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INDUSTRY OUTLOOK

STEEL INDUSTRY OF INDIA: GROWTH AND PROSPECTS

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Introduction

The steel industry contributes around 2 per cent to India's GDP and employs around 5 lakh of the total workforce directly and 20 lakh indirectly. India was the 2nd largest producer of crude steel in the world in 2021. The production capacity of the steel industry has expanded rapidly over the past few years, growing at a compound annual growth rate (CAGR) of 6.1 per cent from 90.87MT in FY 2012 to 137.97 MT in FY 2019.[1] The National Steel Policy 2017 is striving to achieve 300 MT of crude steel production capacity by 2030 and production of 255 MT and a robust finished steel per capita consumption of 158 Kgs by 2030-31, as against the current consumption of 61 Kgs.

The policy envisages to domestically meet the entire demand of steel and high-grade automotive steel, electrical steel, special steel, and alloys for strategic applications.[2]



Global Outlook of Steel Production

According to the World Steel Outlook (April 14, 2022), the impact of Russia-Ukraine geopolitical tussle will be felt globally via higher energy and commodity prices – especially raw materials for steel production – and continued supply chain disruptions, which were troubling the global steel industry even prior to the war. [3]

However, the World Steel Outlook maintains a relatively more optimistic outlook for the Indian steel industry, as the forecast for India in 2022 is quite impressive (7.5 per cent), banking on ever-increasing higher capex on infrastructure spending (see Tables below). The World Steel Association (WSA), in its short-range outlook forecasted India’s steel demand at 114 million tonne (MT) in 2022 compared with 106 MT a year earlier.[4] In 2023 also, India’s steel demand growth will be the second highest at 6 per cent after Germany which is likely to have a better 7.6 per cent rate of growth in demand. Germany, however, consumes one-third of what India consumes annually.

Table 1: Top 10 Steel Using Countries 2021

SRO April 2022, finished steel products

| Countries | million tonnes | | | y-o-y growth rates, % | | |
|---------------|----------------|----------|----------|-----------------------|----------|----------|
| | 2021 | 2022 (f) | 2023 (f) | 2021 | 2022 (f) | 2023 (f) |
| China | 952.0 | 952.0 | 961.6 | -5.4 | 0.0 | 1.0 |
| India | 106.1 | 114.1 | 120.9 | 18.8 | 7.5 | 6.0 |
| United States | 97.1 | 99.8 | 102.1 | 21.3 | 2.8 | 2.4 |
| Japan | 57.5 | 58.2 | 58.8 | 9.3 | 1.2 | 1.0 |
| South Korea | 55.6 | 56.2 | 56.8 | 13.5 | 1.2 | 1.0 |
| Russia | 43.9 | 35.1 | 35.1 | 3.8 | -20.0 | 0.0 |
| Germany | 35.2 | 35.0 | 37.6 | 12.9 | -0.6 | 7.6 |
| Turkey | 33.4 | 35.5 | 37.0 | 13.2 | 6.4 | 4.2 |
| Brazil | 26.4 | 24.2 | 25.4 | 23.2 | -8.5 | 5.0 |
| Italy | 25.9 | 25.4 | 26.3 | 27.1 | -2.1 | 3.5 |

f - forecast

Source: WorldSteel, 14 April 2022.

Globally, however, steel demand will be slower in the current year to just 0.4 per cent from 2.7 per cent recorded last year; and according to the Press Release (14 April 2022) by the World Steel, outlook for 2023 is highly uncertain. The war in Ukraine poses a renewed risk of supply disruption and inflation, which may impact Indian central bank’s accommodative stance and consumer sentiment.

The global crude steel production stood at 1950.5 MT during the calendar year (CY) 2021 which is up by 3.7 per cent as compared to the previous CY 2020. While during the period January to July 2022, most of the steel producing country has registered negative growth except India and Iran, the production is up by 8 per cent and 3.7 per cent, respectively (See Table 2).

Table 2: World Crude Steel Production (Jan-Dec 2021)

| <i>Country</i> | Crude Steel Production (Provisional) January - July (in MT) | % Y-o-Y Change |
|--------------------|--|---------------------------|
| <i>China</i> | 609.3 | -6.4% |
| <i>India</i> | 73.3 | 8% |
| <i>Japan</i> | 53.3 | -4.9% |
| <i>USA</i> | 48 | -3% |
| <i>Russia</i> | 41.4 | -7% |
| <i>South Korea</i> | 39.9 | -3.4% |
| <i>Germany</i> | 22.5 | -5.4% |
| <i>Turkey</i> | 21.6 | -6.9% |
| <i>Brazil</i> | 20.3 | -3.5% |
| <i>Iran</i> | 17.4 | 3.7% |

Source: Joint Plant Committee

Despite a contraction by 6.4 per cent (y-o-y) during the same period, China is still the leading producer of steel in the world with 609.3 MT of steel production followed by India, Japan, and the USA.

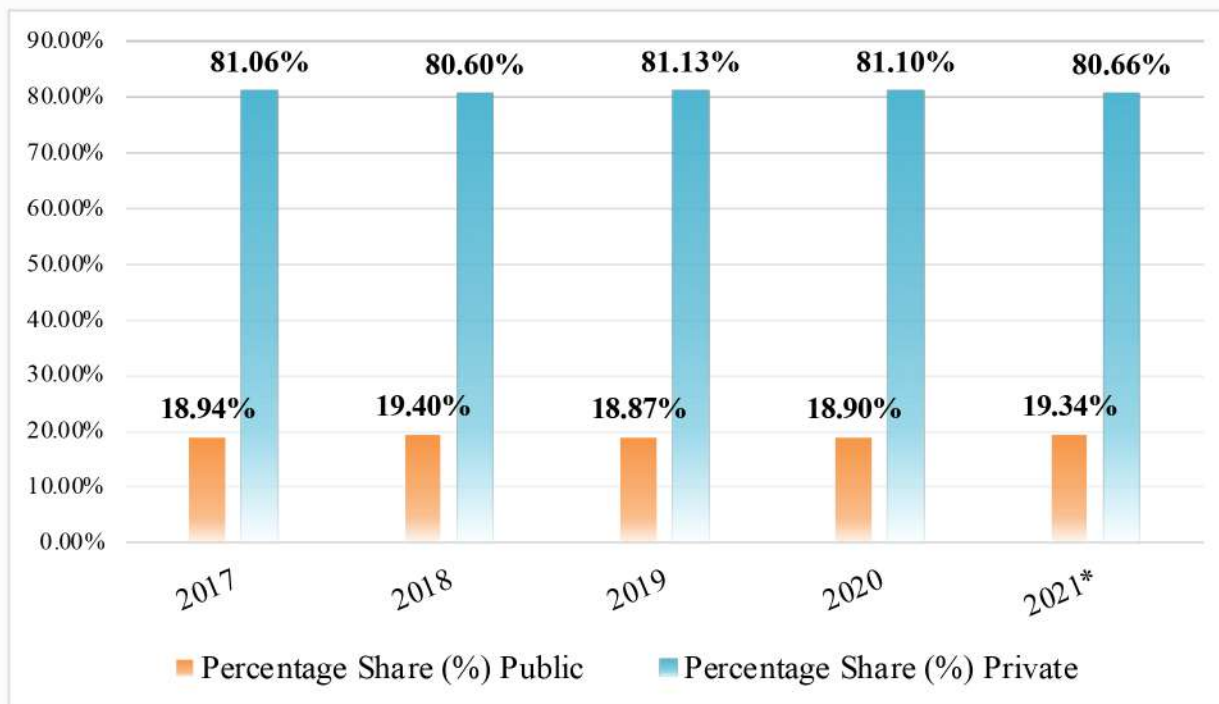
The geopolitical situation surrounding Ukraine poses significant long-term implications for the global steel industry. Among them are a possible readjustment in global trade flows, a shift in energy trade and its impact on energy transitions, and continued reconfiguration of global supply chains.

The recovery of the global auto industry in 2021 was disappointing as the supply chain bottlenecks arrested the recovery momentum in the second half of the year. The war in Ukraine is likely to delay any return to normalcy of the supply chain issues, especially in Europe. Despite the slump in global auto production, the EV segment grew rapidly during the pandemic. Global sales of EVs in 2021 reached 6.6 million units, almost doubling from 2020. The share of EVs in total car sales increased from 2.49 per cent in 2019 to 8.57 per cent in 2021.

Production and Consumption of Steel in India

India's contribution to the total production of steel in the world rose from 5 per cent during the calendar year (CY) 2020 (January to December 2020) to 6 per cent during the CY 2022. The private sector contributes significantly to crude steel production in the country with more than 80 per cent of the total production (See Figure 1).

Figure 1: Indian Crude Steel Production by Public and Private Sector in the last five years

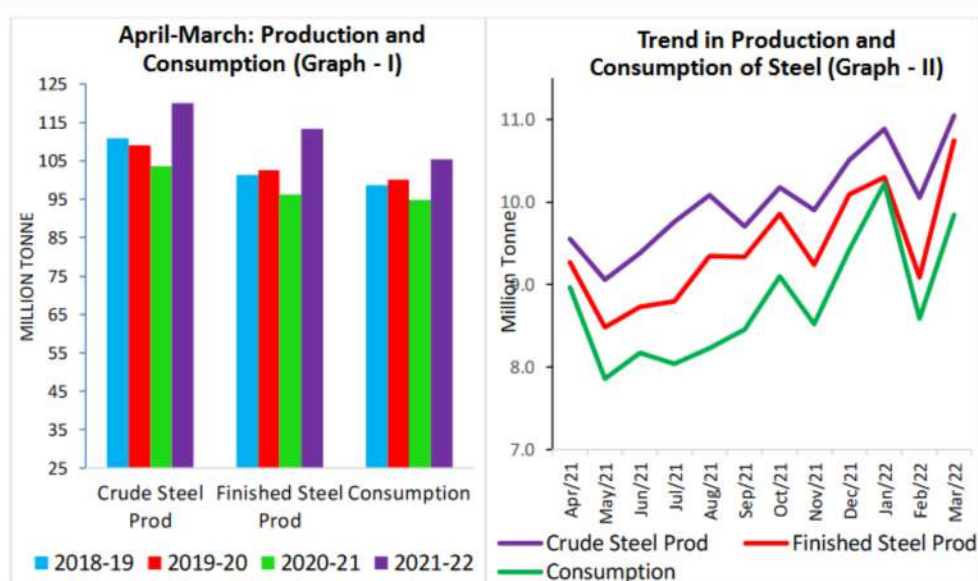


*Provisional (January to December 2022)

Source: Annual Report 2021-22, Ministry of Steel, Government of India

The production of both crude and finished steel and consumption of finished steel is highest in the FY22 when compared to previous three years. The month-wise production and consumption of during the FY22 indicates to an overall increasing trend during the year. Further, after a month-on-month (M-o-M) decline in February 2022, production of steel, both crude and finished, as well as its consumption made smart recovery in March 2022 and registered a significant increase M-o-M figures (See Figure 2).

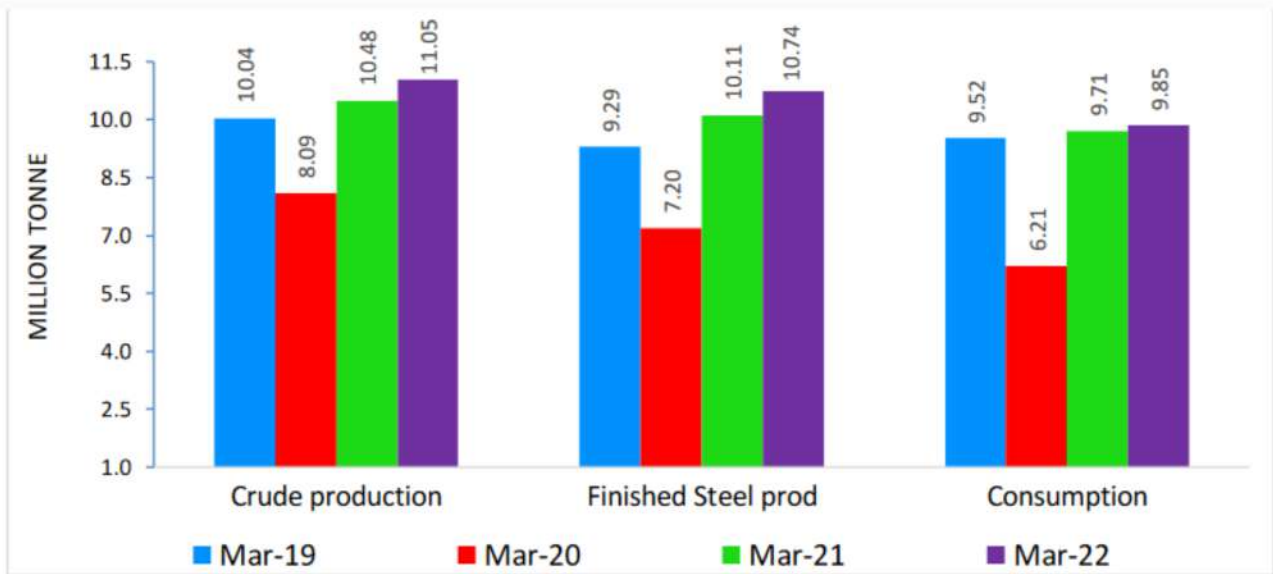
Figure 2: Production and Consumption from 2018-19 to 2021-22



Source: Ministry of Steel

Further, a comparison of production and consumption of steel during the month of March over the last four years indicate that production of crude and finished steel as well as consumption of finished steel during March 2022 is higher than that in the corresponding month of the last three years (See Fig. 3).

Figure 3: Production and Consumption of Steel during March 2019 to March 2022 (Graph III)

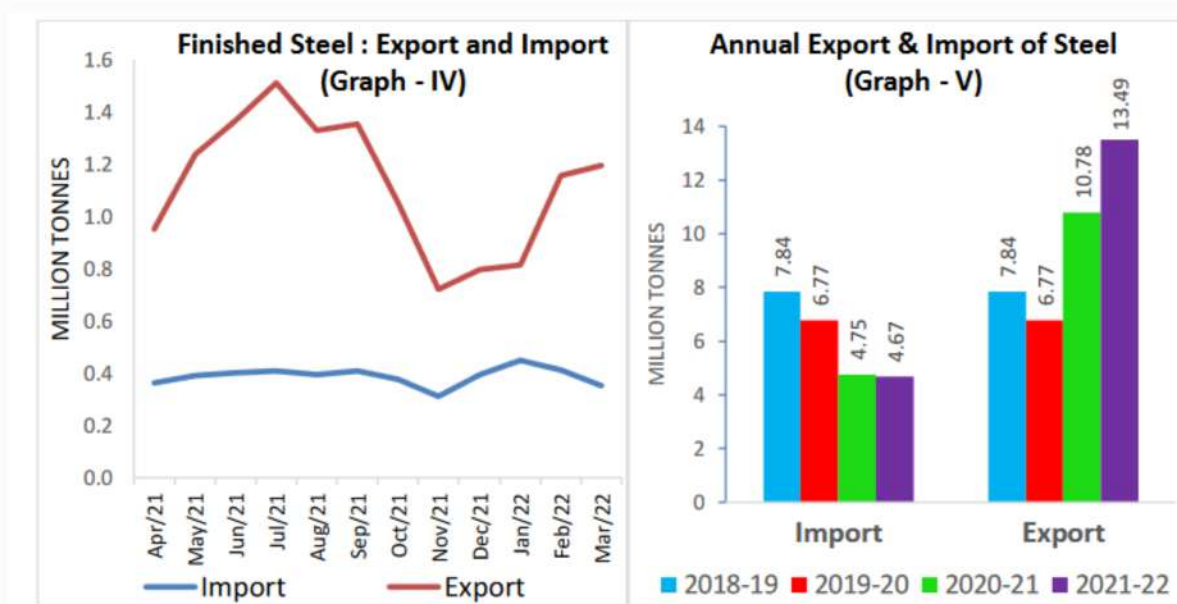


Source: Ministry of Steel

Export-Import Scenario of the Steel Industry

India's annual import of steel have consistently declined during the last four years while its export has been increasing from FY 2020-21 onwards making India a net exporter both in the FY21 and FY22. The month-wise trend in the export and import of finished steel during FY22 indicates that there was a noticeable fluctuation in monthly exports during FY22. There has, however, been an uptrend since December 2021. However, imports have remained relatively stable, and range bound during FY22.

Figure 4: Status of Export and Import of Steel



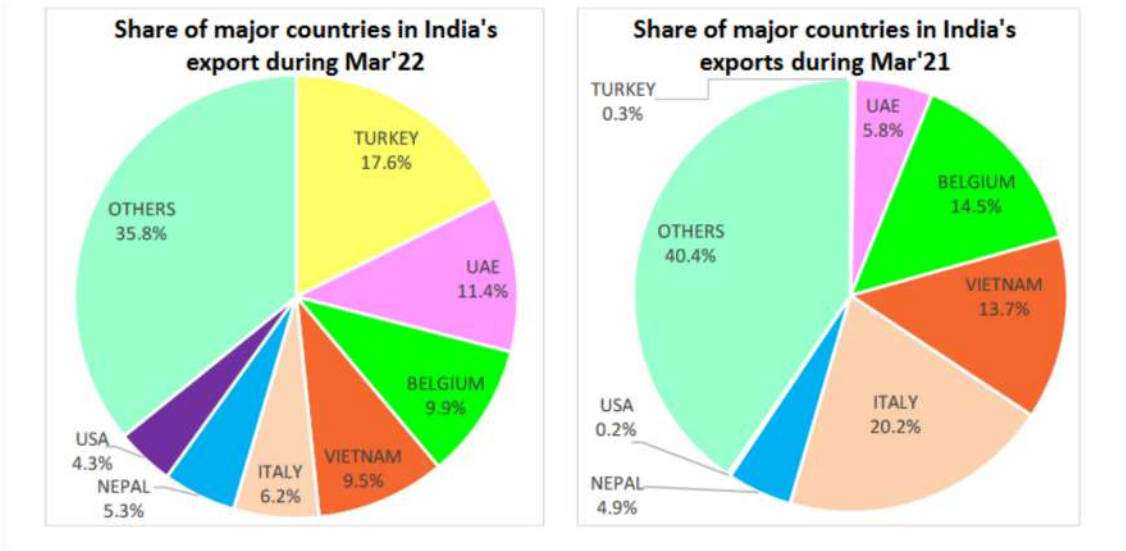
Source: Ministry of Steel

India was a net exporter of finished steel recording a net trade surplus of 8.44 LMT in March 2022 and 88.24 LMT during April-March, FY22, respectively.

Countries to which India has a higher share of steel exports

The share of Turkey, UAE, Nepal, and USA in total steel export from India was higher in March 2022 as compared to March 2021. However, the share of Belgium, Vietnam and Italy in India's total steel export declined over the same period.

Figure 5: Share of Major Countries in Indi's Export during March 2022 and March 2021

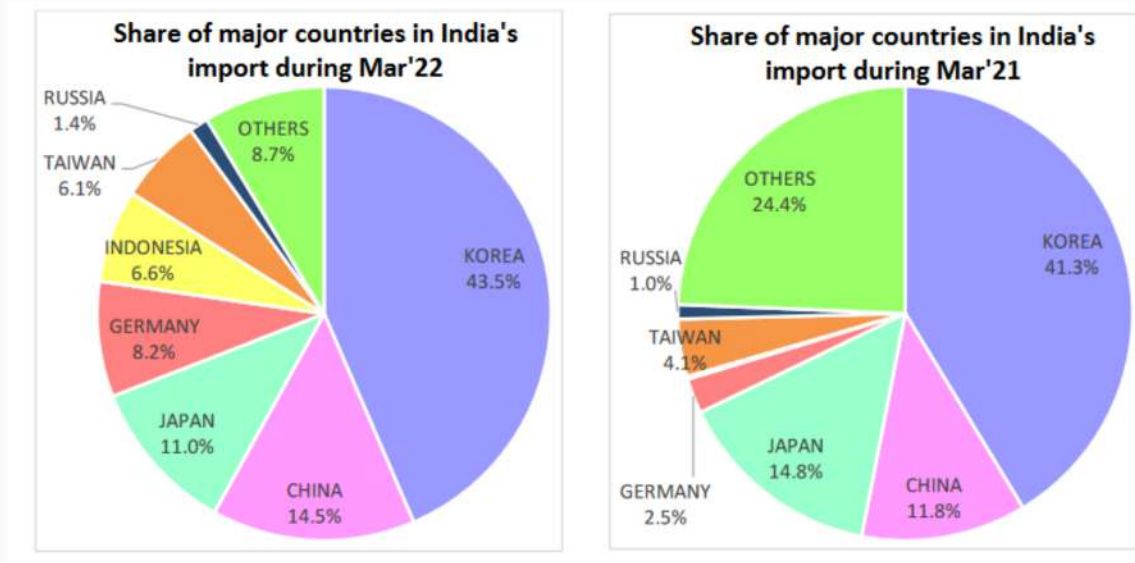


Source: Ministry of Steel.

Countries to which India has a larger share of Imports

The share of Korea, China, Germany, Indonesia, Taiwan, and Russia increased in total steel import of India in March 2022 as compared to March 2021 while it declined for Japan over this period (See Figure 6).

Figure 6: Share of major countries in India's import during March 2022 and March 2021

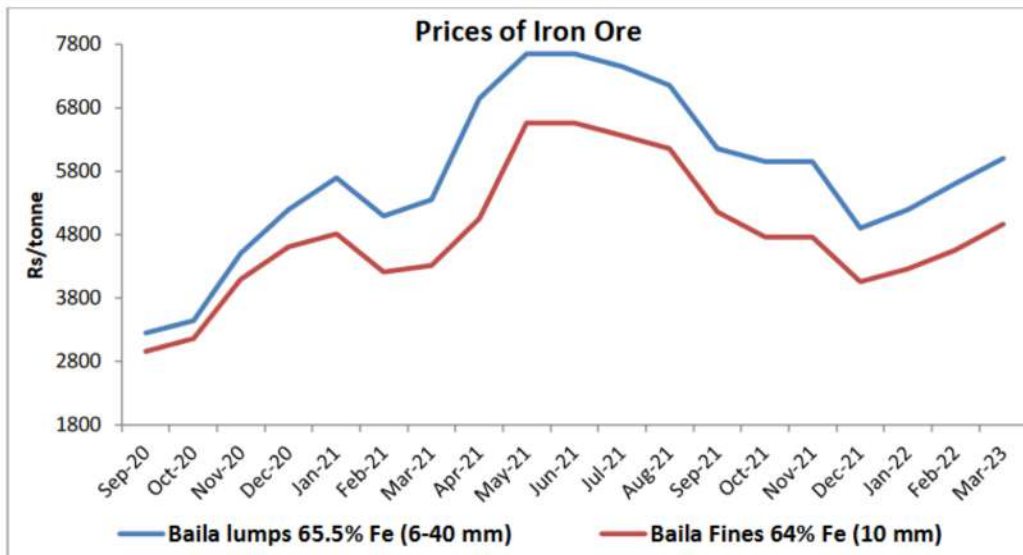


Source: Ministry of Steel.

Price Trend of Iron Ore

Prices of iron ore, after hitting peak in May-June 2021 followed a declining trend since July 2021 till December 2021. However, prices of iron ore have again been witnessing an increasing trend since January 2022 (See Figure 7).

Figure 7: Prices of Iron



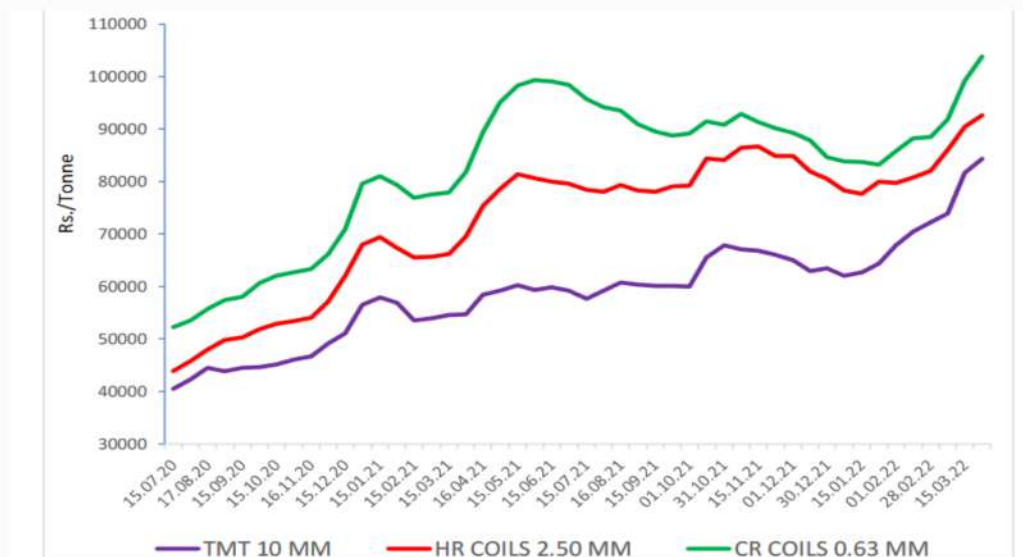
Source: Ministry of Steel

During the month of March 2022, the prices of iron ore lump increased by 7.1 per cent to ₹6000 per tonne and that of fines by 8.8 per cent to ₹4960 per tonne over their respective prices in February 2022.

Trends in Retail Prices of Steel

The prices of CRC, which moderated from July 2021 onwards, started to rise again since February 2022, hitting the new peak by end-March 2022. In case of HRC and Rebar also, retail prices which showed some signs of moderation during November 2021 to January 2022, started increasing subsequently reaching their respective peaks by end-March 2022 (See Figure 8).

Figure 8: Trends in Retail Prices of Steel in the last two years



Source: Ministry of Steel.

Emissions Reduction and Technology Focus

Many Indian players have set decarbonisation goals; and large players are adopting best available technology. Steel and cement occupy major place in economic development but are also major emitters and have long been treated as “hard to abate” industries. There are technological solutions within reach that would allow for close to zero-emissions production of steel and cement if the right policies and investments are in place. The overall emission via steel industry is still above the global standard.

Capex by Industry

The CAPEX by Steel CPSEs in March 2022 was ₹1787.4 crore, which is 168.6 per cent higher M-o-M and 6.2 per cent lower than CAPEX in Corresponding Period of Last Year (CPLY). The cumulative CAPEX by steel CPSEs for FY22 at ₹10038.8 crore is 38.2 per cent higher than CAPEX during CPLY but 75.5 per cent of the BE for the fiscal.

Government Initiatives

The Government of India is a facilitator of policy guidelines and establishes the institutional mechanism/structure for creating conducive environment for improving efficiency and performance of the steel sector.

The National Steel Policy 2017 released by the Government of India delineated a broad roadmap for fostering long term growth for the Indian steel industry, both on the demand and supply sides by 2030-31. The Government has also announced a policy for providing preference to domestically manufactured Iron & Steel products in Government procurement. In the Union Budget 2022, the Government allocated ₹47 crore to the Ministry of Steel. Also, in the same budget the revocation of the Countervailing Duties (CVD) on stainless-steel was announced. The Customs Duty exemption on stainless-steel scrap was extended for another year, i.e., till March 31, 2023, to provide relief to the MSME secondary steel producers. [5]

Under the Production-linked Incentive (PLI) Scheme, it has been expected that the specialty steel production will become 42 million tonnes by the end of 2026-27. This will ensure that approximately 2.5 lakh crores worth of specialty steel will be produced and consumed in the country which would otherwise have been imported. Similarly, the export of specialty steel will be around 5.5 million tonnes as against the current 1.7 million tonnes of specialty steel getting FOREX of ₹33,000 crore.

The Union Cabinet has approved a ₹6,322 crore under the PLI Scheme to boost the production of specialty steel in India. The allocation under the scheme is expected to attract an additional investment of about ₹40,000 crore and generate 5.25 lakh job opportunities.

Production Linked Incentive (PLI) Scheme

The key changes the government is working upon about the newly launched PLI Scheme for Specialty Steel is a reduction in the slabs to two from the present three. The categories will now be “strategic” and “commercial” grades of steel. The commercial grade will attract a lower rate of PLI incentive and the strategic a higher rate although the rates were not revealed. According to the Ministry of Steel, during virtual road shows and interactions with the industry on Production Linked Incentive (PLI) Scheme, new request/suggestions for revision in PLI provisions were received, especially from the Secondary steel sector viz., Alloy steel producers, Steel wire manufacturers, etc. for providing them a fair chance and enabling wider industry participation for making India Atmanirbhar in specialty steel.

To address concerns of the secondary steel sector and to make it simpler and more participatory and to include several other subcategories of specialty steel meant for strategic sector, fresh modifications in the existing scheme have been proposed. The Government of India (GoI) has also extended application deadline for the specialty steel from 30th April 2022 to 31st May 2022.[6] Specialty steel finds application in the automotive and auto components industry, space research and Defence, amongst other areas.

At present, the incentive slabs range from 4-15 per cent over the five-year period of 2022-23 till 2026-27 and have been proposed based on the current production, i.e., higher incentive for those specialty grades which are currently either not produced or if at all, in small quantities, resulting in relatively large imports of the same.

Major proposals for change in PLI scheme:

One major issue that has been highlighted by both the primary and secondary players is a demand to reduce the incremental production rate and to simultaneously widen the scope of investments.

Target segments

With a budgetary outlay of \$828.24 million, the PLI scheme will be effective for a period of five years starting 2024-25. [7]

Five indicative product categories are covered under the scheme:

- Coated/plated steel products
- High strength/wear resistant steel
- Specialty rails
- Alloy steel products and steel wires
- Electrical steel

Subsidy by the Ministry of Steel

In the FY 2021-22, the Ministry of Steel released a subsidy of ₹1,31,96,845 to Steel Authority of India Limited under the "Scheme for Promotion of Flagging of Merchant Ships in India" for providing support to Indian Shipping Companies in global tenders floated by the CPSE for import of government cargo.

Industry Risks and Challenges

Since the issue of power deficit is imminent because of the shortage of fuel required for the operation of major power plants in the country, the steel industry is also facing the power crisis. Steel-production is a power intensive process and the shortage of power exacerbates the woes of the steel industry. However, the government and private players are continuously looking for energy transition with a right mix of renewables and the thermal plant so that the situation of power crisis can averted during the peak hours of energy demand.

Low investment in technology and research is also one of the major issues persisting in the steel industry of India. The key manufacturing players of the industry, either private or public, rely mostly on imported technology, which hurts heavily the balance sheet of the firms. The existing technologies used by the steel manufacturers in India are not sustainable enough to address the issues of greater consumption of power, environmental pollution and greater water in the process of steel production.

The construction sector is one of the biggest consumers of finished steel in India. The newer the ways of construction, the larger demand of steel would be. India is still practicing the obsolete ways of concrete mode in most constructions. The West and the countries in the Middle East are constructing high-erect structures. The continued use of steel gives rise to the unabated demand of steel products. The adoption of a similar pattern of development would boost the domestic demand for steel.

The Way Forward

To achieve the target of 300 MT crude steel production by 2030-31 by using 85 per cent of its steel production capacity, the industry needs to grow at a CAGR of more than 7.5 per cent. Towards this end, the steel industry needs continuous regulatory as well as financial support from the government. The vibrant steel industry is more cyclical in nature as it depends on the performances of other sectors, such as, the real estate sector, construction of roads and highways. The growth of the steel industry is a function of the growth of other related sectors.

In a welcome move to provide relief to secondary and the stressed MSME sector steel industry engaged in housing/construction sector, the government has exempted TMT bars below 8 mm from the purview of the quality control order, as these are primarily used for non-critical applications.

ENDNOTES

1. https://steel.gov.in/sites/default/files/Download_0.pdf
2. <https://steel.gov.in/national-steel-policy-nsp-2017>
3. <https://www.oecd.org/ukraine-hub/policy-responses/the-supply-of-critical-raw-materials-endangered-by-russia-s-war-on-ukraine-e01ac7be/>
4. <https://www.fastmarkets.com/insights/indias-2022-23-budget-up-4-6-steel-industry-to-benefit-from-infrastructure-spending>
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7. Steel Mint,
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