

## Assesment of Iron and Steel Industry in Terms of Sponsors

**Gökhan SÜMER**

Türkiye Halk Bankası A.Ş.

Balıkesir, Turkey

[orcid.org/0000-0001-5579-5689](https://orcid.org/0000-0001-5579-5689)

[gkhanb73@gmail.com](mailto:gkhanb73@gmail.com)

### Extensive Summary

Whereas the signs regarding the first use of iron are seen in the Sumerian and Egyptian period in 4000 BC, not much progress was made in iron metallurgy until the 14th century. The use of wood as a source of heat in the first iron smelting (smelting) operations began to be used as a means of both heat and reduction of coking coal as a result of the diminution of wood resources in England in the 18th century. In 1850, mass iron production became feasible with the emerge of the melting oven blowing technique which was invented by Henry Bessemer. The mass production of iron played an important role in the development of mankind as the driving force of the industrial revolution.

Iron is used as the most important construction and engineering material due to its high availability, stability, flexibility, recyclability and cheapness compared to the other metals available in the country.

Iron is an indispensable product for all countries as it is the driving force of development as a basic industrial input which is durable and reliable, long-lasting and economical, recycling and which also have environment-friendly features, technical superiority and competitive power. The iron and steel sector has been one of the sectors most affected by the economic and political developments and fluctuations.

With the growth of the world economy, the world has also increased the steel production accordingly. On the other hand, foreign trade in the iron and steel sector is increasing day by day, as a consequence of globalization and the progress achieved in the field of logistics and international protectionism practices. Moreover, the beginning of the emerge of new centers around the world, the shift of world trade from the west to the east also shows itself in the world iron and steel sector. By the end of 2016, steel production, which was only 189 million tons in 1950, reached 1 billion 630 million tons.

World steel production has shifted to Asia, especially to China, with the influence of India. That is, 76.195 million tons of steel production, which corresponds to 9% of the world steel production, which was 785.968 million tons in 1989, was produced by China and India, and by 2016, a total of 1.629.6 million tons of product is produced in Asia. By 2016, these two countries account for 55% of world steel production. China,

which produced 61,587 million tons of steel in 1989, increased its production to 808,400 million tons in 2016. Likewise, India has increased its production from 14,608 million tons to 95,600 million tons. The largest producer which is China is also the country with the highest export rates at the same time.

The production facilities specified as blast furnaces in the world are in the foreground; however, electric arc furnace plants in Turkey are in the foreground. In these plants, steel is mainly produced by melting iron whereas electric arc furnace plants produce steel after melting scrap metals.

The restrictions on the iron and steel industry by the World Trade Organization to the OECD, as well as the restrictions imposed by the EU, as well as the limitations arising from the provisions of the Kyoto Protocol, have had a profound effect on the sector. In the international trade, the protection measures of the nations also affect the sector very much.

Turkish Iron and Steel Industry is the leading sector in the development of Turkey as in all over the world. The size reached by the sector has reached important dimensions for creditors as well as producers and investors. Due to the fact that the sector is heavily industrial, it holds high monetary figures in itself.

No matter if electric or blast furnace in the iron or steel industry is used, production is not interrupted due to the high cost. Because of the reheating time and the high cost of the furnaces, continuous stock production is done. In general, it is known that the industry is working with a minimum stock amount of 1 month. Full-day based business operators employ a large number of workers. However, there is a high level of electricity, natural gas-like expenses of the enterprises. Even regular maintenance work in these enterprises is expressed with high figures.

It is necessary for credit institutions to support the high operating capital needs of the iron and steel industry with short-term funds. The loans can be in the form of non-cash or cash. In this resource transfer, a detailed analysis is required from the stock amount of the company to the sales of the term, to the other operating expenses. The iron and steel sector has a high retirement social security premium due to a large number of staff employed in the sector. In the same way, electricity, natural gas and water are used intensively in production, and the expenses in these items are also quite high.

Loan institutions fund these establishments which have a high level of social security premiums, electricity, natural gas and water expenses. These businesses offer funding known as cash management credits for these expenses. In the iron and steel industry, many high volume insurance products such as work insurances, financial liability for employees, vehicle insurances, employees' compulsory individual pension, receivable insurance, freight insurance are used in order to protect creditors' receivables against risks or against the risks of the operator.

The iron and steel sector is a sector in which foreign trade payments are seen due to the fact that imports depend on raw materials and high exports, and imports of final products are common. Eximbank loans, cash payments and letter of credit transactions are common in the sector. In these transactions, creditors have the right to have commissions and exchange profits. The enterprises involved in the iron and steel sector bring high transaction volumes and many transactions in the calculation of high financial turnover and accordingly the calculation of their payout and costs.

As foreign exchange sales are partly indexed TL in the iron and steel sector, the use of derivative products is very high. Direct borrowing systems are also widely used

by these companies in order to benefit from the wide dealer network. It is quite common that the time gap between payments and incomes is borne by the borrowers as well as by the fact that the excess funds are matched with the deposits and similar products.

The iron and steel sector is seen to be a highly productive sector where insurance products are used intensively in the iron and steel sector

The enterprises involved in the iron and steel sector bring high transaction volumes and many transactions in the calculation of high payroll and accordingly the calculation of the payout and costs. In the iron and steel sector, the use of derivative products is very high as foreign exchange sales of purchases are partly indexed TL. Therefore, there is a risk of exchanging currency on their balance sheet, and a high amount of exchange profit and loss is seen in the profit and loss statements. In addition, direct debiting systems are also widely used by these companies to benefit from their extensive dealer networks. The time difference between payments and incomes is often seen as the need for credit by the end-users, and sometimes inactive resources are diminished by the deposits and similar products.

The iron and steel sector is a sector where insurance products are heavily used in almost all banking and finance transactions. When we look at the Turkish iron and steel sector in general; it is seen that it mainly imported from abroad, it produced from scrap materials, it did not benefit from any incentive and support under the EU harmonization laws. Whereas Turkey still continued low capacity in the utilization rate of investment, investments are still made in the sector. On the product side; when the manufactured products are considered, Turkey's flat steel production is not sufficient and the excess production of long steel in the group are exported,

It is observed that there is a risk for foreign exchange risk, the effects of domestic and foreign demand changes on the sector are considerably high because raw material orders are issued months ago, so profitable purchases can be made from purchases losing the bargain.

For the last two years in the world market, China seems to have begun to work together with the other countries by closing the establishments near city centers, which are harmful to the environment due to the high air pollution. As a result, the restraint of production in China appears to be less aggressive than that of the international steel trade. However, it is thought that in the following periods, the investments in the world market will start with the Chinese effect again.

Due to the Trump's economic policy in the US and the start of a trade war and additional taxes of sales, it is expected that the sale of steel to the USA from Turkey will decrease in the future.

The civil war and political instability in Turkey's neighboring countries are predicted to continue in the short term. Therefore, it should be considered that the troubles in the neighboring countries, which arise great expectation regarding the reconstruction of the country, will continue for a while.

Contrary to the expectations, domestic home sales began to slow down and with the increase in interest rates; investment spending has become unable to increase at the desired level. In the US, the Fed's decision to raise interest rates has begun to cause trade wars in the world, rising exchange rates and the emergence of foreign investors from the developing markets.

In the near future, it is necessary to act in the steel sector again considering that the Chinese influence can be seen, that the troubles in the neighboring countries will not

end immediately and that the domestic demand cannot meet the production capacity. For now, it is necessary to be aware of the fake spring weather effect in the sector.

On the other hand, the incentives into the investment, into the flat steel production in Turkey, blast furnace, i.e. the promotion of investment to those who produce from ore or partial ore will be an appropriate decision because of the gap in the production. Developments in China and in the world should be followed closely to shape the angle of view of the sector and make relevant decisions accordingly.

Both producer firms and creditors should take the necessary steps now in the direction of expectations for the future. Due to the fact that there is a shortage of flat products in terms of the product composition of the country, it will be a good decision to direct current businesses and new investors to this area.

It should be assessed what can be done by the political power in the case of incentive support, which cannot be provided indirectly and directly by the professional associations due to the limitations dictated by the Customs Union. Relevant actions should be taken to reduce the additional loads on the sector.

The iron ore production in the sector, flat product production methods and convergence to benefit from scale economies should be encouraged. In addition, the incentives for the production of high-value-added steel products, production of high strength products, seamless pipe-type products, aviation and technology products should be increased.

The projections for the iron and steel sector will bring together the steelmakers who are using the steel products intensively, especially the manufacturers, such as pipes, profiles, plate iron, wire and nails.