CHAPER-II

OVERVIEW OF IRON AND STEEL INDUSTRY

Introduction

Steel is crucial to the development of any modern economy and is considered to be the backbone of human civilisation. The level of per capita consumption of steel is treated as an important index of the level of socio-economic development and living standards of the people in any country. It is a product of a large and technologically complex industry having strong forward and backward linkages in terms of material flows and income generation. All major industrial economies are characterised by the existence of a strong steel industry and the growth of many of these economies has been largely shaped by the strength of their steel industries in their initial stages of development.

Steel industry was in the vanguard in the liberalisation of the industrial sector and has made rapid strides since then. The new greenfield plants represent the latest in technology. Output has increased, the industry has moved up in the value chain and exports have risen consequent to a greater integration with the global economy. The new plants have also brought about a greater regional dispersion easing the domestic supply position notably in the western region. At the same time, the domestic steel industry faces new challenges. Some of these relate to the trade barriers in developed markets and certain structural problems of the domestic industry notably due to the high cost of commissioning of new projects. The domestic demand too has not improved to significant levels. The litmus test of the steel industry will be to surmount these difficulties and remain globally competitive.

Historical Perspective

The finished steel production in India has grown from a mere 1.1 million tonnes in 1951 to 31.63 million tonnes in 2001-2002. During the first two decades of planned economic development, i.e. 1950-60 and 1960-70, the average annual growth rate of steel production exceeded 8%. However, this growth rate could not be maintained in the following decades. During 1970-80, the growth rate in steel production came down to 5.7% per annum and picked up marginally to 6.4% per annum during 1980-90, which further increased to 6.65% per annum during 1990-2000. Though India started steel production in 1911, steel exports from India began only in 1964. Exports in the first five years were mainly due to recession in the domestic iron and steel market. Once domestic demand revived, exports declined. India once again started exporting steel only in 1975 touching a figure of 1 million tonnes of pig iron and 1.4 million tonnes of steel in 1976-77. Thereafter, exports again declined to pick up only in 1991-92, when the main producers exported 3.87 lakh tonnes, which rose to 2.79 million tonnes in 1995-96 and 3.3 million tonnes in 2001-02.

The growth in the steel sector in the early decades after Independence was mainly in the public sector units set up during this period. The situation has changed dramatically in the decade 1990-2000 with most of the growth originating in the private sector. The share of public sector and private sector in the production of steel during 1990-91 was 46% and 54% respectively, while during 2001-02 the same was 32% and 68% respectively. This change was brought about by deregulation and decontrol of the Indian iron & steel sector in 1991.

A number of policy measures have been taken since 1991 for the growth and development of the Indian iron & steel sector. Some of the important steps are (a) removal of iron & steel industry from the list of industries reserved for the public sector and also exempting it from the provisions of compulsory licensing under the Industries (Development & Regulation) Act, 1951, (b) deregulation of price and distribution of iron & steel, (c) inclusion of iron and steel industry in the list of high priority industries for automatic approval for foreign equity investments upto 51%. This limit has been since increased upto 100%, (d) lowering of import duty on capital goods and raw materials etc.

Growth of the Indian Steel Sector after Liberlisation

Finished Carbon Steel

The Indian steel sector was the first core sector to be completely removed from the licensing regime as well as pricing and distribution controls. This was done primarily because of the inherent strengths and capabilities demonstrated by the Indian iron and steel industry. The growth rate in 1995-96 was a phenomenal 20%. During 1996-97, finished steel production shot up to a record 22.72 million tonnes with a growth rate of 6.2%, while in 1997-98, the finished steel production increased to 23.37 million tonnes, which was 2.8% more than the production of the preceding year. The growth rate decreased drastically in 1997-98 and 1998-99 being 2.8% and 1.9% respectively. The growth rate in 2001-2002 was 4.29% with the total production touching 31.63 million tonnes. The production of finished steel during April –December, 2002 has been 23.83 million tonnes, which is 6.3% higher than the production during the corresponding period of 2001-02.

Details of total production of finished carbon steel and the share of main and secondary producers in it from 1991-92 onwards are set out in the following table:

Production of Finished Carbon Steel (In million tonnes)

Year	Main Producers	Secondary Producers	Total
1991-92	7.96 (55%)	6.37 (45%)	14.33
1992-93	8.41 (55%)	6.79 (45%)	15.20
1993-94	8.77 (57.6%)	6.43 (42.4%)	15.20
1994-95	9.57 (53.8%)	8.25 (46.2%)	17.82
1995-96	10.59 (49.5%)	10.81 (50.5%)	21.40
1996-97	10.54 (46.4%)	12.18(53.6%)	22.72
1997-98	10.44 (44.6%)	12.93(55.4%)	23.37
1998-99	9.91 (41.6%)	13.91(58.4%)	23.82
1999-2000	11.20 (41.9%)	15.51(58.1%)	26.71
2000-2001	12.49 (43%)	16.78(57%)	29.27
2001-2002	13.05 (42.6%)	17.58(57.4%)	31.63
2002-2003 (Till December, 2002)	10.38 (44%)	13.45(56%)	23.83

(Figures in bracket indicate the percentage share)

Pig Iron

Alongwith the production of steel, the production of pig iron in the country has also increased. The details since 1991-92 are as under :-

(In million tonnes)

Year	Main Producers	Secondary Producers	Total
1991-92	1.485	0.102	1.587
1992-93	1.679	0.165	1.844
1993-94	1.977	0.273	2.250
1994-95	2.005	0.780	2.785
1995-96	1.735	1.060	2.795
1996-97	1.733	1.557	3.290
1997-98	1.760	1.687	3.447
1998-99	1.354	1.644	2.998
1999-2000	1.245	1.900	3.145
2000-2001	0.970	2.430	3.400
2001-2002	1.016	3.055	4.071
2002-2003 (Till Dec. 2002)	0.810	3.075	3.885

Sponge Iron

During the early 90s, the sponge iron industry had been specially promoted so as to provide an alternative to steel melting scrap, which was increasingly becoming scarce. The production of sponge iron (Direct Reduced Iron - DRI) during the period 1991-92 to 2002-03 was as under:-

(In million tonnes)

Year	Production	% increase
1991-92	1.31	-
1992-93	1.44	9.9
1993-94	2.40	66.7
1994-95	3.39	41.3
1995-96	4.40	29.8
1996-97	5.01	13.8
1997-98	5.35	6.78
1998-99	5.11	-4.48.
1999-2000	5.18	1.37
2000-2001	5.44	5.01
2001-2002	5.66	3.99
2002-2003 (Till December 2002)	4.50	----

As per the International Iron and Steel Institute, India has emerged as the largest producer of sponge iron in the world in 2001. Production of sponge iron in the country as an alternative feed material to steel melting scrap, which was being imported hitherto in large quantities by the Electric Arc Furnace Units and the Induction Furnace Units, has resulted in considerable savings in foreign exchange.

Apparent Consumption of Steel

Apparent consumption of steel is arrived at by subtracting export of steel from the total of domestic production and adding the import of steel in the country. Change in stock is also adjusted in arriving at the consumption figures. It is also treated as the actual domestic demand of steel in the country. Details of year-wise apparent consumption of finished steel since 1990-91 are given in the table below :-

(In million tonnes)

Year	Apparent Consumption
1990-91	14.37
1991-92	14.83 (3.2%)

1992-93	15.00 (1.2%)
1993-94	15.32 (2.0%)
1994-95	18.66 (21.8%)
1995-96	21.65 (16.0%)
1996-97	22.13 (2.2%)
1997-98	22.63 (2.6%)
1998-99	23.54(4.02%)
1999-2000	25.01(6.24%)
2000-2001	26.53(6.08%)
2001-2002	27.44(3.39%)
2002-2003 (Till December, 2002)	20.65(5.0%)

(**The figures in brackets indicate the% percentage increase over the previous year.**

The apparent consumption of steel did not show any substantive increase in 2001-2002 mainly due to slowdown being faced by some of the steel using industries like automobile and engineering industries and construction. With the revival of demand for automobile and engineering goods and general improvement in the economy, it is expected that consumption of steel will increase further.

India's per capita crude steel consumption, as per the latest available figures is 27 Kg, which is far below the level of other developed and developing countries – 472.4 kg., 428.6 kg. and 128 kg. in USA, EU and China respectively. With the ongoing economic liberalisation resulting in faster economic growth, steel consumption is expected to increase rapidly.

Long Term Demand-Availability Projections of Finished Steel

In order to have a long term perspective to facilitate planning, a Sub-Group on Steel and Ferro Alloys was constituted for the steel sector under the aegis of the Planning Commission. The Sub-Group deliberated upon all aspects including supply-demand projections for finished steel during the period 2001-02 to 2011-12. Considering a GDP growth rate of 6.5% as realistic during the 10th Plan, the Sub-Group has projected the demand of finished carbon steel in the country to rise as follows:-

(In million tonnes)

Year	Forecast of demand for Finished Carbon Steel
2001-02	28.24
2002-03	30.01
2003-04	31.91
2004-05	33.92
2005-06	36.05

2006-07	38.22
2007-08	40.74
2008-09	43.30
2009-10	46.03
2010-11	48.93
2011-12	52.01

Import and Export of Iron and Steel

(a) Import of Steel

Import in steel sector has been mainly in plates, hot rolled coils, cold rolled coils and semis. Import of steel (carbon, alloy and stainless) during 2002-03 (upto December, 2002) was about 0.72 million tonnes. Import of steel (carbon, alloy and stainless) during 2001-02 was about 1.50 million tonnes, which was 17.43% less than imports in 2000-2001.

The total import of steel, pig iron and scrap during the last five years and value thereof was as under :-

Import of Steel, Pig Iron & Steel Scrap

(Quantity in million tonnes)
(Value in Rupees crores)

Category	**1998-99**		**1999-00**		**2000-01**		**2001-02**		**2002-03 (Provisional) (Upto Jan., 2003)**	
	Qty.	**Value**	**Qty.**	**Value**	**Qty.**	**Value**	**Qty.**	**Value**	**Qty.**	**Value**
Saleable Steel	1.652	2459.00	2.200	2930.00	1.885	2712.00	1.501	2260.00	1.470	2286.00
Pig Iron	0.002	2.00	0.003	2.00	0.002	2.00	.002	2.36	0 .001	1.48
Steel Scrap	0.880	478.00	1.076	584.00	1.512	945.00	1.980	1206.00	1. 225	820.00
Total	2.534	2939.00	3.279	3516.00	3.399	3659.00	3.483	3468.36	2.696	3107.48

(b) **Export of Steel**

The general policy and procedures for export and import of iron and steel, ferro alloys and ferro scrap are at present decided by the Ministry of Commerce in consultation with the Ministry of Steel. In a momentous move to push exports aggressively, Government of India has announced several measures in the new Five-year Exim policy (2002-07), which is in effect from 1st April 2002. These

include the removal of quantitative restrictions on exports save in respect of a few sensitive items; permission for setting up overseas banking units in Special Economic Zones (SEZ); retention of duty-neutralisation instruments including Duty Entitlement Pass Book (DEPB) and other export promotion schemes.

The most important move in the new Exim Policy is the reduction of transaction time for exporters by introduction of a new eight-digit commodity classification in line with imports. Under Advance Licensing, the new policy abolishes Duty Exemption Entitlement Certificate (DEEC) Book, a practice followed since 1975. The policy also withdraws Advance Licence for annual requirements. Exporters can now avail Advance Licence for any value.

The Union Ministry of Commerce & Industry has recently gone in for a hike/ revision in the DEPB rates for steel exporters, covering exports of galvanised products, hot rolled coils and cold rolled coils. For HR coils, the rate has been revised to 15%, while for galvanised plain/galvanised coated and cold rolled, the present rates are at 17% and 18% respectively. DEPB Scheme has been made further attractive by including SAD in DEPB with effect from 1st April, 2002.

India's major market for steel and steel items include USA, Canada, Indonesia, Italy, West Asia, Nepal, Taiwan, Thailand, Japan, Sri Lanka and Belgium. The major steel items of export include HR coils, plates, CR and galvanized products, pipes, stainless steel, wire rods and wires. With the fall in prices along with depressed domestic demand, India has been increasing exports to overcome the excess supply situation. This has resulted in anti-dumping actions being taken by developed countries like USA, EU and Canada.

The trade action by some countries against Indian steel industry has, to some extent, affected India's exports to these countries. The Government of India and the Indian steel producers are trying to combat such actions despite such efforts being very expensive and involving time-consuming procedures.

Details of the quantity and value of steel, pig iron and sponge iron exported from the year 1998-99 are given in the table below:

Item	1998-99	1999-2000	2000-01	2001-02	2002-03** (Apr.-Dec.02)
Saleable Steel	2.400	3.340	2.570	3.300	2.750
Pig Iron*	0.276	0.290	0.232	0.312	0.351
Sponge Iron*	0.169	Nil	Nil	Nil	Nil
Total	2.845	3.630	2.802	3.612	3.101

***Source DGCI&S ** Provisional**

Current Global Scenario

In the year 2000, the World Crude Steel production was 848 million tonnes, showing an impressive growth of 7.6% over the previous year. The world steel consumption also rose by almost 8%. The international steel trade constituted around 303 million tons or 40.5% of the production. In 2001 and 2002, world crude steel production was 833.70 million tonnes and 886.70 million tonnes, respectively.

The following significant developments have been witnessed recently in the global steel scenario:

- There has been a spate of mergers and acquisitions all over the world in the steel industry. This is a relatively new development in the steel industry and is not confined only to companies within the same country but often involved cross border acquisitions and mergers.

- China has emerged as the most vibrant market for steel production and consumption.

- The crisis of excess capacity and prevalence of market distorting practices in the global steel market has induced protectionist measures from a number of steel trading countries. To address these issues a series of high level inter-governmental meetings have been held under the auspices of the OECD.

- In March 2002, the US President announced imposition of temporary safeguard measures on import of key steel products into USA.

- In retaliation in respect to the US action, EU has also imposed provisional safeguard measures against import of certain steel products.

- China, Canada and Thailand etc. have initiated safeguard investigations against import of steel products into their countries.

Domestic Steel Sector Scenario

The iron and steel sector has been experiencing a slowdown in the last few years. The steel market remained sluggish and price levels of steel and steel products remained stagnant. This stagnancy resulted in steel companies registering net losses. However, steel prices started to pick up from April 2002 and this upturn is expected to help steel companies to reduce their net losses. The growth of steel sector is dependent upon the growth of the economy in general and the growth of industrial production and infrastructure sectors in particular. The major reasons for the slow growth in the steel sector during the last few years include: -

(a) **Cost escalation in the input materials for iron and steel**

Power tariff, freight rates, coal prices etc. have been under the administered price regime. These rates have been frequently enhanced, thereby contributing to the rise in input costs for steel making.

(b) **Continuous reduction in import duty on iron and steel**

After liberalisation, import duty rates on iron and steel items have been gradually reduced over the years. This has opened up the domestic iron and steel sector to international competition. The extent of changes brought about in the customs duty of some of the items of steel since 1993-94 are given below:

(Import Duties % Ad valorem)

Item	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
HR COILS	50%	40%	30%	25%	25%	25%	25%	25%	25%
CR COILS	75%	50%	40%	25%	30%	30%	35%	35%	35%
Plates	75%	50%	40%	30%	30%	30%	35%	35%	35%
Bars/ Rods/ Structurals	85%	50%	40%	30%	30%	30%	35%	35%	35%

Measures taken by Ministry of Steel to boost Demand

The Ministry of Steel has been making all out efforts to help the domestic steel sector to overcome the problems faced by the steel industry and boost demand for steel in the steel consuming sectors. These include:-

(a) Establishing Training cum Service institutes

The Ministry has endeavored to promote research and developmental efforts by industry as well as provide technical support and trained manpower to the steel producing and consuming sectors. The following institutes have been set up:-

(i) The Institute for Steel Development and Growth (INSDAG), Kolkata (West Bengal):- This is meant to promote usage of steel primarily in the construction industry by producing working designs and updating Engineering College syllabi.

(ii) Biju Patnaik National Steel Institute, Puri (Orissa):- This has been set up for providing training-cum-service promotion for the industry.

(iii) National Institute of Secondary Steel Technology(NISST), Mandi Govind Garh (Punjab):- This is primarily meant to promote upgradation of manpower in the secondary steel industry.

(b) Campaign for increasing demand for Steel

The Development Commissioner for Iron & Steel (DCI&S) has launched a National Campaign for increasing the demand for steel, in non-traditional sectors, particularly in the construction, rural and agro-based industrial sectors. In this connection, a conference was held on 21.9.2002 jointly organised by Ministry of Steel and Ministry of Rural Development for promotion of use of steel in the rural markets. Various measures were suggested to increase the use of steel in the rural areas. It was decided that the cooperation of Ministry of Surface Transport, Ministry of Tribal Affairs, Ministry of Finance, Ministry of Small Scale Industries & Agro and Rural Industries, Ministry of Consumers Affairs and Public Distribution and Planning Commission may be obtained for the mission.

(c) Reduction in Power & Rail Tariffs

In order to make despatches of iron and steel material more attractive through the railways, the Railway Board has been requested to consider lowering the classification of steel; give freight discount to bulk users and to bring down freight rates of iron and steel commodities.

(d) Reduction in input costs

The Ministry of Steel has been able to rationalise the classification of coking coal in consultation with the Coal Ministry so as to reduce the impact of royalty payable on this basic raw material. Import duties on several raw materials used by the steel industry have been reduced steadily over the past 4 – 5 years.

(e) Strengthening of Anti Dumping mechanism

The Directorate General of Anti-Dumping And Allied Duties under the Ministry of Commerce is the 'Designated Authority' to initiate necessary action for investigation and subsequent imposition of anti-dumping duty when there is sufficient evidence of imports being dumped in India.

A recent study by the Metal Bulletin Review reveals that in case of flat products, almost every steel producing country has either an anti-dumping case instituted against it or has started a case against exporting countries. As the consumption in India was increasing with the increase of domestic availability, the steel exporters particularly from the Russian/CIS countries have been depressing the Indian market by unduly cheap exports through dumping. India has already imposed anti-dumping duties mainly on HR products imported from these countries. Apart from the flat products, there has been imposition of anti-dumping duties on certain grades of alloy and non-alloy steel billets, bars and rounds from China and Russia.

(f) OECD Meetings

The crisis of excess capacity and prevalence of market distorting practices in the global steel market has induced protectionist measures from a number of steel trading countries. To address these issues, a series of High Level Inter-Governmental meetings have been held in which representatives from countries accounting for nearly 95% of the total steel production have been participation. These meetings serviced by the OECD Secretariat are being held in pursuance of President Bush's initiatives for a multilateral steel capacity. These initiatives are being supported by major steel producing nations including the European Community and Japan. Five High Level Meetings have already been held.

India has a number of concerns with regard to the modalities of excess capacity reduction and enforcement of disciplines in the steel market. India has not forecast any closure of surplus steel capacity. It has been pointed out that our installed capacity which had reached around 40 million tonnes per annum in the mid to late nineties, is now estimated to be around 33-34 million tonnes against domestic demand of around 29 million tonnes. This is largely on account of closure of units in the secondary sector due to operation of market forces. The other participating countries have, however, forecast closure of excess capacity to the extent of 95-100 million tonnes by 2010 and furnished detailed break down of likely closure by 2005. The Working Group on Capacity, established during the third High Level Meeting, will monitor these market forecasts.

Future Prospects

With the onset of liberalisation, the steel industry has to gear-up, not only to meet domestic competition, but also the global competition in terms of product range, quality and price. The growth of the steel sector is intricately linked with the growth of the Indian economy and especially the growth of the steel consuming sectors. India has become self-sufficient in iron and steel materials in the last 3-4 years. Exports are rising and imports are taking place mostly in a few specialised categories. Production and production capacities are increasing. The position needs to be further consolidated and issues affecting production and consumption need to be resolved on a continuous basis. At the same time, productivity of our steel plants must be maintained at levels close to international standards. The Ministry of Steel continues to play an active and major role in helping the steel industry to overcome bottlenecks in the growth of this sector.

Steel Exporters Forum

The Ministry of Steel has set up a Steel Exporters Forum in February 1998 with a view to fulfil the long felt need of the producers and exporters from the iron and steel sector and also to resolve issues, problems and bottlenecks faced by them in exports. The Chairman of the Forum is the Development Commissioner for Iron and Steel. All major steel producers/associations are its members.

Representatives of the Ministries of Finance, Railways and Surface Transport are also its members in addition to the Ministry of Steel.

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