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TURKISH METAL INDUSTRY REPORT

JULY 2010



CONTENTS

1.	Executive Summary	3
2.	Sector Overview	4
2.1	Global Sector	4
2.2	Domestic Sector	7
2.2.1	Overview	7
2.2.2	Key Players	17
2.3	Positioning Map	18
2.4	Sector Outlook	19
2.5	SWOT Analysis	20
2.6	Investment Opportunities	21
2.7	Sector Establishments and Institutions	22
	LIST OF FIGURES	23
	ABBREVIATIONS	24



1. Executive Summary

This report covers ferrous and non-ferrous metals, both of which are key economic industries for Turkey and the world. Ferrous metals primarily consist of steel, where the industry globally now has an annual capacity of around 1.9 billion tons. Annual steel sector revenue in 2009, badly hit in almost every country in the early months of the year by the economic crisis, was over USD 600 billion. The main non-ferrous metals are copper, aluminium, nickel and zinc; total value of non-ferrous metals production in 2009 was USD 172.5 billion.

The steel industry is now dominated by China, with about 45 percent of global production. Turkey has also shown impressive growth and is now the 10th largest producer in the world, the 3rd largest in Europe.¹ Turkey's crude steel production was 25.1 million tons in 2009. Turkish steel production reached approximately 2.5 million tons for the month of May in 2010, increasing by 19 percent from its level of 2 million tons in May 2009.¹

Turkey is predominantly a producer of long steel products which reached a production level of 21 million tons in 2009, constituting 82 percent of Turkish steel production. There has been a strong demand for long steel products in Turkey due to the high level of construction activity, which has left a shortfall in flat production facilities.¹ Western countries generally have an output ratio between long and flat products of 40 percent to 60 percent.²

As of May 2010, 68 percent of steel production was produced in electric arc furnace mills and 32 percent in integrated facilities. Production in integrated facilities have increased by 17 percent in May 2010 when compared to May 2009 and electric arc furnace production has increased by 11 percent.¹ The main raw material in integrated facilities is iron ore whereas the main raw material in electric arc furnaces is scrap, often imported. There are 3 integrated facilities: Erdemir, İsdemir and Kardemir. 21 electric arc furnaces and 2 induction furnaces form the total of 26 production facilities.¹

Turkish steel exports have reached 16 million tons in 2009 and imports have reached approximately 10 million tons.³ Long products formed 74 percent of total exports whereas flat products were 56 percent of total imports in 2009.⁴ The top 5 long product export markets were Egypt, UAE, Iraq, Libya and Yemen. Flat products are mainly imported from Russia, Ukraine, Romania, Italy and Belgium.

The Turkish copper industry constitutes a significant part of Turkey's total metal production. Turkey's copper production reached 6 million tons in 2008. Although the production of copper has been increasing each year since 2004, Turkish copper import levels remained very high, amounting to USD 2 billion.⁴ Imports are mainly from Kazakhstan, Russia and Bulgaria.

Turkish aluminium consumption increased to 989 thousand tons in 2009 with a CAGR of 5 percent between 2005 and 2009.⁴ Turkey is dependent on imports due to the lack of domestic aluminium supply. 81 percent of the total imports were primary aluminium whereas the main items exported were aluminium extrusions and flat products, bars, rods and profiles, together comprising 55 percent of the total exports in 2009.⁵ Aluminium is mainly imported from Russia, Norway and Germany whereas aluminium products are mainly exported to Germany, Iraq and the UK.

¹ Turkish Iron and Steel Association (DCUD)

² Export Promotion Center, Iron & Steel Report, 2010

³ Erdemir Report, February 2010

⁴ Aluminium Manufacturers' Union of Turkey (TALSAD)

⁵ Trade Map



2. Sector Overview

2.1 Global Sector

The metal industry can be divided into two categories, ferrous metals and non-ferrous metals.

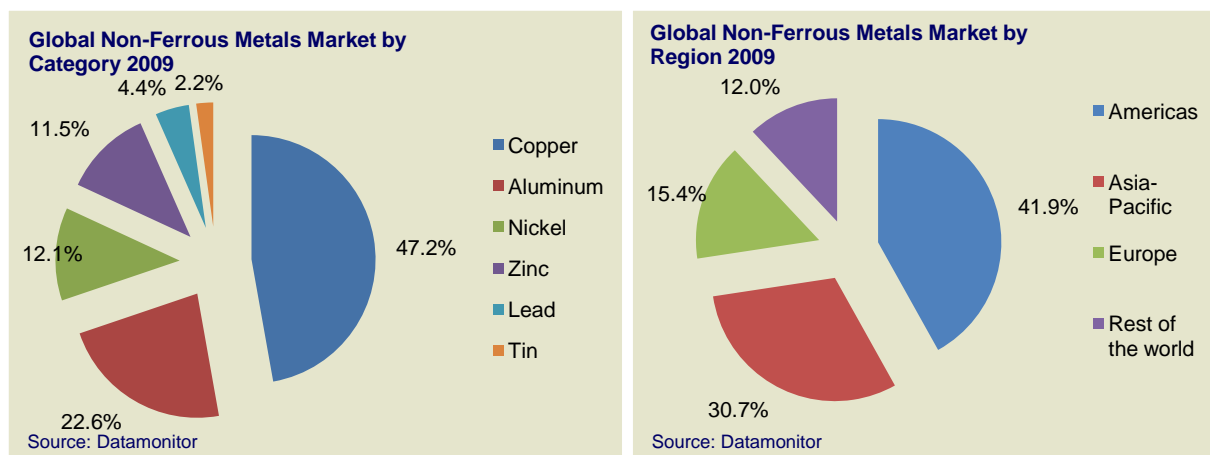
Ferrous metals primarily consist of iron and varieties of steel. The world’s steel industry has shown strong performance in the recent past in terms of production, capacity utilization and consumption.

After the strong boom of the recent years, the global steel sector was affected by the economic crisis in late 2008 and 2009. There was a sharp fall in production at the end of 2008 amounting to 80-90 million tons annually.⁶ In addition, steel prices fell sharply. Recovery began as the year progressed and has continued in 2010. Crude steel production in 2009 was 1,220 million tons with a 8 percent decrease compared to the prior year.⁷

Non-ferrous metals include mainly copper, aluminium, zinc, nickel, lead and tin, which are used to make alloys, castings, forgings, extrusions, wires, cables, pipes, etc., and used in a number of sectors such as agriculture, infrastructure facilities such as power plants, automobiles, railways, telecommunications, building, construction and in engineering and chemical plants.

Major emerging nations such as Turkey that have comparatively low labour rates and a growing domestic demand, have the potential to become key players in the global metal markets.

Figure 1 – Global Non-Ferrous Metals Market, 2009



Non-ferrous production volumes increased with a CAGR of 1.3 percent between 2005-2009, amounting to 56.8 million tons and are expected to reach 67.7 million tons in 2014.⁸ Because of the rising prices, global revenues have been rising faster. The global non-ferrous metals market generated revenues that reached USD172.5 billion in 2009, representing a CAGR of 5.1 percent for the period 2005-2009.⁸ This performance is expected to continue, with an anticipated CAGR of 15.7 percent for the five-year period 2009-2014, which will drive the market to a value of USD 357.5 billion by the end of 2014.

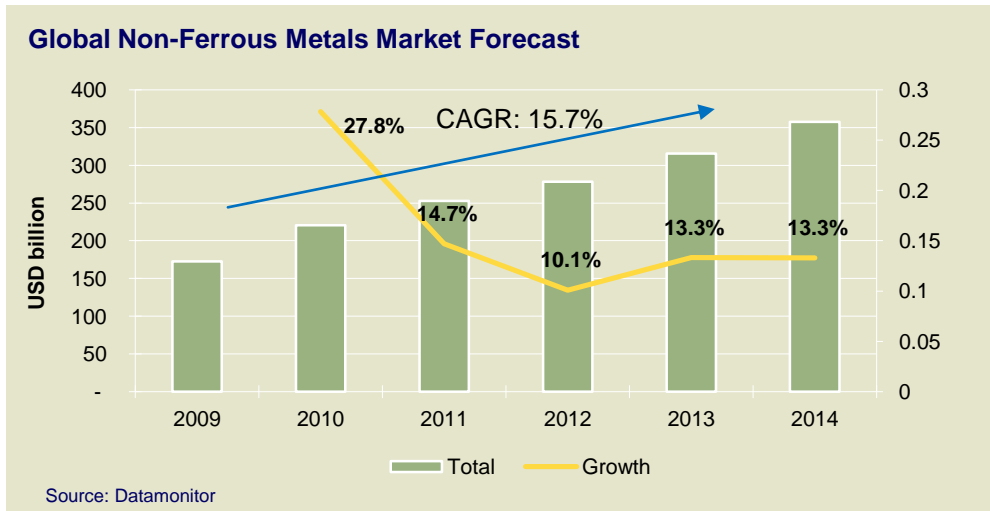
⁶ Erdemir Annual Report,

⁷ World Steel Association

⁸ Datamonitor, Global Base Metals Report, March 2010



Figure 2 – Global Non-Ferrous Metals Market Forecast



Main players in the global metal sector are indicated below.

Figure 3 – Global Metal Sector Key Players, 2009

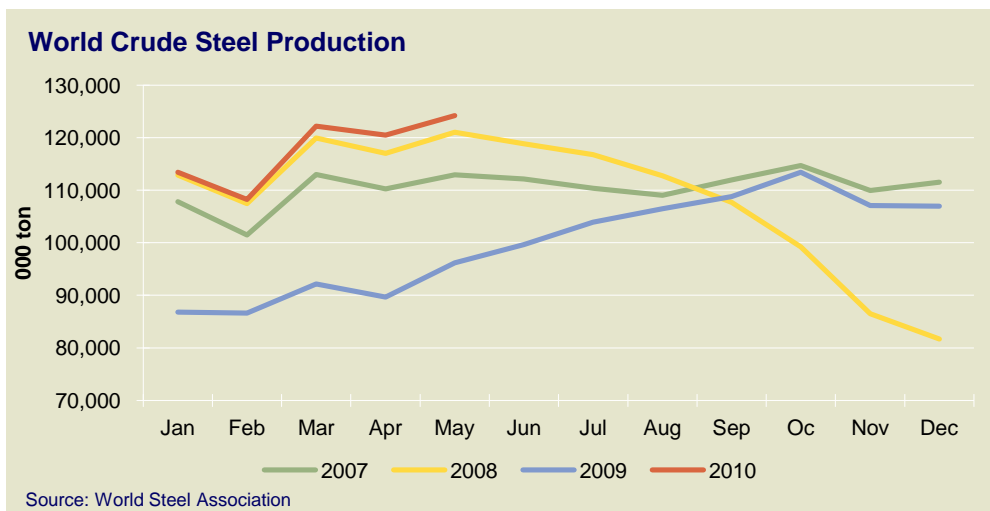
Company	Origin	Sales (USD million)	Assets	# of Employees
ArcelorMittal	Luxembourg	65,110	127,697	282,000
ThyssenKrupp AG	Germany	54,836	60,466	172,576
Mitsubishi Corporation	Japan	48,864	116,559	59,198
Nippon Steel Corporation	Japan	37,526	53,536	51,544
JFE Holdings, Inc.	Japan	30,604	41,934	54,229

Source: Datamonitor

Steel

Thanks in part to the strong growth in China, global steel production in 2010 has been running at levels similar to or exceeding 2008, which was a record year.

Figure 4 – World Crude Steel Production

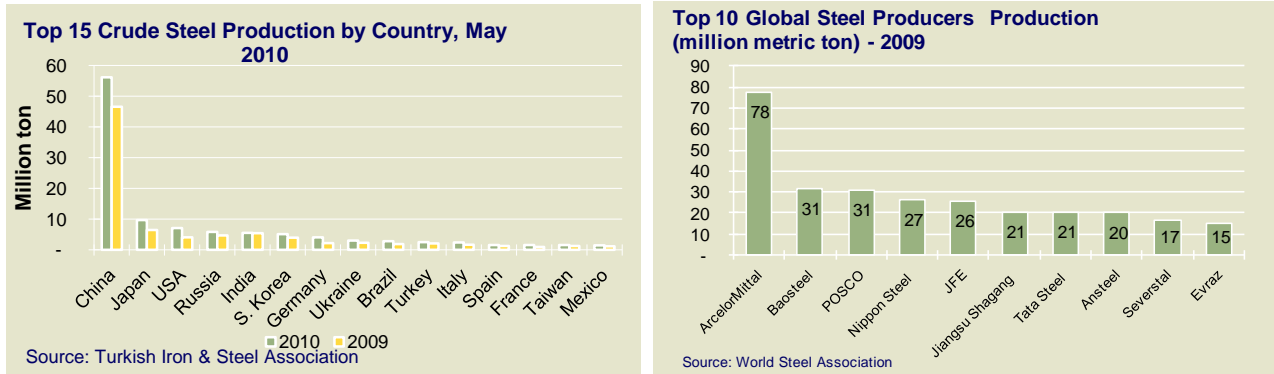




According to the World Steel Association, world crude steel capacity is expected to reach 1.9 billion tons in 2010.⁹

China is now the main player in the global steel industry with its share of approximately 45 percent in 2009. Turkey ranked 10th with its 2 percent share in global crude steel production in May 2010.¹⁰

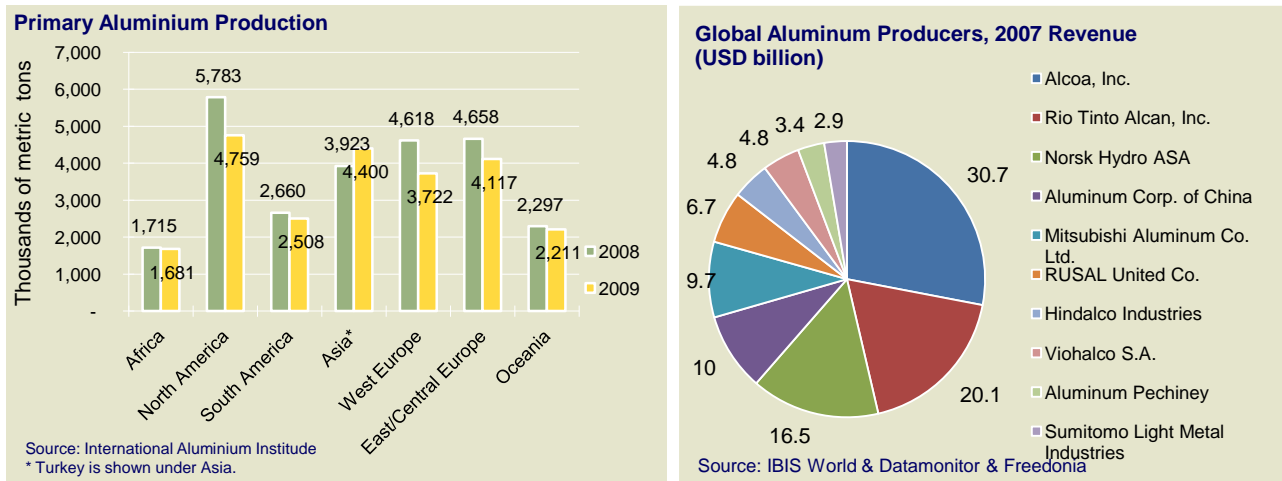
Figure 5 – Top 15 Crude Steel Production by Countries & Top 10 Steel Producers



Aluminium

Global aluminium production reached 23 million tons in 2009 where North America is observed to be the main producer of primary aluminium worldwide with 20 percent of the total production in 2009.

Figure 6 – World Primary Aluminium Production & Producers



The aluminium industry is much more consolidated than the steel industry. In 2007, the top 3 aluminium companies hold 40.5 percent of the world primary output while the top 5 steel companies account for 22 percent of the total steel produced.¹¹

⁹ World Steel Association

¹⁰ Turkish Iron and Steel Association

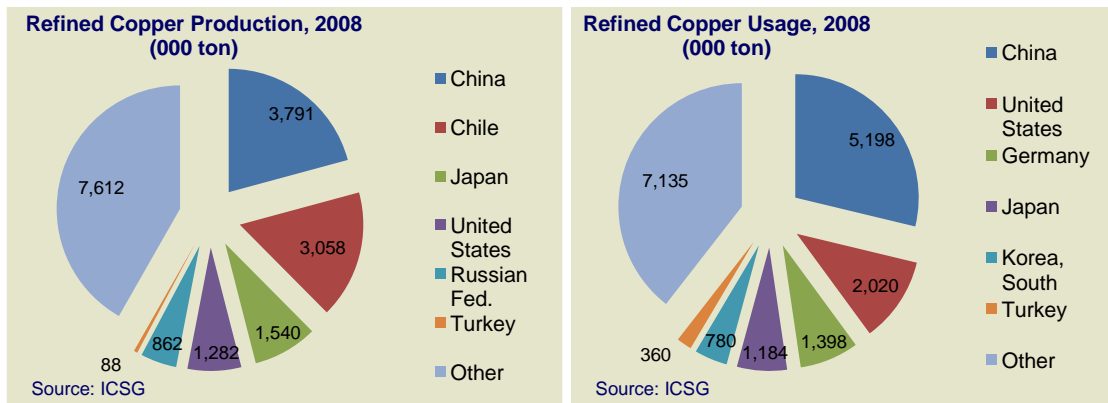
¹¹ Deloitte, Process Industries: Metals, Industry Briefing and On-Boarding Report, 2009



Copper

World copper usage has reached 18,075 thousand tons in 2008 with China and the US being the leaders in copper usage.¹² Copper production was similar, at 18,233 thousand tons in 2008. With regards to copper mining, Chile is the leading country having 5,328 thousand tons of copper mine production followed by the US with 1,335 thousand tons; the global total was 15,344 thousand tons in 2008.¹²

Figure 7 – World Refined Copper Production and Usage



2.2 Domestic Sector

2.2.1 Overview

The Turkish steel industry's foundations go back to the year 1937, to the establishment of Kardemir, the country's first fully integrated iron and steel plant. Two further integrated plants were commissioned in 1965 and 1970, Erdemir and Isdemir. These were both initially publicly owned. Erdemir was floated on the Istanbul Stock Exchange (ISE) during the foundation of the exchange in the 1980s, and privatizations later occurred. The capacity of these integrated plants was steadily increased and they have been supplemented by increasing numbers of privately-owned electric arc furnaces. Turkey has become an increasingly important supplier to the EU.

Steel

Between 2000 and 2008, Turkey performed impressively with a 87 percent increase in production, reaching 26.7 million tons in 2008. Turkey has moved up to 10th place in the world's largest steel producing countries as of May 2010.¹³

Turkey's crude steel production reached approximately 2,526 thousand tons in May 2010, increasing by 19 percent from 2,126 thousand tons in May 2009.¹⁴

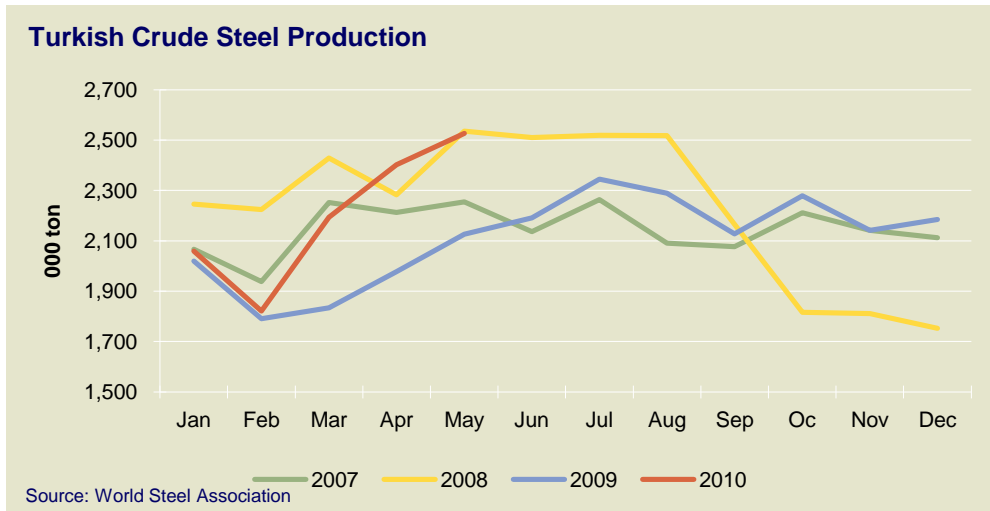
¹² International Copper Study Group (ICSG)

¹³ Turkey's Iron & Steel Producers' Association (DCUD)

¹⁴ World Steel Association



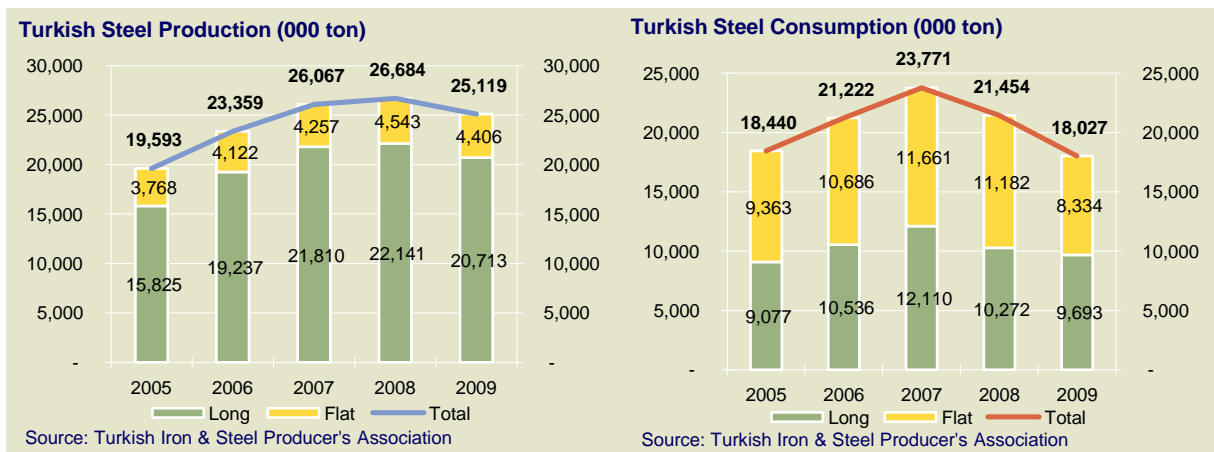
Figure 8 – Turkish Crude Steel Production



Turkey is predominantly a producer of long steel products which reached 21 million tons in 2009 constituting 82 percent of total steel production in Turkey. There has been a higher demand for long steel products in Turkey due to the extent of construction activities which has left the flat production facilities lagging behind demand.¹⁵

Turkish steel production and consumption are presented in the charts below. Special steel products are included within long and flat steel products in the figures below. Total steel production reached 25.1 million tons in 2009 whereas consumption was 18.0 million tons.¹⁵

Figure 9 – Domestic Steel Production and Consumption



As of May 2010, 68 percent of steel production was produced in electric arc furnace mills and 32 percent in integrated facilities. Production in integrated facilities increased by 17 percent in May 2010 when compared to May 2009 and electric arc furnace production increased by 11 percent. The main raw material in integrated facilities is iron ore whereas the main raw material used in electric arc furnaces is scrap metal.¹⁵

The table below shows the detail of 2009 production for each of the 3 integrated facilities, 21 electric arc furnaces and 2 induction furnaces making up Turkey's total capacity.¹⁵

¹⁵ Turkish Iron & Steel Producers' Association (DCUD)



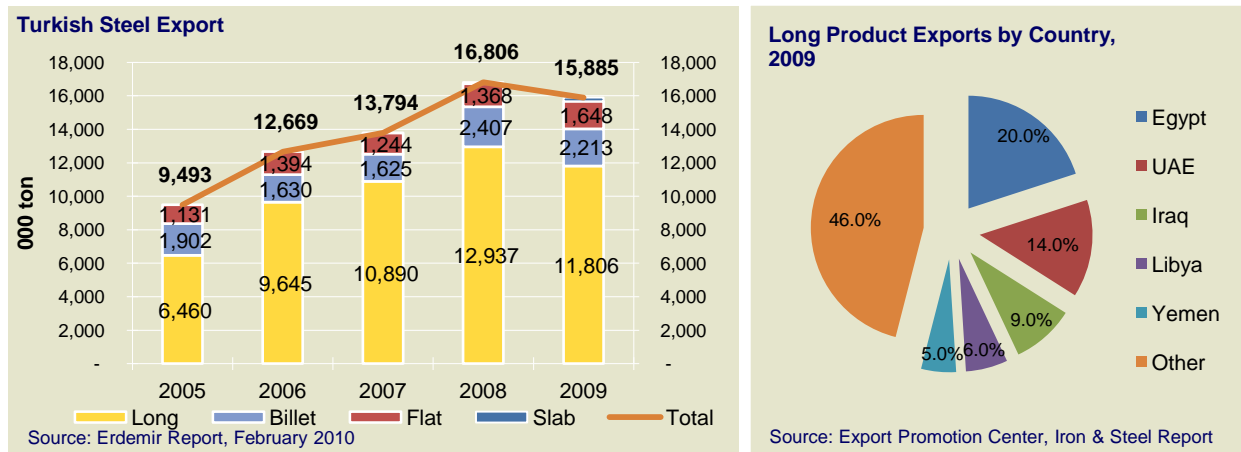
Figure 10– Crude Steel Producers

Crude Steel Producers			Crude Steel Producers		
ton	Production 2009	Capacity 2009	ton	Production 2009	Capacity 2009
Integrated Facilities					
1 Erdemir	3,715,393	3,500,000	8 Ekinciler	735,288	1,000,000
2 İsdemir	2,749,626	3,500,000	9 Habaş	2,438,070	4,800,000
3 Kardemir	1,097,356	1,500,000	10 İçdaş	3,030,100	5,267,600
Induction Furnaces					
1 İlhan Metalurji	93,075	200,000	11 İzmir Demir Çelik	1,097,661	1,320,000
2 Bilecik Demir Çelik (*)	na	na	12 Kaptan Demir Çelik	921,104	1,350,000
Electric Arc Furnaces					
1 Asil Çelik	45,117	485,000	13 Kroman	1,044,501	1,250,000
2 Çebitaş	111,050	750,000	14 Mega Demir (*)	na	na
3 Çemtaş	93,922	172,000	15 MKEK	2,277	60,000
4 Çolakoğlu	2,143,794	3,171,300	16 Nursan Çelik	1,012,665	1,200,000
5 Cer Çelik	285,419	850,000	17 Sider	700,920	720,000
6 Diler	1,304,530	1,500,000	18 Sivas Demir Çelik	409,857	450,000
7 Ege Çelik	473,212	2,000,000	19 Tosyalı Demir Çelik (*)	na	na
			20 Yazıcı Demir Çelik	1,011,054	1,000,000
			21 Yeşilyurt	547,417	720,000

Source: Turkish Iron & Steel Producers' Association
 (*): Total capacity of these three facilities: 1,700,000 ton & production: 240,000 ton
 n/a: not available

Exports and imports of the Turkish steel industry in recent years are summarised in the charts below. As can be seen, exports are higher than imports. Turkish steel exports have reached 16 million tons in 2009 and imports have reached approximately 10 million tons.¹⁶ Long products form 74 percent of total exports whereas flat products form 56 percent of total imports in 2009.¹⁷ The top 5 long product export markets were Egypt, UAE, Iraq, Libya and Yemen in 2009. Flat products are mainly imported from Russia, Ukraine, Romania, Italy and Belgium.

Figure 11– Domestic Steel Exports by Category and by Country

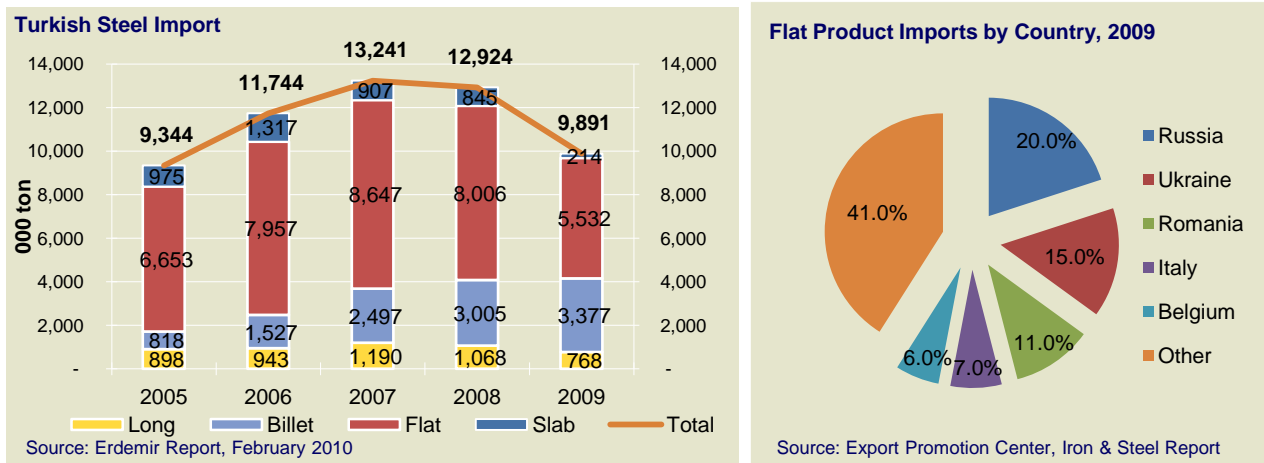


¹⁶ Erdemir Report, February 2010

¹⁷ Export Promotion Center, Iron & Steel Report, 2010



Figure 12– Domestic Steel Imports by Category and by Country



In 2009, together with the global economic crisis, the decreasing demand both globally and domestically has affected exports and imports. Turkish steel exports have declined by 5 percent and imports by 23 percent. However, according to BMI forecasts, steel imports are expected to increase by a CAGR of 14 percent between 2010 and 2014 reaching 17.6 million tons. Steel exports are also expected to increase by a CAGR of 16 percent between 2010-2014 reaching 31.8 million tons.¹⁸

Aluminium

The Turkish aluminium sector's roots go back to 1950s but the industry veritably took off with the establishment of the only primary aluminium producer, Eti Alüminyum A.Ş., in 1974. It has a production capacity of 65 thousand tons/year.¹⁹ The facility produces aluminium by processing bauxite reserves in the region.

The majority of the demand for aluminium products comes from the construction, packaging and transportation sectors. Construction accounts for 54 percent of the demand for extruded products, packaging forms 52 percent of demand for flat products and transportation forms 75 percent of demand for castings.²⁰

Asas Alüminyum and Saray Dokum are the main extruded product producers which are listed in the 2009 top 500 companies list of Istanbul Chamber of Industry. Assan Alüminyum and Teknik Alüminyum are the main flat aluminium producers. Assan Alüminyum's production capacity is 125 thousand tons for aluminium rolled plates and 50 thousand tons for aluminium foils.²¹ Teknik Alüminyum's production capacity is 125 thousand tons per year.²²

Turkey produced a total of approximately 676 thousand tons of aluminium products in 2009; extrusion, flat products and secondary aluminium constituting the major part.²³

¹⁸ BMI, Turkey Metals Report, December 2009

¹⁹ Eti Alüminyum website, <http://www.etialuminyum.com/>

²⁰ Central Anatolian Exporter Unions, Aluminium Report, May 2008

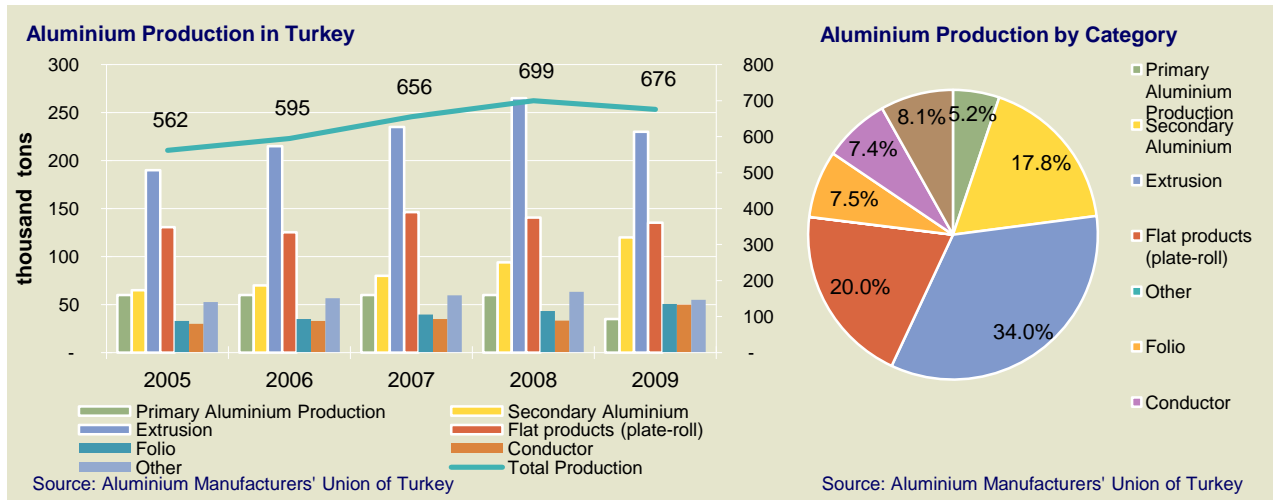
²¹ Assan Alüminyum website, <http://www.assan.com.tr/>

²² Teknik Alüminyum website, <http://www.teknikaluminyum.com.tr/>

²³ Aluminium Manufacturers' Union of Turkey (TALSAD)

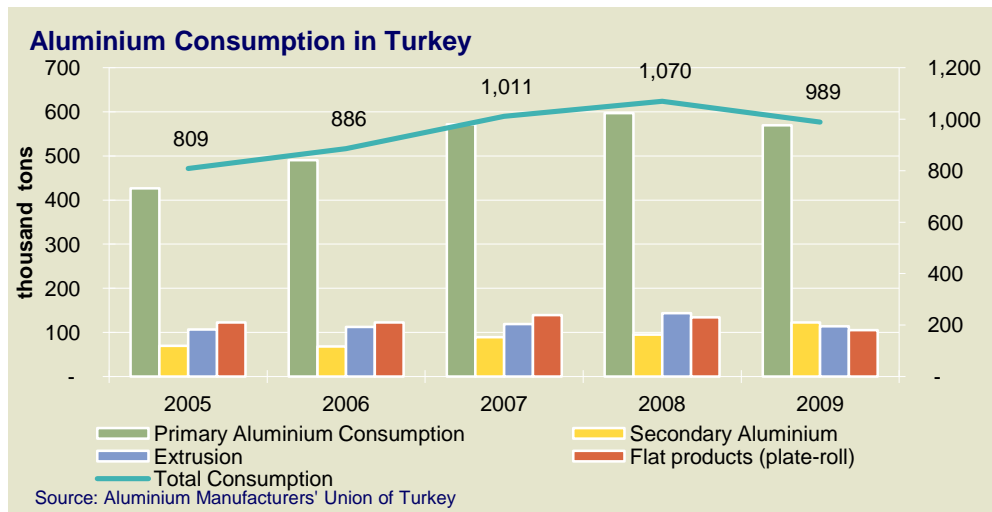


Figure 13– Aluminium Production



Total aluminium consumption increased to 989 thousand tons in 2009 with a CAGR of 5.2 percent between 2005 and 2009, 570 thousand tons being primary aluminium. On the other hand, primary aluminium production decreased to a level as low as 35 thousand tons in 2009.²⁴

Figure 14- Turkey Aluminium Consumption



Turkey is largely import dependent due to the lack of domestic supply. Both imports and exports have increased until 2009, when the sector was hit by the global economic crisis. 81.4 percent of the total imports were primary aluminium whereas the main items exported included extrusions and flat products.²⁴

²⁴ Aluminium Manufacturers' Union of Turkey (TALSAD)



Figure 15– Aluminium Imports of Turkey by Product Type

Aluminium Imports					
000 ton	2005	2006	2007	2008	2009
Primary Aluminium	393.5	459.7	572.1	598.4	567.8
Secondary Aluminium	17.0	12.1	21.2	16.9	14.2
Extrusion	4.5	6.2	8.3	8.3	5.3
Flat products (plate-roll)	57.6	68.3	81.3	82.4	60.8
Folio	21.8	23.8	27.0	25.2	19.3
Conductor	8.8	6.7	9.3	17.5	15.5
Other	13.1	13.9	16.5	20.2	14.8
Total	516.2	590.7	735.8	768.8	697.7

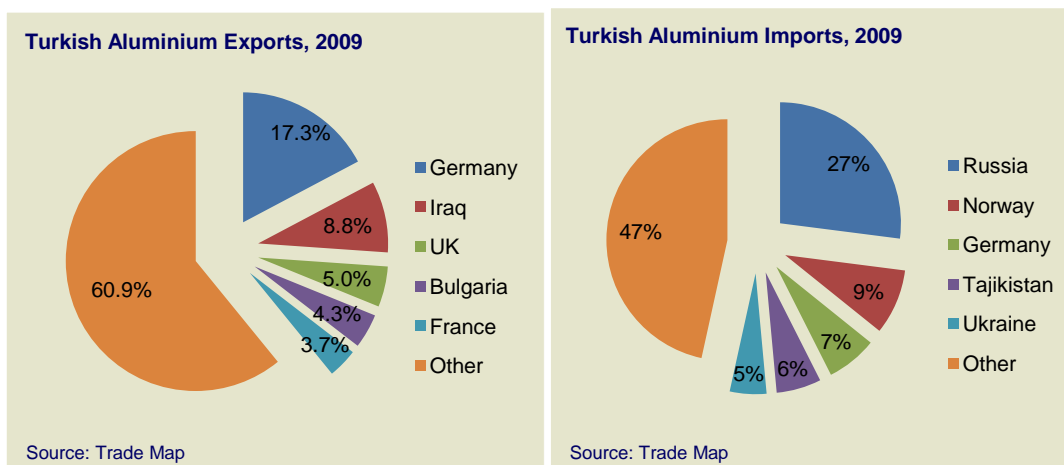
Source: Aluminium Manufacturers' Union of Turkey

Figure 16– Aluminium Exports of Turkey By Product Type

Aluminium Exports					
000 ton	2005	2006	2007	2008	2009
Primary Aluminium	27.2	28.9	60.6	60.9	33.2
Secondary Aluminium	12.6	14.3	12.5	16.2	11.7
Extrusion	88.0	108.6	124.7	129.9	121.2
Flat products (plate-roll)	66.1	71.4	88.6	89.2	90.7
Folio	21.7	24.3	25.2	29.5	37.2
Conductor	11.8	4.3	10.2	9.3	20.2
Other	42.0	48.0	58.9	63.4	70.6
Total	269.2	299.8	380.6	398.3	384.8

Source: Aluminium Manufacturers' Union of Turkey

Figure 17– Aluminium Exports & Imports by Country



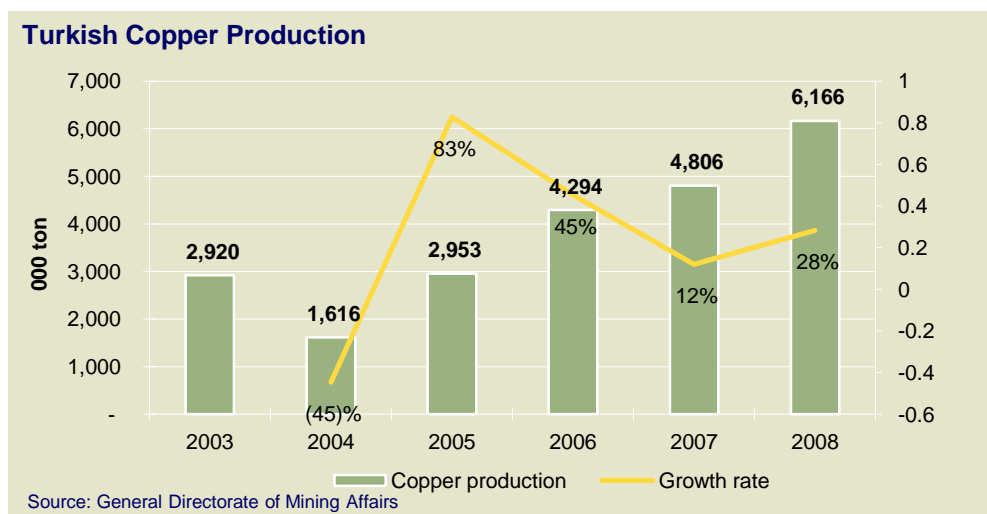
The top 5 trading counterparties for aluminium exports and imports in 2009 are presented in the charts above. Aluminium is mainly imported from Russia, Norway and Germany whereas products are mainly exported to Germany, Iraq and the UK.

Copper

The Turkish copper industry constitutes a significant part of Turkey's total metal production. Turkey's copper production was 6 million tons in 2008. Although the production of copper has been increasing each year since 2004, Turkish copper import levels remained high due to the lack of sufficient reserves. Copper is imported mainly from Kazakhstan, Russia and Bulgaria. This data indicates that Turkey is still dependent on foreign countries in addressing its copper demand. In relation to high imports, Turkey's copper exports are also low when compared to the country's exports in the steel industry.



Figure 18– Turkish Copper Production



The organizations that have taken a role in the extraction and processing of copper are both government institutes and private sector organizations. These corporations include Eti Bakir A.S, Karadeniz Bakir Isletmeleri A.S. and Cayeli Bakir Isletmeleri A.S.. Copper is largely used in the construction industry, electronics industry, household goods manufacturing industry and also in the biomedical sector, among others. The most common form of products manufactured from the metal are wire rods, cathodes, copper wires, bars and profiles.

Karadeniz Bakir Isletmeleri and Eti Bakir are the only producers of blister copper (containing 98.5-99 percent copper) in Turkey, but due to the global economic crisis in late 2008, which caused a serious decline in demand and copper prices, blister production stopped in 2009. Cathode production also declined considerably due to the crisis.²⁵

Figure 19– Turkish Copper Production

000 ton	2007	2008	2009
Blister	36	40	-
Cathode	99	88	33

Source: Eti Bakir

Figure 20– Cathode Imports of Turkey

000 ton	2007	2008	2009
Cathode	268	272	291

Source: Eti Bakir

Kazakhstan is the major copper supplier of Turkey with a 24 percent share in total imports in 2009, followed by Russia, Bulgaria and Uzbekistan. The main destinations for Turkish copper exports are; Italy, Bulgaria, the US, China and Israel.²⁶

²⁵ Eti Bakir

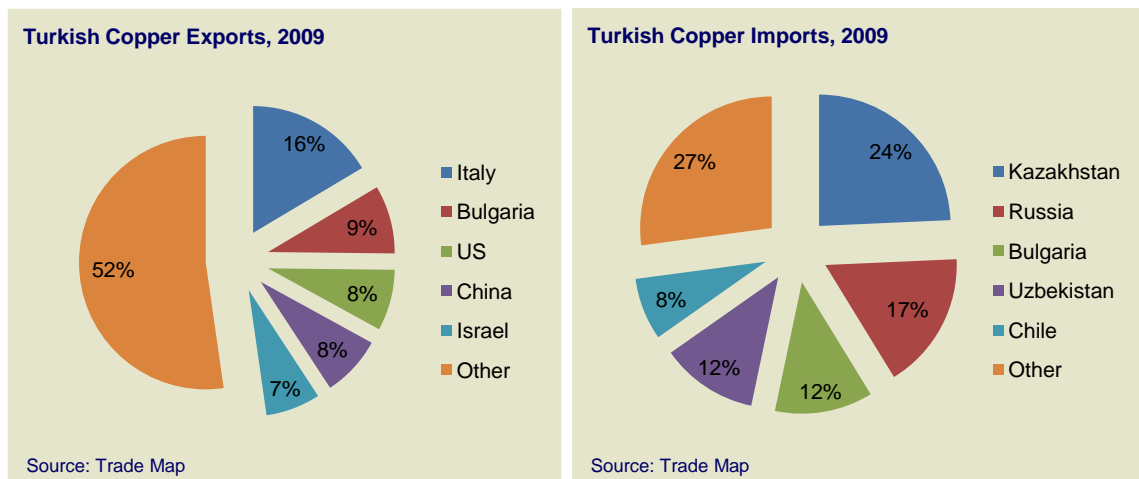
²⁶ Trade Map



Figure 21– Turkish Copper Industry – Export & Import



Figure 22– Copper Exports & Imports by Country



Metal Forging & Casting

The forging and casting industry is highly correlated with the automotive industry’s demands. Additional demand comes from the construction, petro-chemicals, machinery and white goods industries. The Turkish metal casting industry included 952 facilities and 25,000 employees as of 2009.²⁷

Forging is a manufacturing process where metal is pressed, pounded or squeezed under great pressure. Forging requires higher technical knowledge and has a bigger added value compared to casting. Some of the main players in the Turkish forging industry are as follows;

²⁷ Turkish Foundrymen’s Association



Figure 23– Main Players in Turkish Forging Industry

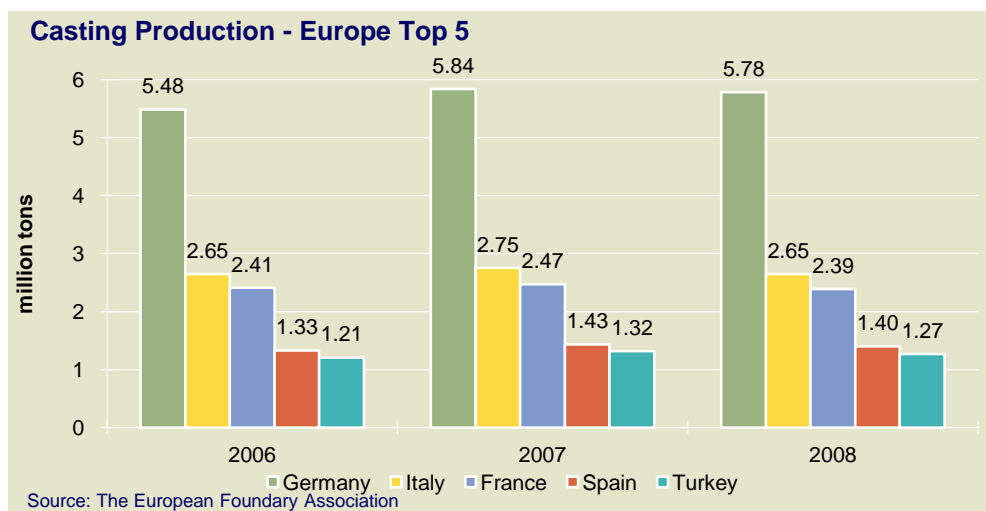
Main Players in Turkish Forging Industry	
Company	Capacity (tons/year)
Parsan	24,000
Kanca El Aletleri	20,000
Çimsataş	20,000
Omtaş	15,000

Source: Deloitte

The casting industry deals with pouring the metal into casts to give them a definite and permanent shape. The global casting industry reached 100 million tons of production in 2007 but then declined to 93 million tons in 2008, due to the economic crisis and the shrinkage in construction and automotive industries.²⁸

Turkey ranks 14th in the world and 5th in Europe in regards of casting production, and has 1.4 percent market share in total global production. Turkey reached 1.3 million tons of production in 2007, but then declined to 1 million tons in 2009.²⁸

Figure 24 – Metal Casting Production – Europe Top 5



The Turkish casting industry was also hit by the global economic crisis in 2009 and production ceased in nearly 150 casting factories and workshops which left 952 facilities operating in the casting industry at the end of 2009. Total production decreased from 1.2 million tons to 1 million tons. Iron is the main metal produced by metal casting and constituted 79 percent of total production in 2009.²⁸

Figure 25– Turkish Metal Casting Production

Turkish Casting Industry				
000 ton	2006	2007	2008	2009
Iron	961	1,024	970	810
Steel Casting	132	144	140	98
Non-Iron	117	149	155	122
Total Production	1,210	1,317	1,265	1,030
# of employees ('000)	34	35	29	25
# of facilities	1,306	1,226	1,150	952

Source: Turkish Foundrymen's Association

²⁸ Turkish Foundrymen's Association



The most important players in the casting industry are as follows:

Figure 26– Main Players in Turkish Casting Industry

Main Players in Turkish Casting Industry	
Company	2009 Production Based Sales (TRY million)
CMS Jant	242
Componenta Dokumculuk Ticaret ve Sanayi A.S.	229
Samsun Makine	138
DEMISAS Dokum Emaye Mamulleri San. A.S.	113
Hayes Lemmerz İnci	112
Cevher Dokum San. A.S.	108

Source: ISO 500 list

Exports in the Turkish metal casting and forging industry reached USD 4.7 billion in 2008, showing an increase of 11 percent compared to 2007. Automotive industry products have the biggest share in exported goods constituting 63 percent of the total exports in 2008, followed by the machinery industry constituting 24 percent.²⁹

The main importer of Turkish metal castings and forgings is Germany, constituting 31 percent of the total, followed by Italy and France.²⁸

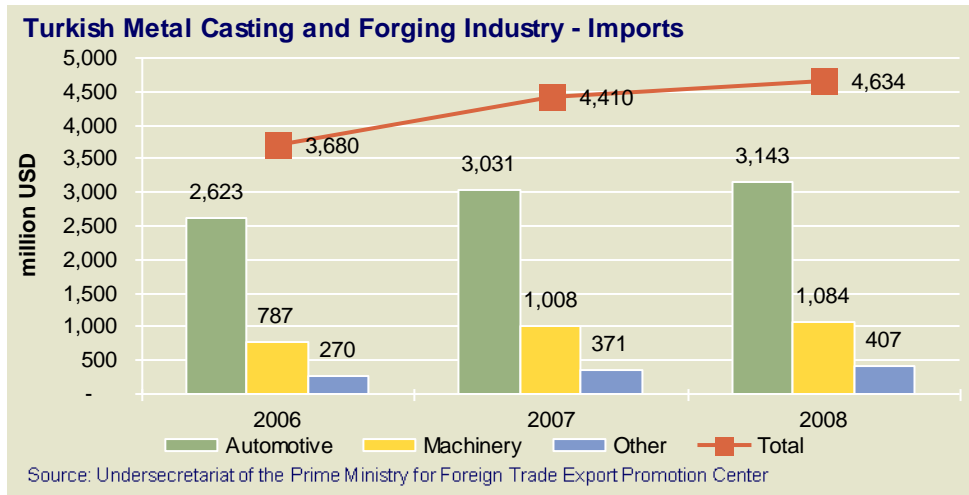
Figure 27– Turkish Metal Casting and Forging Industry – Exports



Imports in the industry are close to the exports, amounting to USD 4.6 billion in 2008. Again the automotive industry is the main industry forming 68 percent of total imports in 2008.

²⁹ Export Promotion Center

Figure 28– Turkish Metal Casting and Forging Industry – Imports



2.2.2 Key Players

Top 20 firms operating in the metal industry which were included in the Istanbul Chamber of Industry (ISO) 500 list in 2009 are presented below.

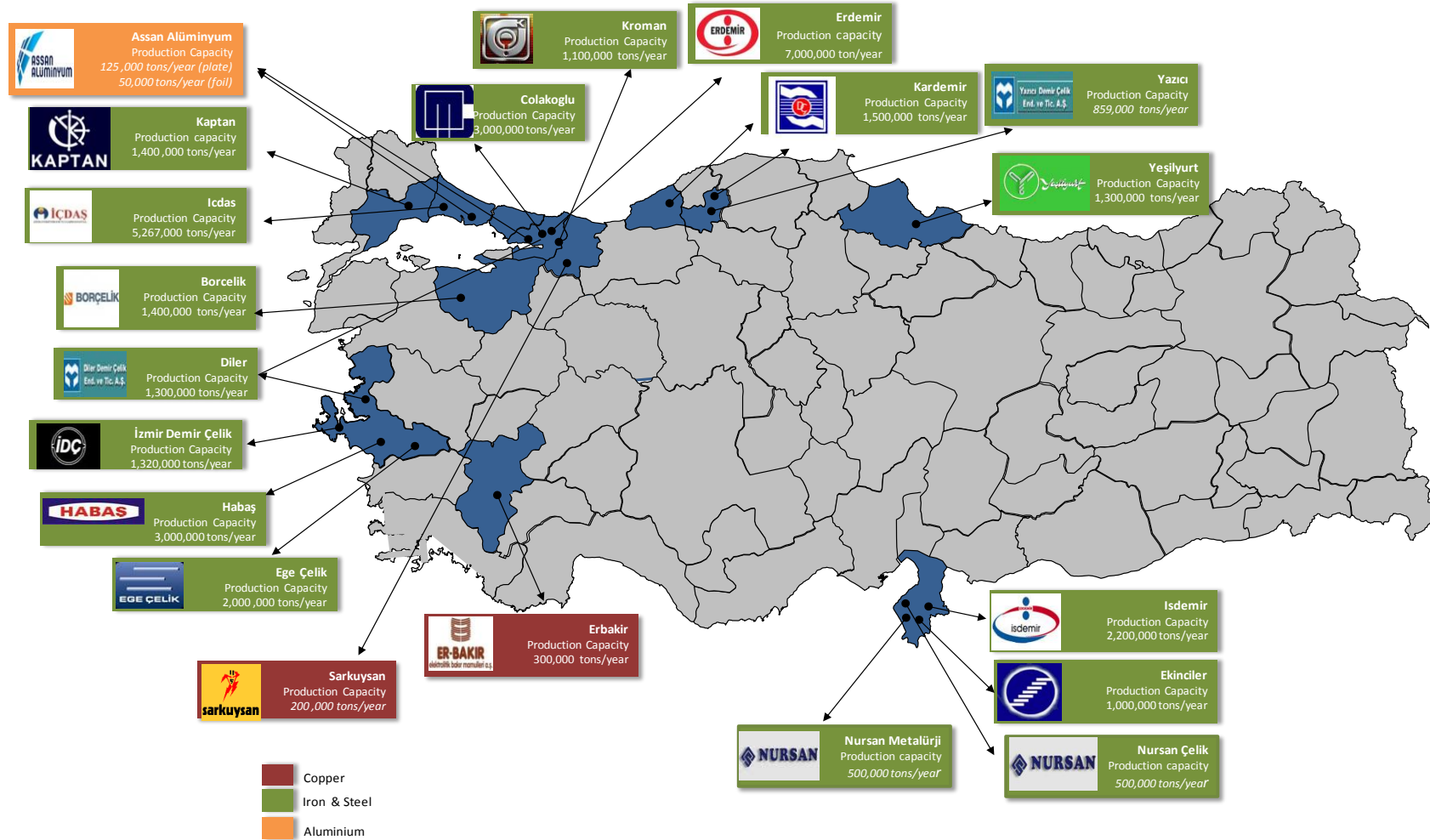
Figure 29– Main Players In Turkish Metal Industry

Main Players In Turkey's Metal Industry					
ISO 500 Ranking 2009	Company	Subsector	Production Based Sales, TRY mn (2009)	# of Employees	Year Established
7	Ereğli Demir Çelik	Iron&Steel	3,576	13,033	1960
10	Habas Sinai ve Tibbi Gazlar Istihsal Endustrisi A.S.	Crude Steel	2,520	1,425	1964
11	İçdaş Çelik Enerji Tersane ve Ulaşım San. A.S.	Iron&Steel	2,450	3,200	1880
12	İskenderun Demir ve Çelik A.S.	Iron&Steel	2,362	na	1975
20	Çolakoğlu Metalurji A.S.	Steel	1,547	985	1945
23	Kroman Çelik Sanayii A.S.	Steel	1,352	937	1985
28	Borçelik Çelik Sanayii Ticaret A.S.	Steel	1,138	850	1990
29	Sarkuysan Elektrolitik Bakır San. ve Tic. A.S.	Copper	1,029	na	1972
35	Diler Demir Çelik Endüstri ve Tic. A.S.	Iron&Steel	903	500	1978
38	Er-Bakır Elektrolitik Bakır Mamülleri A.S.	Copper	870	475	1981
41	Kaptan Demir Çelik Endüstrisi ve Ticaret A.S.	Iron&Steel	824	750	1983
46	Kardemir Karabük Demir Çelik	Steel	774	3,118	1939
50	İzmir Demir Çelik	Iron&Steel	721	1,051	1975
59	Yazıcı Demir Çelik Sanayi ve Turizm Ticaret A.S.	Iron&Steel	678	1,500	1949
63	Assan Alüminyum Sanayi ve Tic. A.S.	Aluminium	627	900	1987
70	Nursan Çelik Sanayi ve Haddecilik A.S.	Steel	611	392	1983
75	Nursan Metalürji Endüstrisi A.S.	Steel	578	635	2005
77	Ekinciler Demir ve Çelik San. A.S.	Steel	559	1,100	1983
128	Ege Çelik Endüstrisi San. Ve Tic. A.S.	Steel	377	843	2001
133	Yeşilyurt Demir Çelik End. Ve Liman İşl.	Iron&Steel	366	320	2001

Source: ISO 500 list, Capital IQ, DÇÜD



2.3 Positioning Map





2.4 Sector Outlook

The outlook for the Turkish metals industry is correlated with the country's economic performance in general, because the metal industry depends on demand from a wide range of key industries. According to the Turkey Forecast Report published by EIU in January 2010, the Turkish economy is expected to grow on average 5 percent per year for the next five years. As the country recovers from the negative effects of the global crisis, it will continue in the upcoming years to rapidly expand its industrialization. An increase in the production of housing, automobiles and other products is expected. Consequently, Turkey's metal industry should benefit from this expansion significantly and demonstrate an increase in demand as well as production.

According to a BMI forecast for the Turkish metal industry, steel consumption is expected to increase with a CAGR of c.7 percent for both crude steel and finished steel between 2010 and 2014. Furthermore, production growth is also expected in line with the consumption forecast, with a CAGR of c. 7.5 percent.³⁰

Parallel to the upward trend in consumption and production, the steel industry is expected to increase its exports and imports as well. Exports and imports are expected to increase with a CAGR of c.23 percent and 20 percent respectively. Turkey is expected to continue exporting more metals and metal products (especially steel) than it will import. The country's exports are expected to reach approximately 31 million tons of steel by 2014.³¹

Figure 30 – Turkish Steel Industry, 2010-2014f

Turkey's Steel Industry 2010-2014					
	2010f	2011f	2012f	2013f	2014f
Consumption					
Apparent crude steel use (000 tons)	32,330	34,581	36,920	39,619	42,620
Apparent finished steel use (000 tons)	25,530	27,429	29,402	31,679	34,210
Production					
Production ('000 tons)	29,447	31,640	34,116	36,635	39,130
Production (USDmn)	22,575	24,693	26,626	28,591	30,539
Exports					
Exports ('000 tons)	17,624	21,228	24,720	28,256	31,804
Exports (USDmn)	13,202	16,998	20,737	24,422	28,296
Imports					
Imports ('000 tons)	10,453	12,837	14,489	16,146	17,666
Imports (USDmn)	8,864	11,636	13,759	15,797	17,792

Source: BMI

³⁰ BMI

³¹ Turkish Iron & Steel Producer's Association



2.5 SWOT Analysis

Strengths

- Turkey is now an important steel manufacturing nation, ranking 3rd in production in Europe after Germany and Italy.
- Turkey offers high employment opportunities in the sector, currently 114,500 employees, and has a large skilled labour pool.

Weaknesses

- Imbalance between flat and long products. There is a deficit in flat steel and special steel production capacity in contrast to the excess capacity in long steel production.
- Imbalanced structure of the production facilities, where electric-arc furnaces (“mini-mills”) form 68 percent of the total production capacity, leading to a high requirement for scrap imports.

Opportunities

- Increase in demand for housing, automobiles and other products such as white goods leads to growth in the demand for iron and steel production.
- With the National Restructuring Plan (UYYP), the industry is expected to benefit from Government incentives for investments in flat products and modernization. Furthermore, investments in flat products in the recent years are expected to compensate the supply deficit of flat products.

Threats

- High energy costs which negatively affect production costs.
- Volatile and often increasing raw material costs (scrap steel, iron ore and coal). Growth in China tends to pull raw material prices higher.
- Competition arising from lower-quality, lower priced semi finished goods imported from the CIS.



2.6 Investment Opportunities

Major M&A transactions in Turkey since 2005 are presented in the list below:

Figure 31– M&A Transactions in Turkey, 2005-09

#	Acquirer	Origin	Target	Target subsector	Date	Stake %	Deal Value (USD m)
1	Zeman International	Austria	Alfa Çelik	iron & steel	1.7.2009	80.0%	na
2	Aldridge Minerals Inc	Canada	Valhalla Resources Limited	mineral oil exploration	12.19.2008	100.0%	9
3	ArcelorMittal	Luxembourg	ArcelorMittal Istanbul Stainless Service Turkey (formerly Uginox)	coil processing	7.14.2008	35.0%	na
4	SK Networks	Korea	Daiyang Metal Sanayi	iron & steel	3.31.2008	30.0%	38
5	Ada Metal	Turkey	Demrad Döküm	iron & steel	3.10.2008	100.0%	24
6	AMCOL Minerals Europe Ltd	UK	Bensan Aktifleştirilmiş Bentonit Sanayi ve Ticaret A.S.	white bentonite production	6.1.2007	100.0%	12
7	ArcelorMittal	Luxembourg	Rozak Demir Profil	iron & steel	9.10.2007	51.0%	na
8	Magnitogorsk Iron and Steel Works (MMK)	Russia	Atakaş Metalurji	iron & steel	8.15.2007	50.0%	102
9	Metallink Metal	Turkey	Ferro Döküm	iron & steel	6.11.2007	56.7%	82
10	Oyak	Turkey	Erdemir	iron & steel	11.2.2005	49.3%	2,960

Source: Mergemarket & ISI

2.7 Sector Establishments and Institutions

Figure 32– Metal Sector Establishments and Institutions

Establishment/ Institution	Code	Description	Contact details
General Secretariat of Istanbul Mineral and Metals Exporters' Association	IMMIB	Organised on the basis of materials subject to export, trying to increase exports as it is accepted priority goal for the development of the country. Has 6 Associations in its body: 1) Istanbul Mineral Exporters' Association 2) Istanbul Ferrous and Non-Ferrous Metals Exporters' Association 3) Istanbul Chemicals and Chemical Products Exporters' Association 4) Istanbul Chemicals and Chemical Products Exporters' Association 5) Istanbul Precious Minerals and Jewellery Exporters' Association 6) Istanbul Iron and Steel Exporters' Association	Dis Ticaret Kompleksi A Blok Cobancesme Mevkii Sanayi Cad. 34197 Yenibosna Bahcelievler Istanbul Turkiye Tel: (0212) 454 00 00 Fax: (0216) 454 00 01 Website: www.immib.org.tr
Turkish Exporters Association	TIM	The objective of the Association is providing cooperative achievements of the whole exporter firms.	Dis Ticaret Kompleksi B Blok Cobancesme Mevkii Sanayi Cad. 34197 Yenibosna Bahcelievler Istanbul Turkiye Tel: (0212) 454 04 71/454 04 90 Fax: (0216) 454 04 13/454 04 83 Website: www.tim.org.tr
Turkish Aluminium Manufacturers Association	TALSAD	Organization has 80 members. Represents its members in domestic or foreign exhibitions, organizes studies, seminars to support the sector growth.	Assan Alüminyum Tesisleri, E5 yolu üzeri 32. km, 81700 Tuzla Istanbul Turkiye Tel: (0216) 446 79 61 Fax: (0216) 446 79 62 Website: www.talsad.org.tr
Turkish Iron & Steel Producers Association	DCUD	Organization has 20 members. Main goals are promoting Turkish Iron and Steel Industry to the level of the ones in the developed countries; developing a structure which can keep up with the global developments of all aspects; compiling and disseminating the statistical information concerning the Iron and Steel Industry in Turkey and the world; discussing the problems that the members face; proposing solutions and applying all lawful means to solve those problems.	Cinnah Cad. Alaçam Sok. No:1/24 Cankaya Ankara Turkiye Tel: (0312) 466 37 34 Fax: (0312) 467 22 07 Website: www.dcu.org.tr
Istanbul Copper and Braze Manufacturers Association		Main goals are to protect common interests of copper and braze producers; consolidate loyalty amongst these industrialists, to make development in the sector; meet the requirements of the members.	Istanbul Bakir ve Pirinc Sanayicileri Derneği Sitesi Hurriyet Cad. No:2 34900 Beylikduzu Buyukcekmece Istanbul Turkiye Tel: (0212) 875 10 05 (3 lines) Website: www.bakirpirincdernegi.org.tr



LIST OF FIGURES

Figure 1 – Global Non-Ferrous Metals Market, 2009	4
Figure 2 – Global Non-Ferrous Metals Market Forecast	5
Figure 3 – Global Metal Sector Key Players, 2009	5
Figure 4 – World Crude Steel Production	5
Figure 5 – Top 15 Crude Steel Production by Countries & Top 10 Steel Producers	6
Figure 6 – World Primary Aluminium Production & Producers	6
Figure 7 – World Refined Copper Production and Usage	7
Figure 8 – Turkish Crude Steel Production	8
Figure 9 – Domestic Steel Production and Consumption	8
Figure 10– Crude Steel Producers	9
Figure 11– Domestic Steel Exports by Category and by Country	9
Figure 12– Domestic Steel Imports by Category and by Country	10
Figure 13– Aluminium Production	11
Figure 14- Turkey Aluminium Consumption	11
Figure 15– Aluminium Imports of Turkey by Product Type	12
Figure 16– Aluminium Exports of Turkey By Product Type	12
Figure 17– Aluminium Exports & Imports by Country	12
Figure 18– Turkish Copper Production	13
Figure 19– Turkish Copper Production	13
Figure 20– Cathode Imports of Turkey	13
Figure 21– Turkish Copper Industry – Export & Import	14
Figure 22– Copper Exports & Imports by Country	14
Figure 23– Main Players in Turkish Forging Industry	15
Figure 24 – Metal Casting Production – Europe Top 5	15
Figure 25– Turkish Metal Casting Production	15
Figure 26– Main Players in Turkish Casting Industry	16
Figure 27– Turkish Metal Casting and Forging Industry – Exports	16
Figure 28– Turkish Metal Casting and Forging Industry – Imports	17
Figure 29– Main Players In Turkish Metal Industry	17
Figure 30 – Turkish Steel Industry, 2010-2014f	19
Figure 31– M&A Transactions in Turkey, 2005-09	21
Figure 32– Metal Sector Establishments and Institutions	22

**ABBREVIATIONS**

BMI	Business Monitor International
CAGR	Compound Annual Growth Rate
EIU	Economist Intelligence Unit
ISPAT	Republic of Turkey Prime Ministry Investment Support and Promotion Agency
TPA	Ton per annum
DCUD	Turkish Iron & Steel Producers Association
ICSG	International Copper Study Group
UK	United Kingdom
UAE	United Arab Emirates
USGS	United States Geological Survey
GDP	Gross Domestic Product
TRY	Turkish Lira
USD	US Dollar

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