

EXIM BANK: RESEARCH BRIEF

INDIAN STEEL INDUSTRY: EXPORT PROSPECTS



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Steel industry is often considered as the backbone of the economy, depicting the development and performance of the economy. A period of industrial growth is typically matched by prosperity in the iron and steel sector; similarly, industrial sluggishness gets captured in contraction in demand for iron and steel, resulting in a phase of stagnation for the industry.

Increasing modernization in the twenty-first century has led to a doubling of global steel production from 851 MT (million tons) at the turn of the century in 2000 to 1,662 MT in 2014. According to World Steel Association, the global steel demand¹ is estimated to have touched 1537 MT in 2014. The past growth in steel has largely been at the backdrop of the heightened economic activity in the emerging economies, particularly China, whose demand remains a pivotal factor driving the global steel industry.

The steel industry in India has also witnessed a rapid rise in production over the past few years at the backdrop of enhancement of

capacity. This has resulted in India becoming the fourth largest producer of crude steel (after China, Japan, and USA) and the largest producer of sponge iron in the world. However, the industry witnessed a sharp decline in capacity utilisation to 77 per cent in 2013-14 from a high of 91 per cent in 2010-11, primarily due to shortage of iron ore. Notwithstanding this, the steel sector in India accounts for about 2 per cent of India's GDP and holds a 6 per cent share in the industrial production of the country. With construction and infrastructure sectors together occupying a significant share in total steel demand in India, the revival of these sectors are expected to cause a positive effect on the domestic steel industry.

GLOBAL STEEL: AN INSIGHT

Asia and the Middle East remained the most vibrant regions in terms of production, with a CAGR of 7.1 per cent and 7.0 per cent, over the last decade (2005-2014), respectively, in crude steel as compared to 4 per cent for the world as a whole (Exhibit 1). However, regions like EU, Africa and North America exhibited contraction, registering negative

CAGRs of 1.6 per cent, 1.2 per cent, and 0.6 per cent, respectively. Production in other parts of the world remained either stagnant or registered a decline.

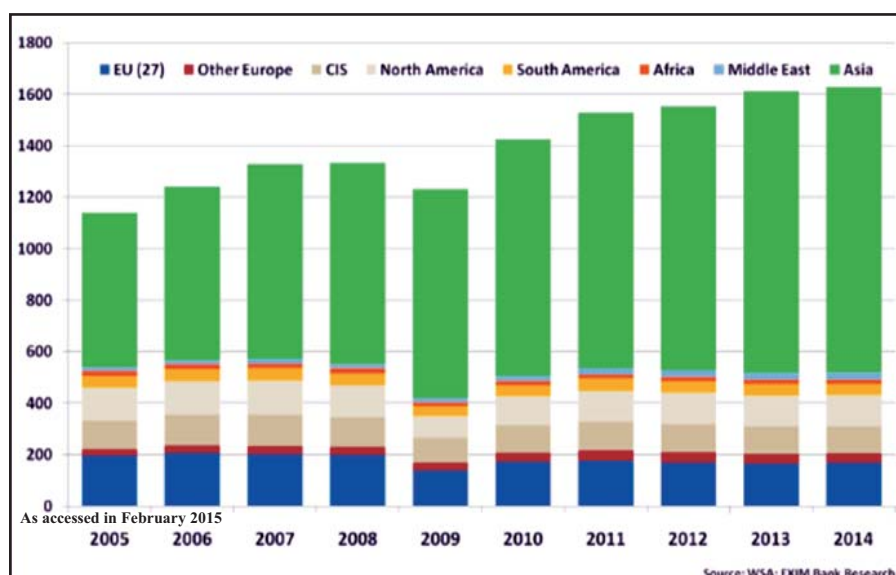
At the country level, China remained by far, the largest producer of crude steel accounting for nearly half of the world's steel production in 2014. The country also recorded the highest growth in production levels among the major producers with output increasing from 355.8 MT in 2005 to 822.7 MT in 2014 (CAGR of 9.8 per cent). The only other major crude steel producer to witness such dynamism was India, which recorded a CAGR of 6.9 per cent - increasing its production from 45.8 MT to 83.2 MT during the same period.

The top 10 exporters of steel (HS : 72) in the world occupied a share of 58 per cent in 2013. Global steel exports registered a CAGR of 5.1 per cent during 2004 and 2013, with the largest exporter of steel – China recording a brisk CAGR of 14.4 per cent during this period. The other major exporters include Japan, Germany, South Korea and Russia.

On the other hand, world exports of articles of iron or steel (HS 73) stood

¹ Measured in terms of apparent steel use, which is defined as deliveries of steel goods plus net direct imports of steel goods.

**Exhibit 1: Trends in World Crude Steel Production
(Mn Tonnes): Major Regions**



at US\$ 310 bn in 2013, having increased from US\$ 143 bn in 2004. The top 10 exporters of articles of iron or steel (HS 73) in the world constituted 61.7 per cent in 2013, with China leading with a share of 18.4 per cent. India ranked 11th in the list of exporters, with a share of 2.4 per cent globally in 2013.

As demand for steel weakened and a huge overcapacity hovered over the global steel industry, raw material prices eased. The global composite carbon steel prices, which stood at US\$ 686/tonne in June 2013 and had touched a peak at US\$ 726/tonne in January 2014, plunged to US\$ 592/tonne in February 2015, owing to a demand-supply mismatch. This was the ninth consecutive decline in global steel prices since May 2014. Iron-ore prices on the other hand stood at US\$ 60.2 per dry metric tonne (as on May 2015) as compared to US\$ 100.5 per dry metric tonne a year ago. In fact, prices have dipped significantly since May 2010 when they hovered around US\$ 161.35 per dry metric tonne.

INDIAN SCENARIO

The Indian steel sector was the first core sector to be completely freed from the licensing regime. Since 1991, the sector has witnessed consistent reforms including elimination of pricing and distribution controls.

The production for sale of total finished steel (alloy and non-alloy) in the country stood at 85.05 MT in 2013-14 as compared to 14.23 MT in 1991-92 – an increase of more than 6 times. The total production for sale of pig iron was 7.29 MT in 2013-14 as compared to 1.59 MT in 1991-92. In the case of DRI (direct reduced iron), India is one of the largest producers in the world. From a mere 1.31 million tonnes of production in 1991-92, India's DRI production reached 14.97 million tonnes in 2013-14 after touching a high of 25.08 million tonnes in 2010-11. The category-wise production of pig iron and finished steel in India during the period 2013-14 shows that rods/ bars and HR Coils/ Strips were the largest produced

categories, with shares of 35 per cent and 23 per cent, respectively.

On account of the steady growth in the domestic steel consumption, India became the third largest consumer of steel globally in 2009, and continued to remain so till 2014. China was the largest consumer with a consumption of 711 MT in 2014.

Among end-user sectors, infrastructure and industrial construction together continued to account for about 40 per cent of India's total steel consumption in 2013-14, followed by automobiles (12 per cent) and the pipes & tubes industry (9 per cent) (Exhibit 2). Category-wise real consumption of total finished steel was led by non-flat steel (41.28 MT), which recorded a growth rate of 2.6 per cent on year on year basis, while growth rate declined for flat steel consumption (32.61 MT) by 2 per cent during the year. This was also reflected in the respective shares, with the share of flat steel in total consumption (44 per cent) dropping by one percentage point in 2013-14, accompanied by a gain in the share of long/non flat steel (56 per cent) during the year as compared to the last year.

In terms of value, India's exports of iron and steel in the year 2008-09 was valued at US\$ 13.3 billion, and India's imports of iron and steel were valued at US\$ 13.9 billion, leading to a trade deficit of US\$ 0.6 billion under this category. After having witnessed a trade deficit for a number of years, in 2013-14 India displayed a trade surplus in iron and steel, with exports amounting to US\$ 16.0 bn and imports amounting to US\$ 12.7 bn. However, in 2014-15, India exhibited a marginal trade deficit of US\$ 35 mn in iron and steel (Exhibit 3).

India's export markets for steel are well diversified and less concentrated as compared to imports. While India's exports of iron & steel (HS Code 72) during 2003-04 was hugely concentrated in China, the share declined drastically in 2014-15. Unlike 2003-04, India's exports of iron and steel (HS code 72) seemed quite diversified across regions and countries in 2014-15. However, India's exports of articles of iron and steel (HS code 73) remained concentrated within USA and UAE, both during 2003-04 and 2014-15, with their cumulative shares being 34.7 per cent in 2003-04 and 31.7 per cent in 2014-15.

PRODUCT AND MARKET IDENTIFICATION OF STEEL PRODUCTS

Quantification of comparative advantage over a period of time will help in understanding the markets and products where India has been performing well, as well as identifying the areas where producers have lost ground and success has been limited. This will be a necessary first step towards identification of areas where Indian

companies could potentially expand their presence.

An attempt has been made to map the global demand for iron and steel products with India's export competitiveness, with a view to outline a market specific approach for exporters. A generic analysis has been attempted in order to identify products that have strong capabilities to export. Also analyzed are the current export markets where India has penetrated and the key

competitors which India faces. While India needs to further consolidate its share in the major import markets, there are markets where India already has export competitiveness, but its exports are at relatively lower levels. These markets are the potential growth drivers for India's iron and steel exports and need to be suitably targeted.

At the aggregate level, the markets of North America, Latin America, Asia and Oceania are regions where Indian iron and steel products are competitive, and these regions have also exhibited strong import demand for the products. In Europe and Africa, Indian iron and steel products are competitive, but the growth in import demand has been frail, which puts forward a case for Indian exporters currently exporting to these regions, to diversify into other regions which have shown higher import demand.

Product Champions have been identified at the regional level. These have the maximum potential,

Exhibit 2: Steel Consumption Pattern in India (2013-14)

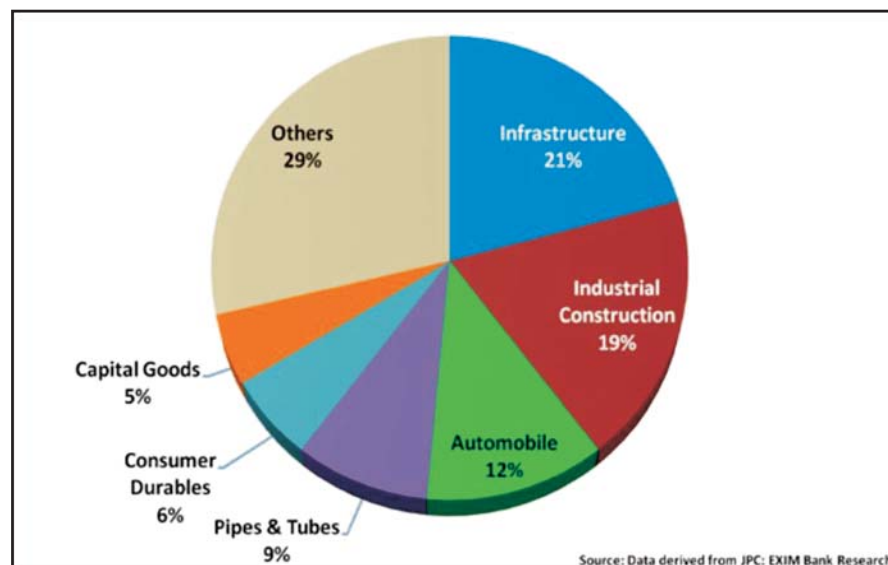
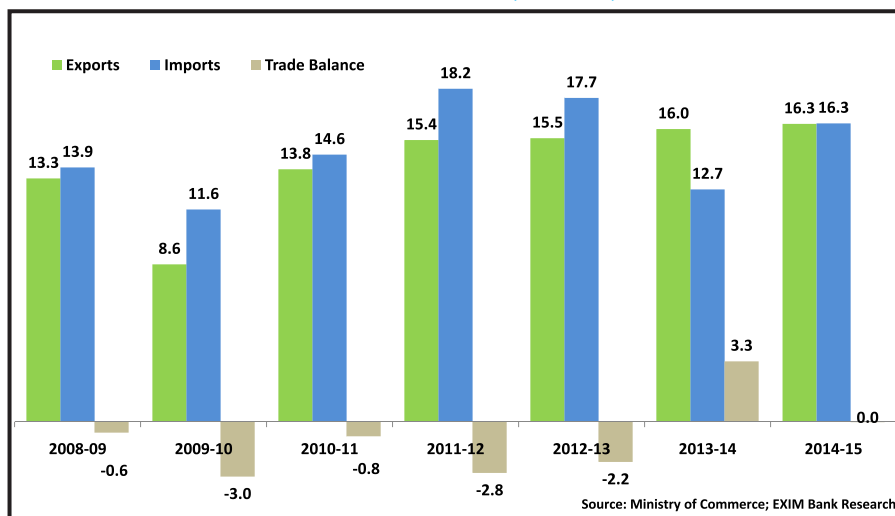


Exhibit 3: India's International Trade in Iron and Steel (US\$ Bn)



as the regional import demand in these products has shown robust AAGR over the period 2008-2012, while India's exports of these products to the region are competitive, and the competitiveness has remained same or increased over the period under consideration. The identified product champions are 'Stainless Steel' in Africa and Europe; 'Stainless Steel' and 'Primary Materials; Products in Granular or Powder Form' in Latin America; and 'Articles of Iron and Steel (other than Tubes, Pipes and Hollow Profiles)', 'Tubes, Pipes and Hollow Profiles', 'Iron and Non-Alloy Steel', and 'Other Alloy Steel; Hollow Drill Bars and Rods, of Alloy or Non-Alloy Steel' in Oceania. There were no true product champions in the case of India's exports to Asia and North America.

THE INDIAN STEEL INDUSTRY: STRATEGIES

Raw materials security is on the top of the agenda. India is very dependent on imported coking coal. Approximately 60 – 65 per cent of the domestic coking coal requirements are met through imports due to unavailability of appropriate qualities in the country. As companies look to secure their raw materials supplies, the capability to acquire, develop and operate overseas raw material assets has become a strategic imperative given the short term challenges in securing such assets in India.

The comprehensive economic partnership agreement (CEPA) with South Korea has resulted in increase in imports of iron and steel. With the

conclusion of the India-Japan FTA in 2011, India faces a similar threat of imports from Japan. Companies have to bring to the notice of the policymakers about the various pitfalls of such trade agreements, and hence necessary attention is required during such deals.

Given the fact that steel market across the globe is vulnerable to global conditions, India needs to be more proactive in diversifying its export markets. India could therefore adopt a similar strategy as Brazil, focusing on geographically nearer markets where it has a freight advantage, such as Nepal, Bangladesh and Sri Lanka. At the same time, Indian companies could be more successful in other important and growing export destinations for steel sheet products, including the Middle East and Africa, where they have a freight advantage over China, Japan and South Korea.

To ensure competitive advantage, steel makers need to concentrate on reducing costs, especially operating costs. Operating costs need to be brought down by adopting strict cost control measures and through benchmarking. Another major cost that needs to be looked into is the cost of raw material. The only way to reduce costs on this account is using raw materials more efficiently, which can bring significant cost savings.

Among other crucial aspects which the Government may look into to help establish sustainable growth for the steel industry are streamlining land acquisition and environmental

regulations, augmenting infrastructure and logistic facilities, discouraging the exports of iron-ore from India given India's domestic needs, reducing procedural delays, and encouraging futures market for steel products.

Firms, on the other hand, need to introduce new product lines in accordance with the needs of specific markets, be abreast of the competition they face from substitutes, enhance recycling of steel in the country, while raising the manufacturing facilities in the steel plants to global standards.

OUTLOOK

Domestic steel demand growth is expected to remain subdued in 2014-15 and 2015-16 largely owing to execution delays in construction projects and lower demand for automobiles and consumer durables. Over the longer term steel demand is expected to grow, as growth in key end-user sectors such as construction, infrastructure and automobiles revives.

The contents of the publication are based on information available with Export-Import Bank of India and on primary and desk research through published information of various agencies. Due care has been taken to ensure that the information provided in the publication is correct. However, Export-Import Bank of India accepts no responsibility for the authenticity, accuracy or completeness of such information.

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