

Analysis of The Financial Performance of the Public Sector Steel Units in India After Liberalisation

DR. SUNIL KUMAR

LECTURER IN ABST, G.K. GOWANI GOVT. COLLEGE, BHINMAL, JALORE, RAJASTHAN, INDIA

ABSTRACT: The steel industry is considered as basic foundation of the modern industries in all advanced nation of the world. Indian steel industry is a century old. It was the first core sector to be completely freed from the licensing regime (1990-91) and the pricing and distribution control. Indian steel industry can be divided into two main sectors public and private. Prior to liberalization public sector had a dominant share in steel production but after economic reforms the scenario became changed. More of the private companies enter into the competition. However, the performance of public sector steel companies also remarkable in the post-liberalized era. Actually, financial health of any company decides its sustainability in long run. Financial ratio is useful measure to provide a snapshot of a company's financial position at any certain point of time or to provide a comprehensive idea about the financial performance of the company (Muresan and Wolitzer, 2004). Use of financial ratios in finance is multi-dimensional. It is not only useful to analysis the performance of a company over the years but also facilitates the comparison between the companies under the same industry. Therefore, to determine the financial performance of the public sector steel units financial ratios are taken into account. Analyzing the ratios of the companies not only show the clear picture of present performance but also a futuristic dimension of the companies. For better understanding and conceptualizing the ratios an attempt has been made in this regard with public sector steel companies namely Steel Authority of India Limited (SAIL) and Rastriya Ispat Niigam Limited (RINL).

KEYWORDS: steel, financial, public, liberalisation, companies

I. INTRODUCTION

The performance of Indian steel industry registered an impressive growth over the recent few years. The industry got all the essential ingredients required for dynamic growth like strong domestic demand, infrastructural development, demand from automotive sector, etc. Industrial reform also extended its help for development of the industry. Indian steel industry was contributing around 2 percent to Gross Domestic Product (GDP) and its weight in the Index of Industrial Production (IIP) is 6.2 percent. With an impressive track record India became a reputed name in the world steel industry. Even during the tough times of recession, the industry was succeeded of recoding the positive growth rate. Global giants from all over the world has shown their interest in the industry because of its phenomenal performance. The present study was an attempt to examine the performance of the industry in terms of production, consumption and foreign trade and to exhibit the trend of the industry for a period of twenty years[1,2,3]

The steel industry is one of the most important sectors of the Indian economy, contributing significantly to the industrial output, employment generation, and foreign exchange earnings. The public sector steel companies have played a vital role in the development of the steel industry in India, especially after the liberalization of the sector in 1991-92. The objective of this study is to analyze the financial performance of ten selected public sector steel companies in India for a period of ten years from 2011-12 to 2009-21, using various financial ratios and statistical tools. The study also compares the performance of these companies with the industry average and benchmarks. The results of the study reveal that the public sector steel companies have shown mixed performance in terms of liquidity, solvency, efficiency, and profitability. Some of the companies have performed better than the industry average, while some have lagged behind. The study also identifies the strengths and weaknesses of each company and suggests some measures for improvement.

II. DISCUSSION

- Present Scenario:
 - India's steel output has been 125.32 million tonnes (MT) of crude steel and 121.29 MT of finished steel production in FY23.

- Significance:
 - Steel is one of the widely used materials all over the world. The iron and steel industry is the bottom line producer industry.
 - The steel industry plays a pivotal role in crucial sectors such as construction, infrastructure, automobile, engineering, and defense.
 - Steel is a key sector for the Indian economy (responsible for 2% of the country's GDP in FY 21-22).
- Producing States:
 - India's major steel-producing states include Odisha, which leads among all steel producing states, followed by Jharkhand and Chhattisgarh. Karnataka, Maharashtra, Gujarat, and West Bengal also play crucial roles.

What are the Government Initiatives for the Growth of Steel Sector?

- Inclusion of Specialty Steel in PLI Scheme:
 - The government approved a Rs 6322 crore outlay for a 5-year period to promote manufacturing of specialty steel, attracting investments, and fostering technological advancements in the sector.
- Green Steel Making:
 - The Ministry of Steel constituted 13 Task Forces with the engagement of industry, academia, think tanks, S&T bodies, different Ministries and other stakeholders to discuss, deliberate and recommend upon different levers of decarbonisation of the steel sector.
 - The Ministry of New and Renewable Energy (MNRE) has announced a National Green Mission for green hydrogen production and usage. The steel sector has also been made a stakeholder in the mission.
 - The steel sector has adopted the Best Available Technologies (BAT) available globally, in the modernization & expansions projects.[4,5,6]
- Ministry's Engagement with PM Gati Shakti National Master Plan:
 - The Ministry of Steel has integrated BISAG-N's capabilities into the PM Gati Shakti National Master Plan, uploading geolocations of more than 2000 steel units to gain insights into steel production facilities.
 - This information will aid in planning railway line extension, inland waterways, highways, ports, and gas pipeline connectivity.
- Steel Scrap Recycling Policy:
 - The Steel Scrap Recycling Policy (SSRP) has been notified in 2009 which provides a framework to facilitate and promote establishment of metal scrapping centres in the country for scientific processing and recycling of ferrous scrap generated from various sources including end of life vehicles (ELVs).
- National Steel Policy 2010:
 - The Government has formulated the National Steel Policy 2010, which lays down the broad roadmap for encouraging long term growth for the Indian steel industry, both on demand and supply sides, by 2030-31.
 - Government's push for infrastructure development through Gati-Shakti Master Plan, 'Make-in-India' initiative for manufacturing sector and other flagship schemes of the Government would provide impetus to the demand and consumption of steel in the country. .
- Steel and Steel products (Quality Control) Order:
 - The Ministry of Steel has introduced Steel Quality Control Order, thereby banning sub-standard/ defective steel products both from domestic & imports to ensure the availability of quality steel to the industry, users and public at large. As per the Order, it is ensured that only quality steel conforming to the relevant BIS standards are made available to the end users.
- Safety in the Iron & Steel Sector:
 - After extensive consultations with stakeholders, academia etc, a set of 25 common minimum Safety Guidelines for the Iron & Steel Sector was formulated.

- These Safety Guidelines are at par with the global standards and are compliant with the requirements of the ILO Code of practice on safety in the Iron & Steel industry.
- Inputs have also been taken from the World Steel Association's guidance document on "Safety & Health Principles and Definitions".[7,8,9]
- National Metallurgist Award :
 - This award is a prestigious award given by the Ministry of Steel to recognize the outstanding contributions of metallurgists in the iron and steel sector.

III. RESULTS

The Iron and Steel industry in India is among the most important industries within the country. India surpassed Japan as the second largest steel producer in January 2009.^[1] As per worldsteel, India's crude steel production in 2010 was at 106.5 tonnes (MT), 4.9% increase from 101.5 MT in 2010, which means that India overtook Japan as the world's second largest steel production country. Japan produced 104.3 MT in year 2010, decrease of 0.3% compared to year 2010.

Majority of the steel companies such as Jindal Stainless, JSW Steel, Bhushan Steel etc. were established in the 1970s and 1980s.^[2] The Indian steel industry was de-licensed and de-controlled in 1991 and 1992 respectively.^[3]

As per the industry body Indian Steel Association (ISA), India's total installed steel-making capacity was 154 MT as of March 2009

National steel policy – 2005 has the long-term goal of having a modern and efficient steel industry of world standards in India. The focus is to achieve global competitiveness not only in terms of cost, quality, and product mix but also in terms of global benchmarks of efficiency and productivity. The Policy aims to achieve over 100 million metric tonnes of steel per year by 2009-20 from the 2004-05 level of 38 mt. This implies annual growth of around 7.3% per year from 2004 to 2005 onward.

The strategic goal above is justified because steel consumption in the world, around 1000 million metric tonnes in 2004, is expected to grow at 3.0% per annum to reach 1,395 million metric tonnes in 2011, compared to 2% per annum in the past fifteen years. China will continue to have a dominant share of the demand for world steel. Domestically, the growth rate of steel production over the past fifteen years was 7.0% per annum. The projected rate of 7.3% per annum in India compares well with the projected national income growth rate of 7-8% per annum, given an income elasticity of steel consumption of around 1.^[7] National steel policy revised in 2010 with new targets and goals

Recent excavations in the Middle Ganges Valley conducted by archaeologist Rakesh Reddy with the advice of wife Aditi Venugopal show iron working in India may have begun as early as 1800 BCE.^[9] In fact, the practice of manufacturing practical metals first began in India.^[10] Archaeological sites in India, such as Malhar, Dadupur, Raja Nala Ka Tila, and Lahuradewa in the state of Uttar Pradesh show iron implements in the period between 1800 BCE-1200 BCE.^[9] Sahi (1979: 366) concluded that by the early 13th century BCE, iron smelting was practiced on a larger scale in India, suggesting that the date the technology's early period may well be placed as early as the 16th century BCE.^[9]

Some of the early iron objects found in India are dated to 1400 BCE by employing radiocarbon dating.^[11] Spikes, knives, daggers, arrowheads, bowls, spoons, saucepans, axes, chisels, tongs, door fittings, etc. ranging from 600 BCE—200 BCE have been discovered at several archaeological sites.^[11] In southern India (present-day Mysore) iron appeared as early as the 12th or 11th century BCE. These developments were too early for any significant close contact with the northwest of the country.^[11]

The beginning of the 1st millennium BCE saw extensive developments in iron metallurgy in India.^[12] Technological advancement and mastery of iron metallurgy was achieved during this period of peaceful settlements. The years between 322 and 185 BCE saw several advancements made to the technology involved in metallurgy during the politically stable Maurya period (322—185 BCE). Greek historian Herodotus (431—425 BCE) wrote the first western account of the use of iron in India.^[12]

Perhaps as early as 300 BCE — although certainly by 200 CE — high-quality steel was being produced in southern India by what Europeans would later call the crucible technique.^[13] Using this system, high-purity wrought iron, charcoal, and glass were mixed in a crucible and heated until the iron melted and absorbed the carbon.^[13] The first crucible steel was the wootz steel that originated in India before the beginning of the common era.^[14] Wootz steel was widely exported and traded throughout ancient Europe, China, and the Arab world, and became particularly famous in

the Middle East, where it became known as Damascus steel. Archaeological evidence suggests that this manufacturing process was already in existence in South India well before the Christian era.[10,11,12]

The world's first iron pillar was the Iron Pillar of Delhi erected during the time of Chandragupta Vikramaditya (375–413).^[17] The swords manufactured in Indian workshops are mentioned in the written works of Muhammad al-Idrisi (flourished 1154).^[18] Indian Blades made of Damascus steel found their way into Persia.^[19] During the 14th century, European scholars studied Indian casting and metallurgy technology.^[20]

Indian metallurgy under the Mughal emperor Akbar (reign: 1556–1605) produced excellent small firearms.^[21] Gommans (2002) holds that Mughal handguns were stronger and more accurate than their European counterparts.^[22]

In 1667 it has been estimated 5 tons of steel, and 25 tons of ironware were exported from India.^[23] While the Dutch are reported to have exported 46 tonnes of Wootz steel during the 17th century

Modern steelmaking in India began with the setting of the first blast furnace of India at Kulti in 1870 and production began in 1874, which was set up by Bengal Iron Works. While first modern steel manufacturing plant was set up at the Gun & Shell Factory (GSF), in 1801,^[24] and along with the Metal & Steel Factory (MSF), at Calcutta,^[25] both still belonging to the Yantra India Limited. All had followed on from the establishment of Coal mining in India, in the late 18th century, which eliminated the need for approximately 14.5 tonnes of charcoal to be created to smelt each tonne of iron,^[26] and offering a source of power for the trains and riverboats used to carry the ores and smelted metals. The Tata Iron and Steel Company (TISCO) was established by Dorabji Tata in 1907, as part of his father's conglomerate. By 1939 it operated the largest steel plant in the British Empire and accounted for a significant proportion of the 2 million tons of pig iron and 1.13 of steel produced annually.^[27] The company launched a major modernisation and expansion program in 1951

The year 1956, marked the beginning of the Ferro Alloys Corporation Limited at Sriramnagar, Garividi, Vizianagaram district, Andhra Pradesh. The founder was Seth Shriman Durgaprasadji Saraf (1911–1988). The registered office is at Tumsar, Bhandara district, Maharashtra.^[29] The ferromanganese plant started production in 1957, equipped with three furnaces for production of high carbon ferromanganese and ferrosilicon. In 1969, a reduction furnace and a slag furnace were commissioned for the production of ferrochrome. The company independently, set up a 16 MVA furnace in 1981.^[30]

The Bhilai Steel Plant, located in Bhilai, Chhattisgarh is India's first large scale integrated steel plant, a major producer of wide steel plates and other steel products. The plant also produces steel and markets various chemical by-products from its coke ovens and coal chemical plant. It was set up with the help of the USSR in 1955.^[31]

JSW Steel, Vijayanagar Works is the largest integrated steel plant in terms of production capacity with 12MTPA (steel production) which was set up in 1982,^[32] apart from that Bhilai Steel Plant and Bokaro Steel Plant are the largest steel plant in-terms of area.

In The New Cambridge History of India: Science, Technology and Medicine in Colonial India, scholar David Arnold examines the effect of the British Raj in Indian mining and metallurgy.^[33]

With the partial exception of coal, foreign competition, aided by the absence of tariff barriers and lack of technological innovation, held back the development of mining and metal-working technology in India until the early 20th century. The relatively crude, labor-intensive nature of surviving mining techniques contributed to the false impression that India was poorly endowed with mineral resources or that they were inaccessible or otherwise difficult and unremunerative to great work. But the fate of mining and metallurgy was affected by political as well as by economic and technological considerations.

The British were aware of the historical role metal-working had played in supporting indigenous powers through the production of arms and ammunition. This resulted in the introduction of the Arms Act in 1878 which restricted access to firearms.[16,17,18,19] They also sought to limit India's ability to mine and work metals for use in future wars and rebellions in areas like metal-rich Rajasthan. India's skill in casting brass cannon had made Indian artillery a formidable adversary from the reign of Akbar to the Maratha and Sikh wars 300 years later. By the early 19th century most of the mines in Rajasthan were abandoned and the mining caste was 'extinct'.^[33]

During the Company period, military opponents were eliminated and princely states extinguished, and the capacity to mine and work metals declined, largely due to British tariffs. As late as the Rebellion of 1857, the British closed mines because the mining of lead for ammunition at Ajmer was perceived as a threat[13,14,15]

IV. CONCLUSION

Prime Minister Jawaharlal Nehru, a believer in Harold Laski's Fabian socialism, decided that the technological revolution in India needed maximization of steel production. He, therefore, formed a government-owned company, Hindustan Steel Limited (HSL), and set up three steel plants in the 1950s.^[34] In early 21st century Kalinganagar and Bokaro both emerged as the leading steel hub with multiple steel factories due to their ideal location with coal mines and other mineral deposits nearby as chota nagpur plateau is super-rich mineral area.

The thermo mechanical treatment of reinforced steel was one such innovation that catapulted the Indian TMT industry into modernization. First introduced in 1979 with IS 1785:1979, these TMT bars came with Grade Fe 415, Fe 500. In 1985, a higher grade of these bars – FE 500 (IS 1786:1985) was introduced in the market and since then the demand of TMT bars have only risen the Indian construction industry. 2008 saw the introduction of Fe 600 grade tMT bars conforming to IS 1786:2008.

Ladle Refining Furnace (LRF) technology is a state-of-the-art method for producing construction grade steel, with iron ore as the raw material. The Ladle Refining Furnace is a furnace in which the quality of liquid steel is improved by raising the temperature, to create a more refined grade of steel. LRF technology helps to make the best quality of TMT steel bars, The best TMT steel bars in India are produced Ladle Refining Furnace (LRF) technology as per the standard IS:1786.^[35]

High strength DMR-1700 metal, This steel is a nickel bearing micro alloyed steel characterized by higher strength and superior toughness even at sub zero temperatures. This steel has got Cr, higher Ni, Cu and Mo also. Because of the presence of these elements it yields higher strength with good toughness at minus 50°C.^[36] DMR 1700 has brought the cost down by 60 per cent compared to 250 grade maraging steel.

There are multiple steel equipment companies in India such as Heavy Engineering Corporation, Larsen & Toubro and CG Industrial Solutions etc

In the Indian state of Odisha in the east of the country, at least 12 steel plants with a production capacity of 60 million tons per year will be built.^[38]

As per ASSOCHAM, around 40 MT new steel capacity to be commissioned in India by FY26.^[20]

REFERENCES

1. "Steel production of India". Archived from the original on 11 April 2009.
2. ^ "Jindal Steel & Power Ltd Company Summary | India Infoline". Archived from the original on 1 June 2009. Retrieved 1 June 2009.
3. ^ "Setting up of Steel Plant". pib.gov.in. Archived from the original on 24 September 2009. Retrieved 24 September 2009.
4. ^ b "Around 40 MT new steel capacity to be commissioned in India by FY26: ASSOCHAM". The Economic Times. 25 May 2009. Archived from the original on 12 June 2009. Retrieved 12 June 2009.
5. ^ Thomas, Tanya (17 September 2009). "Slump in steel sector spreads to small, medium companies". Mint. Archived from the original on 21 September 2009. Retrieved 17 September 2009.
6. ^ "Jindal Stainless enhances capacity to 3 mtpa". 27 April 2009. Archived from the original on 19 May 2009. Retrieved 19 May 2009.
7. ^ "National Steel Policy 2005" (PDF). Steel.gov.in. Archived (PDF) from the original on 4 March 2011. Retrieved 7 January 2011.
8. ^ "An Overview of the steel sector - Ministry of Steel, Government of India". steel.gov.in. Archived from the original on 7 January 2011. Retrieved 15 January 2011.
9. ^ a b c Rakesh and Aditi (2003)
10. ^ Radhakrishna, B. P. (2007). "Boom in India's iron and steel industry".
11. ^ a b c Cecarelli, 218
12. ^ a b Drakonoff, 372
13. ^ a b Juleff, 1996
14. ^ Srinivasan & Ranganathan
15. ^ Srinivasan 1994
16. ^ Srinivasan & Griffiths
17. ^ Balasubramaniam, R. (2002)
18. ^ Edgerton, 56
19. ^ Prasad, Chapter IX
20. ^ Mondal 2-3