

IRON AND STEEL INDUSTRY

The iron and steel market is large and set to grow further. Automotive, household durables and machinery & equipment comprise the main sectors to trigger this growth. The privatisation of Erdemir, the leading producer, in 2005, would help to strengthen disciplines and market-driven adjustment in the steel sector.

Sector Overview

Turkey was the world's 11th steel producer with a total production of 20.9 million tonnes in 2005, accounting for 2.0% of total world steel production. It ranked 12th in 2004 with a total production of 20.5 million tonnes and a growth rate of 12% over 2003. In the early 1980s, three government-owned integrated steel producers controlled a substantial majority of the capacity. Over the past two decades, significant capacity has been added through private mini-mill investments. As a result, Turkey has become one of the major players in the global steel market.

Turkish iron and steel industry has witnessed privatisations, close downs or changes in the ownership status of some enterprises over the last decade. Turkey has been implementing policies supporting the withdrawal of government from the steel sector over the last decade. The industry consists of three main types of players: Integrated steel producers, mini-mills using electrical arc furnaces (EAF) and processors. Currently, 3 integrated plants and 16 electrical arc furnaces operate in the sector. Processors import semis or purchase them from integrated steel producers and mini-mills. With the exception of one cold rolling company that produces flat products and a few companies producing specialized products such as spring steel, most of these players are sub-scale rolling mills supplying low-value-added, often very substandard, long products to the construction industry.

KEY PLAYERS, 2005			
Company	Capacity million t/y	Production	
		million ton	%
Integrated (1)	6.3	6.1	29
EAF	18.4	14.8	71
<i>Total</i>	<i>24.7</i>	<i>20.9</i>	<i>100</i>

(1) Erdemir (privatised), Kardemir (privatised), Isdemir (to be privatised)

Erdemir is the only flat producer with 3 million tonnes of crude steel capacity. The share of the electric steel making plants within the total steel-making capacity is much higher than the world average – these own 71% of crude steel production.

The industry is uniquely positioned, combining high potential growth with a proximity to the EU, but is also embedded with a structural problem: The production is biased 83% to 17% in favour of long products. As regards consumption, the ratio is 50-50%. Although the industry produces most types of steel, the product mix is skewed towards lower-value long products that are used mainly in the construction industry. Due to the steel industry's focus on long products Turkey has become a major player in export markets. However, although Turkey exports almost half of its total production, it meets domestic demand for flat products mainly through imports. The modernization

and transformation investments in Isdemir, which will involve conversion from long to flat products, will be an important step for capacity rationalization in the sector.

Turkish steel making companies are pursuing technological developments in the steel production across the world in order to increase their long-term viability. They have been investing in new technologies to enhance their competitiveness and efficiency and this trend is likely to be maintained over the coming years

The iron & steel industry is an important part of the Turkish economy, accounting for over 8.0 % of total exports in 2004.

The Turkey-ECSC Free Trade Agreement is still under implementation as no new decision has been taken.

Market Size and Growth Rate

Consumption was an estimated \$9.1 billion in 2004 and \$9.7 billion in 2005, with an increase of 31.4% and 6.5%, respectively, over the previous year. In spite of several periods of economic recovery during the last 20 years and a fast growing population, the use of steel in Turkey has remained below potential levels, in terms of per head consumption by global standards. Domestic consumption recovered in 2003, resulting in the consumption per capita figure to rise to the pre-crisis level of 193 kg, and then to 271 kg in 2005.

	MARKET SIZE, 1990-05						Growth Rate (%)	
	\$ million, at 1998 prices						2004	2005
	1990	2000	2002	2003	2004	2005 e		
Demand	3,474	6,491	5,780	6,936	9,185	9,784	31.4	6.5
Production	3,628	6,010	6,262	6,846	8,049	8,269	17.6	2.7
Exports	1,176	2,098	2,877	2,989	3,555	3,277	18.9	-7.8
Imports	947	2,888	2,689	3,468	3,729	4,436	7.5	18.9

Source: State Planning Organisation (SPO)

Crude steel production increased over 400% between 1980 and 2004, reaching 20.4 million tonnes. The growth in production ranged between 10-12% during 2002-04 and 2.3% in 2005, due to the rise in domestic demand rather than exports.

In 2005, long products accounted for 86% of production, flat products 12% and special quality steel products 2% in volume terms. No stainless steel is produced in Turkey. Consumption of long products stands at around 6 million tonnes, 80% of which is met by domestic production. Due to a production surplus of 5.5 million tonnes, capacity utilization rate is 67% in long products, while it is 99% in flat products.

As a result of the November 2000 and February 2001 economic crises, steel demand from main sectors such as construction, infrastructure, automotive and machinery have diminished. With the decline in the domestic demand and the competitive advantage gained from the devaluation of the Turkish Lira, the producers shifted towards the export markets and steel imports were curtailed. Such increase in the exports and decrease in the imports resulted in the iron and steel industry being less affected from the crisis situation. Thus, the growth trend in production has continued. Domestic consumption and imports recovered starting from 2003.

BREAKDOWN OF PRODUCTION, 1999-05
000 tonnes

	1999	2000	2001	2002	2003	2004	2005
Long products	11,455	11,597	11,717	13,250	14,859	17,084	17,492
Flat products	2,611	2,388	2,962	2,893	3,088	3,032	3,095
Special alloy products	243	340	301	329	352	362	377
<i>Total</i>	<i>14,309</i>	<i>14,324</i>	<i>14,982</i>	<i>16,467</i>	<i>18,299</i>	<i>20,478</i>	<i>20,964</i>
Change, %	1.1	0.1	4.6	9.9	11.1	11.9	2.3

Source: Turkish Iron and Steel Producers' Association

Foreign Trade

The Turkish steel industry is largely dependent on foreign trade. It is the third largest exporting sector in the economy. Exports have been continuously increasing in the recent years, making Turkey the 11th biggest exporter of the steel products in 2002.

After the economic crisis of 2001, with the positive developments in economy in general, the iron and steel sector has shown great performance due to increases in exports and domestic demand. In 2005, exports totalled \$4.8 billion (11.0 million tonnes) and imports \$5.7 billion (9.5 million tonnes). Long products accounted for the greatest part of exports with a share of 68.3%, followed by semi-finished products (19.9%).

Import dependency rate has increased over the last six years, with the value of imports exceeding exports, except the crisis year of 2001. Although the production capacity for crude steel is able to meet current demand, nearly 50% of domestic demand is met by imports due to the high share of long products in this capacity. Imports increased 18.8% in 2005 in volume, and 71.6% of imports was accounted by flat products and 10.2% by slabs.

IRON & STEEL FOREIGN TRADE, 1998-05

	Exports		Imports	
	\$ million	000 tonnes	\$ million	000 tonnes
1998	1,525	6,045	1,821	5,150
1999	1,463	7,020	1,280	4,595
2000	1,559	6,975	1,931	6,223
2001	2,029	9,676	1,203	4,227
2002	2,219	10,105	1,692	5,493
2003	2,899	10,450	2,660	6,819
2004	5,251	12,195	4,554	7,994
2005	4,838	11,003	5,789	9,504

Source: Turkish Iron and Steel Producers' Association

BREAKDOWN OF IRON & STEEL FOREIGN TRADE, 1998-05
000 tonnes

	Exports				Imports				
	Billet	Long	Flat	Special	Billet	Long	Flat	Special	Slab
1998	765	4,599	599	85	916	346	3,028	296	564
1999	631	5,622	688	78	900	283	2,454	253	705
2000	1,226	4,880	755	114	967	306	3,687	311	951
2001	2,228	5,948	1,374	126	573	228	2,722	240	463
2002	3,054	5,762	1,120	168	644	369	3,841	359	280
2003	3,148	6,141	979	180	779	451	4,292	461	832
2004	3,770	7,184	1,039	203	580	627	5,195	645	945
2005	2,196	7,526	1,109	199	898	693	6,180	758	974

Source: Turkish Iron and Steel Producers' Association

Prospects

- The iron and steel industry will continue to grow, fuelled by both domestic and exports markets:
 - ✓ Turkey's steel consumption per capita is about half of that in the EU and developed countries.
 - ✓ A lot of infrastructure investments and potential demand have been postponed because of the recent economic crises.
 - ✓ Recovery registered in the macro economic indicators since 2002 will result in a boost in the investments in the near future, which will also increase domestic steel consumption.
- Erdemir's privatisation in 2005 is set to change the balances in the market and offer good opportunities for new investors. Local players have already started acting according to the expected changes in the market balance.
- Meanwhile, with Erdemir's converting Isdemir into flat production through modernization and conversion investments worth \$1.9 billion, the production capacity will increase to 7 million tonnes/year in 2007 and 10 million tonnes/year in 2009, eroding the excess capacity in long products and, at the same time, absorbing the supply deficit in flat products. In addition, the Arcelor-Borcelik partnership is envisaging new investments in flat products.
- Automotive and home appliances sectors, with their big domestic markets and significant potential in export markets, will continue to trigger the steel consumption in the long term. SPO expects that annual average increase in steel consumption will be between 6-7% parallel with the forecast of 5% GDP growth in the coming years.
- In recent years, steel producers concentrated on the export markets and around 70% of the crude steel production has been exported. Although a higher share of the production is expected to target the domestic market in the following years as a result of the economic recovery, competitiveness in the foreign markets will be also be maintained. Currently, Turkish steel producers are one of the best suppliers for the restructuring investments in Iraq and Middle East.