector companies in crude steel production raised from 49 % in FY 01 to 75 % in FY 11. While the share of private sector companies in finished steel production increased from 68 % in FY 01 to 80 % in FY 11.

STEEL CONSUMPTION TREND IN INDIA

Steel consumption growth during 11 th FYP (2007-11) has outpaced steel production growth. Steel consumption growth during this period was at CAGR of 8.8 % compared to production growth at CAGR of 5.8 %. We have estimated finished steel demand growth during 12 th FYP (2012-17) in two scenarios. For scenario- 1 we assumed finished steel demand to grow at CAGR of 9 % while in more optimistic case of scenario-2 we assume demand growth at CAGR of 11 %, with respect to FY11 as base year.

STEEL IMPORT TREND AND FUTURE SCENARIO

India has been a net importer of steel, primarily of high grade steel and special steel products. Deregulation and reduction in import duties on steel imports has favoured steel imports. Steel imports has increased during the past decade

due to surge in domestic demand and reduction in price differential between imported steel and domestic steel. Import volumes have been fluctuating during the past five years and as per working group estimates steel imports during 12 th FYP is estimated to be in 5-6 MT range.

STEEL EXPORT TREND AND FUTURE SCENARIO

Liberalization and free trade policy helped growth of steel exports from India. Most of the steel exports from India consists of value added steel products with higher margins. To remain competitive globally India needs to grow share of value added and sophisticated steel product in its export basket. Steel exports from India declined during 2008-11 period due to subdued demand of steel globally. Steel export is expected to regain momentum as the global economy revives . Steel exports is estimated to grow gradually from about 4 MT during FY 13 to 7 MT by FY 17.

TECHNOLOGICAL EXPOSURE OF INDIAN STEEL INDUSTRY

Indian steel industry is highly fragmented with large number of small to large scale producers. Use of steel making technologies varies among different steel making units. With overall low level of advanced technological exposure, Indian steel industry faces issues of quality, efficiency, hazards and process standards. The overall use of latest and modern technologies is inadequate in the entire steel industry value chain comprising of raw material mining and processing, transportation and steel making. This leaves a broad scope for process improvement through introduction of latest and efficient technology.

INDIAN STEEL INDUSTRY NEEDS TO ADAPT LATEST TECHNOLOGIES

With open trade policy for steel, Indian steel industry faces global competition, hence to remain competitive and profitable it has to adapt latest and efficient technologies. Using latest technologies can boost steel companies business with advantages of scale, quality, productivity, safety and higher margins. As overall exposure of Indian steel industry to latest technology remains low, so there is a huge potential for increase in production and process optimisation. Also with development and use of technologies suitable for steel making using iron ore fines and low grade Indian coal, Indian steel Industry can have advantage of raw material security and sustainability.

POTENTIAL GROWTH DRIVERS OF INDIAN STEEL INDUSTRY

Indian steel industry is aiming for high growth during the next 5-7 years, supported by economic growth and positive change in consumption behaviour of the large and growing population. The prime factors which will support growth of Indian steel Industry are demand driving factors, government policies and capacity addition plan for steel.

Steel Demand Drivers Government Policies Capacity Addition in Steel Making

- Growing economy
- Large population
- Low per capita steel consumption
- Manufacturing & construction activity
- Untapped rural market
- Industrial activity growth

Government Policies

- Funding developments
- Stressing on R&D
- Offering incentives
- Policies favoring domestic industry & regulating dumping
- Judicious Import- export taxes/duties
- Faster approvals

Capacity Addition in Steel Making

- SAIL, Tata Steel, JSW, ISPAT, RINL, ISPAT etc. along with global multinationals like POSCO, Arcelor Mittal, Nippon Steel, Kobe Steel, Severstal and others have large scale expansion plans for steel making in India
- Planned projects by Indian and global companies is likely to increase India's steel producing capacity to 150 MT by 2017

STRENGTH, WEAKNESS, OPPORTUNITY & THREATS: (SWOT) ANALYSIS

Indian steel Industry is evolving itself to become global leader in terms of product quality and overall efficiency. It's growth objective can be attained efficiently by addressing the present issues and challenges and building the growth strategies in cohesion with its strength.

STRENGTH

- Low manpower cost
- Abundance of raw materials
- Policies for long term linkages for raw material supply
- Option of getting project linked captive iron ore, coal mines
- Large economy and population driving steel demand

OPPORTUNITY

- Growing & untapped rural market
- Infrastructure & manufacturing activity growth to drive steel demand
- Per capita steel demand to grow, which at present is one fourth of the global average
- Low present export volume: so potential for growth in exports is considerable
- Option for investment and stake acquisition

THREAT

- Delays in approvals and regulatory clearances
- Land acquisition and rehabilitation issues
- Competition from large number of small steel producers
- Threat from cheap import and dumping
- Issues of capital for projects and high interest on loans

WEAKNESS

- Overall production efficiency is low
- Inadequate infrastructure support
- Lacking in coking coal reserve and most of iron ore reserves consists of iron ore fines
- Latest technological input and research and development activity is low

CONCLUSIONS

Post liberalisation in 1991 Indian steel Industry has attained a substantial growth on domestic as well as global platform. Growing in pace with the economy Indian steel industry has positioned itself as the largest sponge iron producer and the fourth largest crude steel producer in the world. Global crude steel production reached 1527 MT in 2011 in which India contributed a significant 4.7%.

Though effect of global economic recession post 2008 was witnessed by steel sector globally, but Indian steel industry showed resilience and growth due to robust domestic demand. The credit of Indian steel industry's growth goes to policies of government and Indian public and private sector steel producers. With present low per capita steel consumption at 57 kg in India against global average of 215 kg there lies a huge potential for steel demand growth in India.

Also the estimated massive \$ 1 trillion investment in India's infrastructure sector during 12th FYP will boost demand of steel. Significant steel demand will also arise from rural markets and proactive steel producers in India have started exploring untapped rural markets to get maximum share of this market.

Indian steel industry attained appreciable growth post liberalisation but it has suffered due to issues of efficiency, quality, safety and productivity. Future growth and sustainability of Indian steel industry lies in adapting latest technologies, improving efficiency and optimising process.

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