TURKEY
MACHINE TOOLS SECTOR REPORT

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PREFACE

Machine Tools are "Basic Investment and Production" machines used to produce high value-added technologies in all sectors of manufactured goods and manufacturing industry, especially critical industries such as automotive, defense, aviation and medical. Machine Tools sector has a highly strategic significance for the growth process of countries, and creates a multiplier effect on economic growth by determining the productive skills of the sectors that it provides input for as the fundamental manufacturing machinery. The structure of the sector and its developments are considered to be an important indicator of national economy.

Since 1992, Machine Tools Industrialists and Businessmen Association of Turkey (TIAD) has been working in order to create added value for the country. Additionally, the Association is convinced that making an assessment of current situation of the sector as well as communicating the developments to relevant communities will make a contribution to Turkey's economy. Prepared in order to achieve this specified goal, this report features economic developments of 2014, as well as assessments on Machine Tools Manufacturing Industry and comments by TIAD members.

The primary objective of the report is to present the developments of Machine Tools Industry both in Turkey and the world by figures, and enable respective institutions to conduct a situation assessment of the sector. The statistical data used in the report are given in detail as much as possible, offering easy access to information for the organizations in the sector.

Hoping that the findings of this study will contribute to solving the problems of Turkey and the sector; we would like to take this opportunity to offer our thanks to the contributers of this report; TIAD members, institutions and organizations that have provided access to their studies, RGA Management Consultants, Ltd. and General Secretariat of TIAD.

Hakan AYDOĞDU
TIAD Chairman of the Board

1. DEFINITION AND SCOPE OF THE SECTOR

Industrial products of Machine Tools sector are "Basic Investment and Production" machines used to produce high value-added technologies throughout all sectors of manufacturing industry. Machine Tools sector has a highly strategic significance for the growth process of countries, and thanks to its investments, intermediate goods and services, creates a multiplier effect on economic growth by determining the productive skills of the sectors that it provides input for.

Each product manufactured in the industry is produced by means of either a Machine Tool, or a machine or mould which again has been manufactured by using a Machine Tool. Economies that have a robust Machine Tools sector achieve a notable competitive advantage in a lot of strategically important sectors. In this respect, Machine Tools sector is one of the subsectors that are particularly significant in machine manufacturing industry. The subsector undertakes production for numerous sectors, especially automotive, white goods, iron and steel, metalware, defense and aviation industry, machine manufacturing, agricultural machinery, shipbuilding, coach manufacturing, medical devices etc.

In this study, NACE 2 grouping has been taken as the base for the analysis of economic indicators such as Machine Tools sector production and employment, Turkey's foreign trade and PPI. SITC Rev 3; 73 Machine Tools sector data and Gardner Research's findings have been used in the section regarding global trade of metal working machines and top five countries in Turkey's foreign trade.

NACE codes for Machine Tool Manufacturing are 28.41 and 28.49 in NACE 2 grouping. NACE Rev.2 groups of the sector are given below:

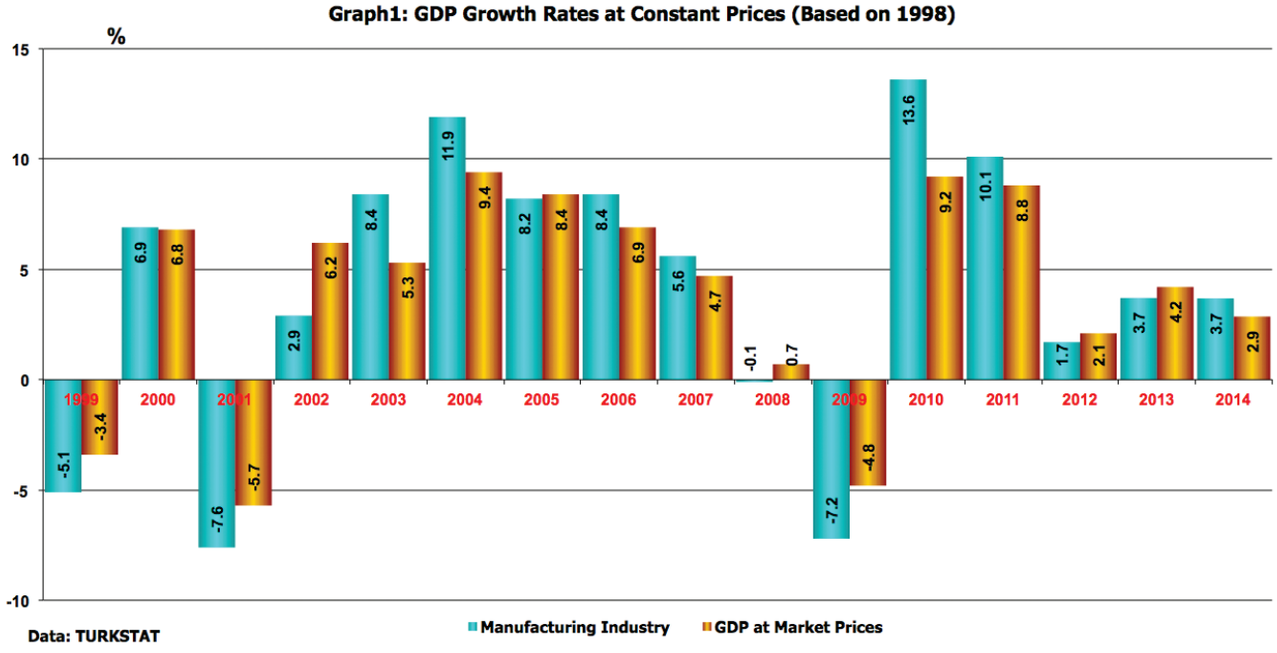
28. Machinery and Equipment Manufacturing
28.41. Metal Working Machine Manufacturing
28.49. Other Machine Tool Manufacturing

Export and import amounts of the sector have been calculated by using the HS Codes in the PRODCOM_2010/GTİP_2010 conversion table of NACE Rev.2. In the graphs, 12-digit HS Codes which are not in the conversion table have not been included in the 4-digit HS Code totals.

2. 2014 ECONOMIC DEVELOPMENTS

In 2010 and 2011, following the economic crisis, Turkey reached considerably high GDP growth rates with 9.2% and 8.8% respectively, and yet due to external dependence in inputs, even these rates led to a larger trade deficit and had an adverse impact on current account deficit. As a result, current account deficit risks rose to substantial levels in an economy that grew through debt and where savings rate ran low. In 2012, amidst a debate on the need for slowing down this rapid growth, Turkey's GDP growth rate fell dramatically to 2.1%. In the same year, manufacturing industry recorded a much faster slowdown in growth rate, which dropped to 1.7%, lower than GPD growth rate. During this period, current account deficit saw an improvement from previous year.

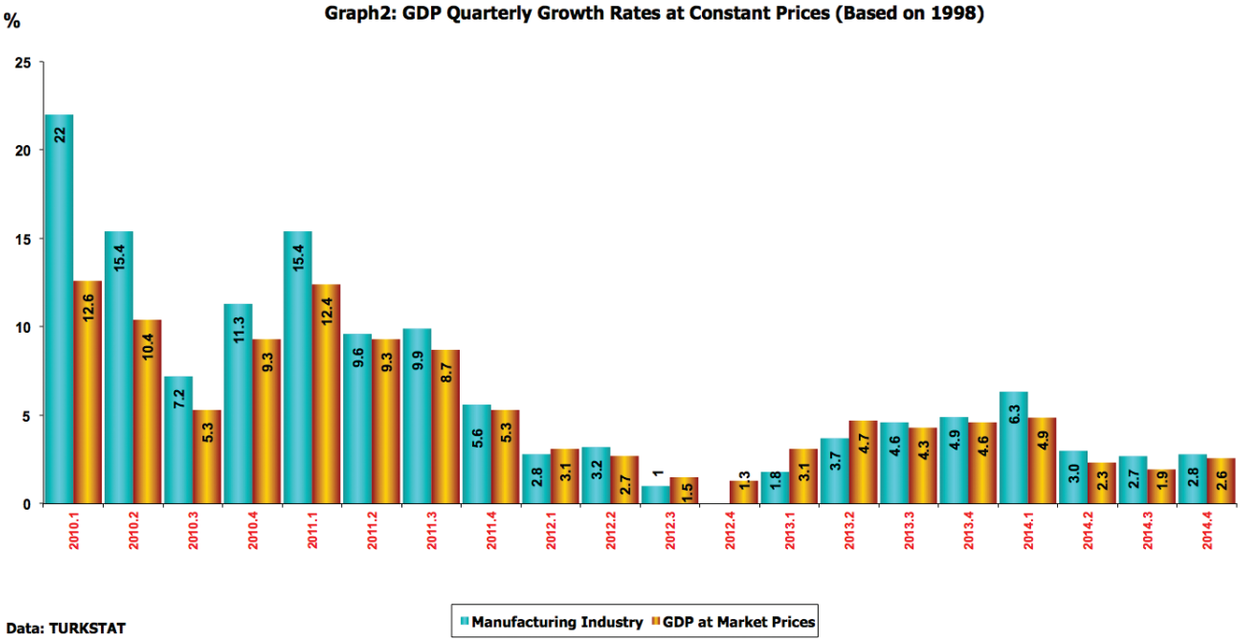
Graph1: GDP Growth Rates at Constant Prices (Based on 1998)



Data: TURKSTAT

In 2013, Fed's (United States Federal Reserve) stance in relation to ending its quantitative easing program and raising interest rates posed a threat for economies with high levels of current account deficit. In economies where growth depends on external resources, the effects of this capital outflow threat emerged more quickly and an upward movement was recorded in foreign exchange rates of these countries. During this period, CBRT (Central Bank of the Republic of Turkey) intervened in currency markets pursuing its inflation targets, while resisting to change in long-term interest rates; and yet afterwards, the Bank hiked the benchmark interest rate. While global markets witnessed significant developments in 2013, Turkey's manufacturing industry grew at a rate of 3.7% with an increase from 2012, although lower than 2013 GDP growth rate which was 4.2%.
Global economy was in recovery in 2014, growing by 3.3% according to IMF data. Rapidly falling oil prices had a limited impact on economic activities. In 2014, US economic growth rate increased to about 2.4%. Fed's tight monetary policy and high interest rates, which came along after this recovery, created significant risks especially for emerging economies with high external source requirements like Turkey. With the impact of quantitative easing policies of Japan, European Union (EU) etc., US Dollar surged significantly in global markets in 2014.

Graph2: GDP Quarterly Growth Rates at Constant Prices (Based on 1998)

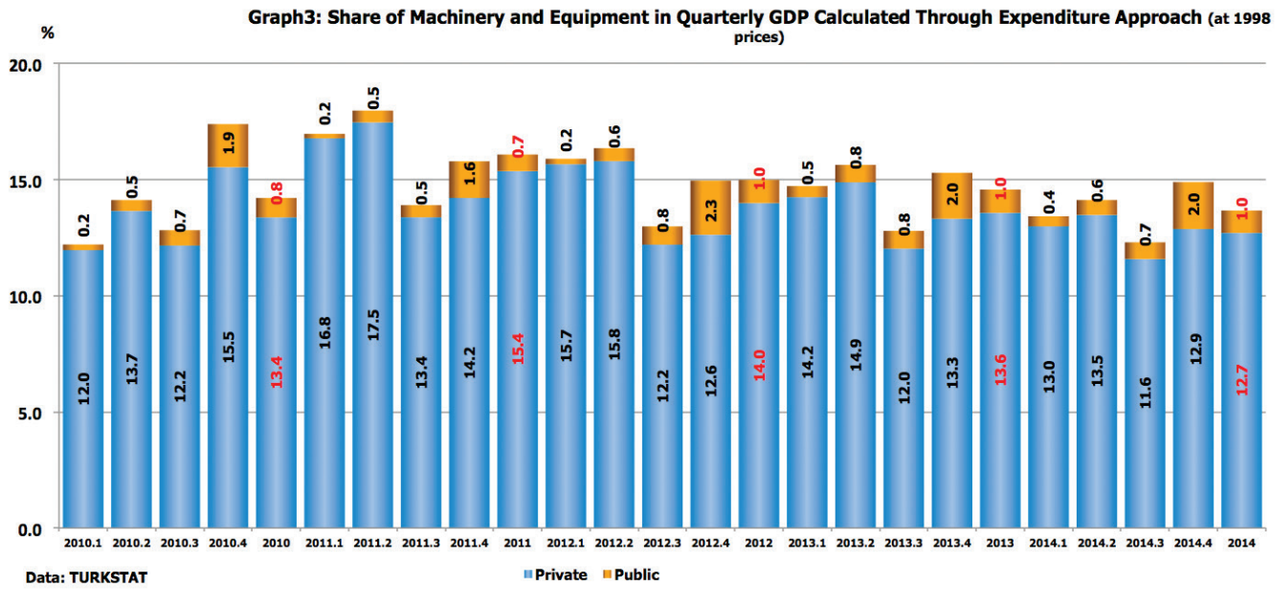


Data: TURKSTAT

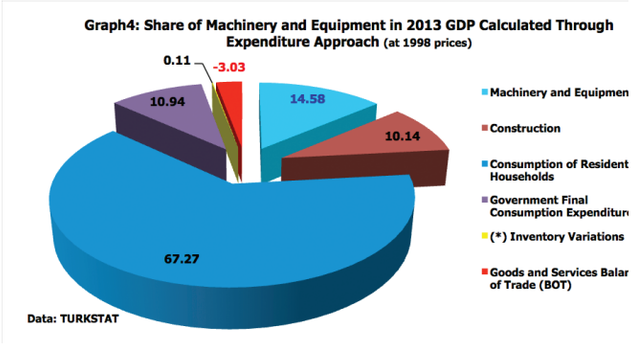
Despite signs of recovery compared to 2013, 2014 was a highly problematic year for Turkey. GDP grew by 4.9% in the first quarter, whereas in the second and third quarters, growth rate dropped dramatically to 2.3% and 1.9% respectively. Manufacturing industry grew by 6.3% in the first quarter, whereas growth of the industry slowed down in the second and third quarters with 3.0% and 2.7% respectively. In the last quarter, GDP growth rate was 2.6%, with little improvement over last quarter, and annual average GDP growth rate for 2014 was 2.9%. Growth rate of the manufacturing industry was 2.8% in the last quarter and 3.7% per annum. In 2014, Turkey's GDP growth rate fell behind world average.

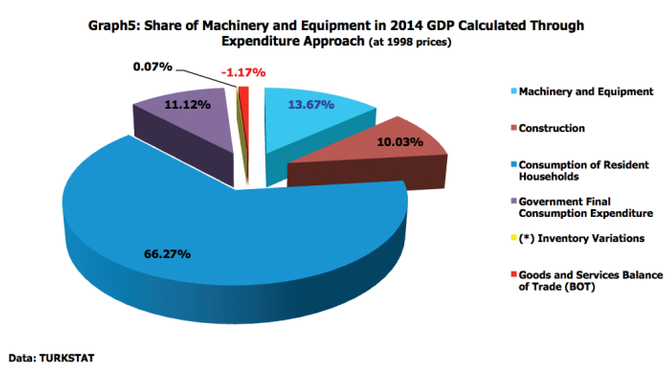
GDP Calculated Through Expenditure Approach

In GDP figures calculated through expenditure approach (1998 prices), it can be seen that the share of Machinery and Equipment, which also includes Machine Tools, reached a five-year high of 18.0% in the second quarter of 2011, and its annual share was 16.1%. Annual GDP growth rate declined to 15.0% in 2012, and 14.6% in 2013.
It may well be seen that in terms of expenditures, the slowdown in GDP affected Machinery and Equipment sector, which also includes Machine Tools. This trend continued in 2014, and share of Machinery and Equipment in 2014 GDP calculated through expenditure approach at 1998 prices dropped to 13.7%. This trend is in parallel with the developments in GDP growth rate. These findings also indicate the recent slowdown trend in public and private sector special machinery and equipment expenditures.



Despite the positive trend in GDP from previous year, the share of machinery and equipment expenditures in GDP decreased in 2014. 17.86 billion TRY of total public and private expenditures at 1998 prices in 2013 dropped by 3.5% to 17.24 billion TRY in 2014.Machinery and Equipment has the second largest share out of GDP calculated through expenditure method at constant prices. Machinery and Equipment (public and private combined) has a larger share in GDP through expenditure method than government final consumption expenditure and construction. In 2013, Machinery and Equipment had a share of 14.58% in GDP through expenditure method.





In 2014, share of Machinery and Equipment in GDP through expenditure method declined to 13.67%. Share of Machinery and Equipment in 2014 GDP at constant prices decreased by about 1% from previous year. This fall in share was due to declining private Machinery and Equipment expenditure.

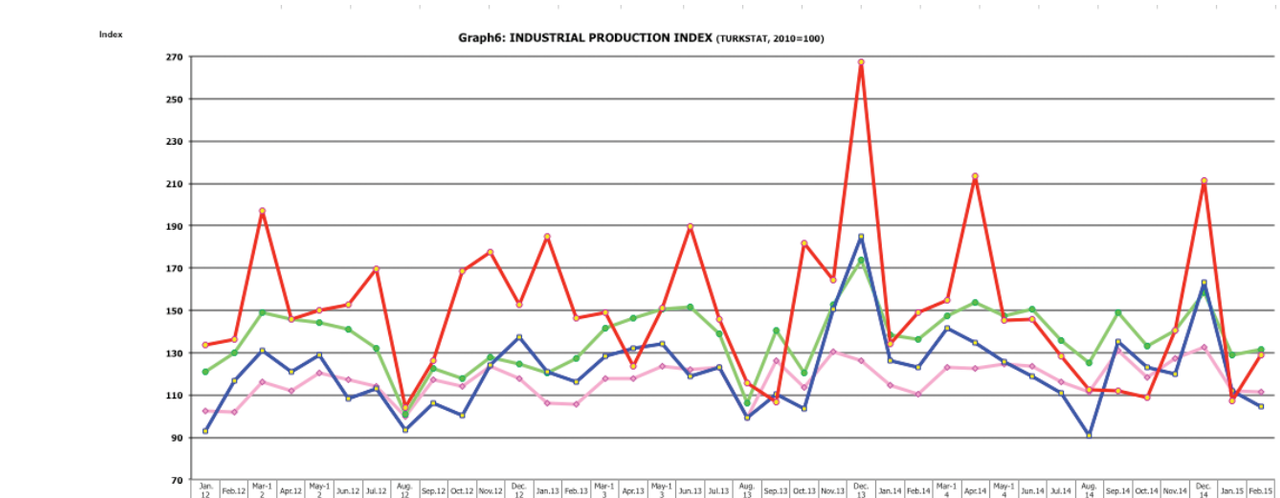
3. SECTOR GROWTH AND BASIC INDICATORS

3.1 Developments in Sector Production

In 2014, Metal Working Machine Manufacturing (28.41) subsector production index was lower than Machinery and Equipment Manufacturing industry's production index only except December. Following a downward trend after April, the index value was lower than manufacturing industry's production index in June, July and August.

The production index value plummeted to a 24-month low of 90.7 in August 2014; yet increased by 49% to 135.1 in September, followed by 122.9 in October and 119.9 in November. In December, the index value upsurged to 161.2. Recently, first months of 2015 have been negative for Metal Working Machine manufacturing with the index falling to 104.5 in February.

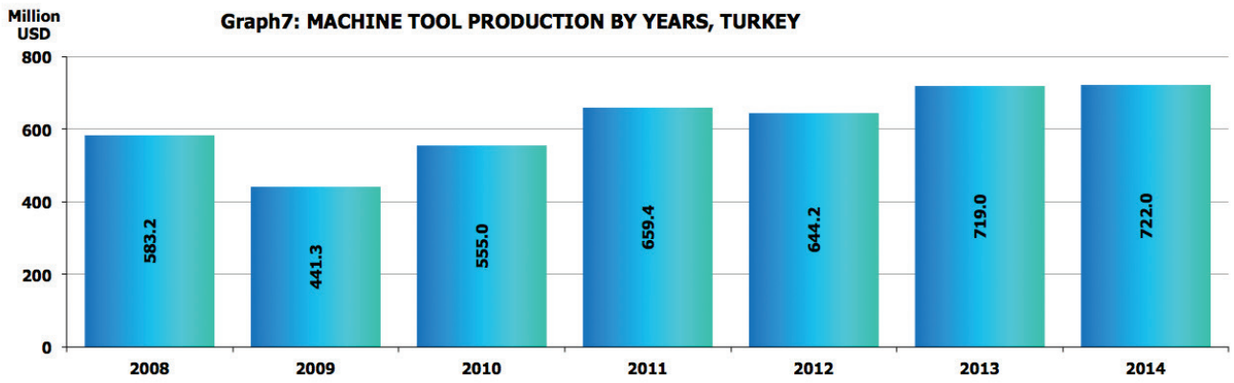
In 2014, Other Machine Tool Manufacturing (28.49) production index was higher than Metal Working Machine Manufacturing production index except September and October, and followed a similar trend. Data show that Metal Working Machine Manufacturing had a worse year compared to Machinery and Equipment Manufacturing industry.



	Jan. 12	Feb.12	Mar-12	Apr.12	May-12	Jun.12	Jul.12	Aug. 12	Sep.12	Oct.12	Nov.12	Dec. 12	Jan.13	Feb.13	Mar-13	Apr.13	May-13	Jun.13	Jul.13	Aug. 13	Sep.13	Oct.13	Nov.13	Dec. 13	Jan.14	Feb.14	Mar-14	Apr.14	May-14	Jun.14	Jul.14	Aug. 14	Sep.14	Oct.14	Nov.14	Dec. 14	Jan.15	Feb.15
C - Manufacturing	102.4	102	116.3	111.8	120.4	117.2	114	100	117	113.9	123.7	117.7	106.1	105.6	117.5	117.5	123.4	121.8	122.9	99.1	126.3	113.3	130.6	126.2	114.4	110.4	123.1	122.7	124.5	123.5	116.1	111.4	131.2	118.4	127.4	132.4	111.7	111.3
28 Machinery and Equipment Manufacturing	120.9	129.8	149.0	145.7	144.4	140.8	132.1	100.6	122.5	118.0	127.6	124.8	120.5	127.1	141.8	146.5	150.4	151.6	139.1	106.2	140.7	120.4	152.5	173.9	138.4	136.5	147.5	153.9	147.5	150.3	135.8	125.1	149.0	133.0	140.6	158.6	128.6	131.6
28.41 Metal Working Machine Manufacturing	93.0	116.6	130.8	120.7	128.6	108.1	113.1	93.2	106.0	100.4	124.2	137.2	120.7	116.2	128.5	131.8	134.0	118.7	123.1	99.8	110.2	103.5	150.7	185.1	126.0	123.2	141.5	134.6	125.7	119.0	110.9	90.7	135.1	122.9	119.9	163.2	111.7	104.5
28.49. Other Machine Tool Manufacturing	133.4	136.4	197.3	145.9	149.9	152.4	169.6	104.2	126.1	168.6	177.5	152.4	184.7	146.3	149.2	123.7	151.1	189.7	145.7	115.8	106.5	181.8	164.2	267.5	133.9	148.9	155	213.2	145.1	146	128.2	112.5	112.2	108.7	140.3	211.3	107	128.6

Data: TURKSTAT

Turkey's Machine Tool production is calculated by adding the balance of trade to consumption/use figures in research studies carried out by Gardner Research. According to these data, Turkey's production/manufacture was about 583.2 million US Dollars in 2008. Production fell to 441.3 million USD in 2009, thereafter increasing gradually to 659.4 million USD in 2011. Following a slight decline, production remained at 644.2 million USD in 2012. In 2013, production took on an upward movement, reaching 719 million USD. According to recent calculations, production increased by 3 million USD to 722 million USD in 2014.



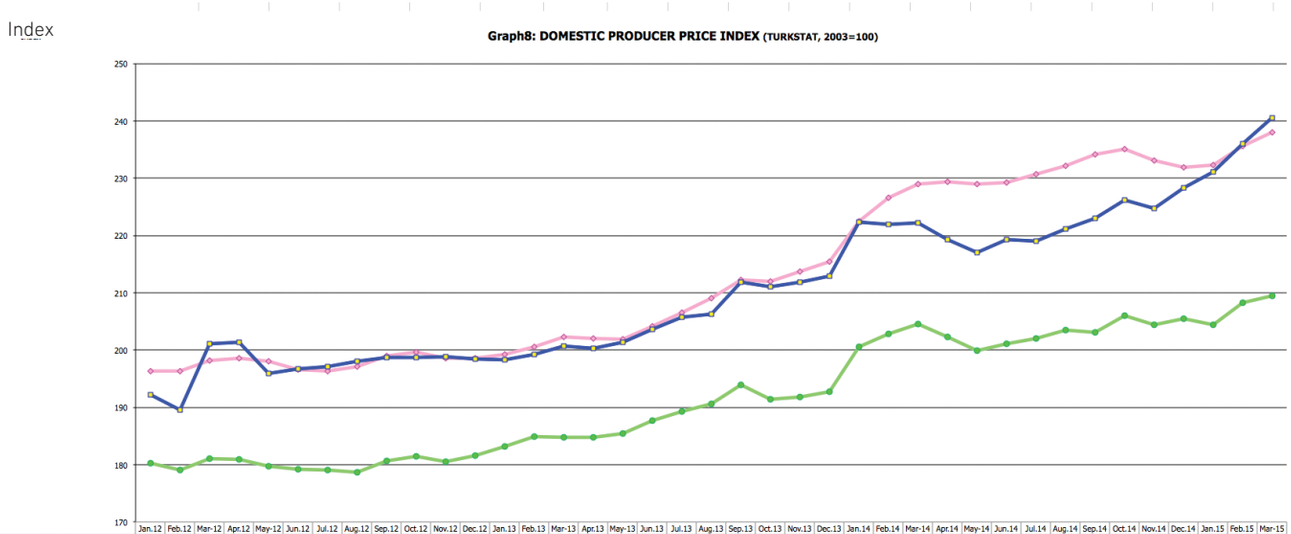
Data: Gardner Research, The World Machine-Tool Output & Consumption Survey

3.2 Developments in Domestic Producer Prices

In 2012 and 2013, Domestic Producer Price Index (D-PPI) figures of Metal Working Machine Manufacturing (28.4) and Manufacturing Industry were on similar levels. However, this trend changed in 2014, and D-PPI of Metal Working Machine Manufacturing fell quite below Manufacturing Industry index.

D-PPI value of Metal Working Machine Manufacturing sector, which was 222.3 in January 2014, was on the decline for a few months. After May, the index began to rise and reached 228.3 in December. These figures show that the sector failed to reflect the price increases of the inputs provided from manufacturing industry on 2014 domestic prices. January 2015 index value indicated an upward movement in D-PPI, getting very close to Manufacturing Industry's D-PPI with 231.1. In February and March 2015, this upward trend gained speed thanks to the increase in exchange rates, and the index reached 240.6 in March.

Graph8: DOMESTIC PRODUCER PRICE INDEX (TURKSTAT, 2003=100)



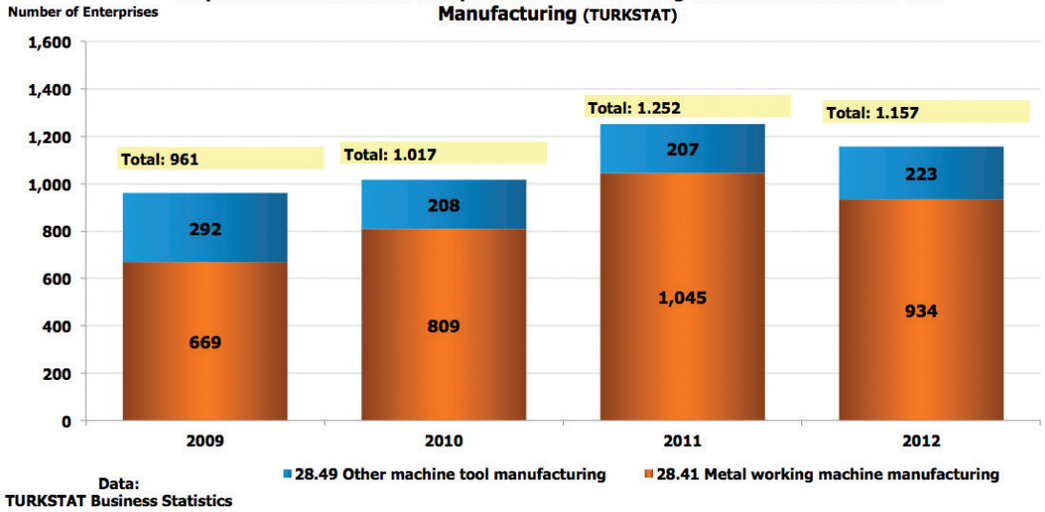
	Jan.12	Feb.12	Mar-12	Apr.12	May-12	Jun.12	Jul.12	Aug.12	Sep.12	Oct.12	Nov.12	Dec.12	Jan.13	Feb.13	Mar-13	Apr.13	May-13	Jun.13	Jul.13	Aug.13	Sep.13	Oct.13	Nov.13	Dec.13	Jan.14	Feb.14	Mar-14	Apr.14	May-14	Jun.14	Jul.14	Aug.14	Sep.14	Oct.14	Nov.14	Dec.14	Jan.15	Feb.15	Mar-15
C - Manufacturing	196.4	196.4	198.2	198.6	198.1	196.6	196.4	197.1	199.0	199.7	198.6	198.6	199.2	200.5	202.3	202.1	202.0	204.1	206.5	209.1	212.2	212.1	213.7	215.4	222.5	226.6	229.0	229.4	228.9	229.2	230.8	232.1	234.2	235.0	233.1	231.9	232.3	235.7	238.0
28. Machinery and Equipment Manufacturing	180.3	179.1	181.1	181.0	179.8	179.2	179.1	178.7	180.6	181.5	180.5	181.6	183.2	185.0	184.7	184.8	185.4	187.7	189.4	190.6	193.9	191.5	191.8	192.8	200.6	202.8	204.5	202.3	199.9	201.2	202.0	203.4	203.1	206.1	204.5	205.5	204.5	208.3	209.4
28.4. Metal Working Machine Manufacturing	192.2	189.6	201.1	201.4	195.9	196.8	197.2	198.1	198.8	198.7	198.9	198.5	198.3	199.2	200.8	200.3	201.3	203.6	205.8	206.3	211.9	211.1	211.9	213.0	222.3	221.9	222.2	219.3	217.1	219.3	219.0	221.1	223.0	226.2	224.7	228.3	231.1	236.1	240.6

Data: TURKSTAT

3.3 Number of Workplaces

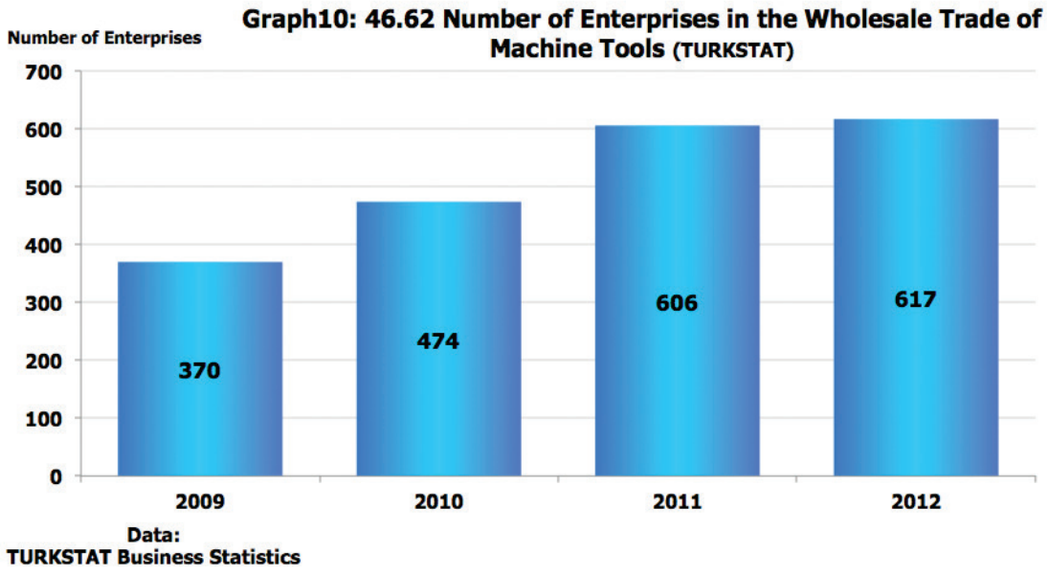
According to TURKSTAT (Turkish Statistical Institute) Business Statistics, total number of enterprises in Metal Working Machine and Other Machine Tool Manufacturing sectors increased from 961 in 2009 to 1,252 in 2011. Nevertheless, this number dropped to 1,157 in 2012. The reason behind the decline in total number of enterprises was actually the decline in the number of enterprises in Metal Working Machines subsector.

Graph9: 28.4 Number of Enterprises in Metal Working Machine and Machine Tool Manufacturing (TURKSTAT)



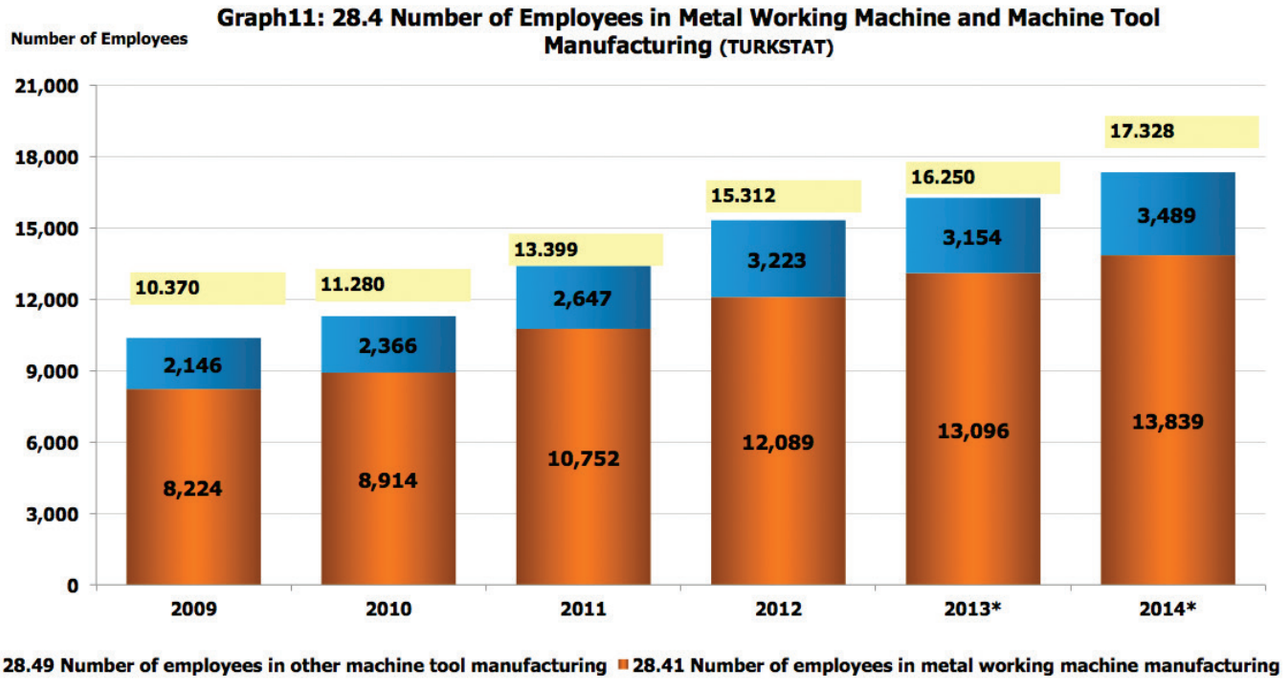
Data:
TURKSTAT Business Statistics

The number of enterprises in the wholesale trade of Machine Tools increased from 370 in 2009 to 617 in 2012. Therefore, the number of enterprises engaged in wholesale trade almost doubled. According to TURKSTAT Business Statistics, there were 1,774 enterprises actively engaged in the manufacturing and wholesale trade sector in 2012.



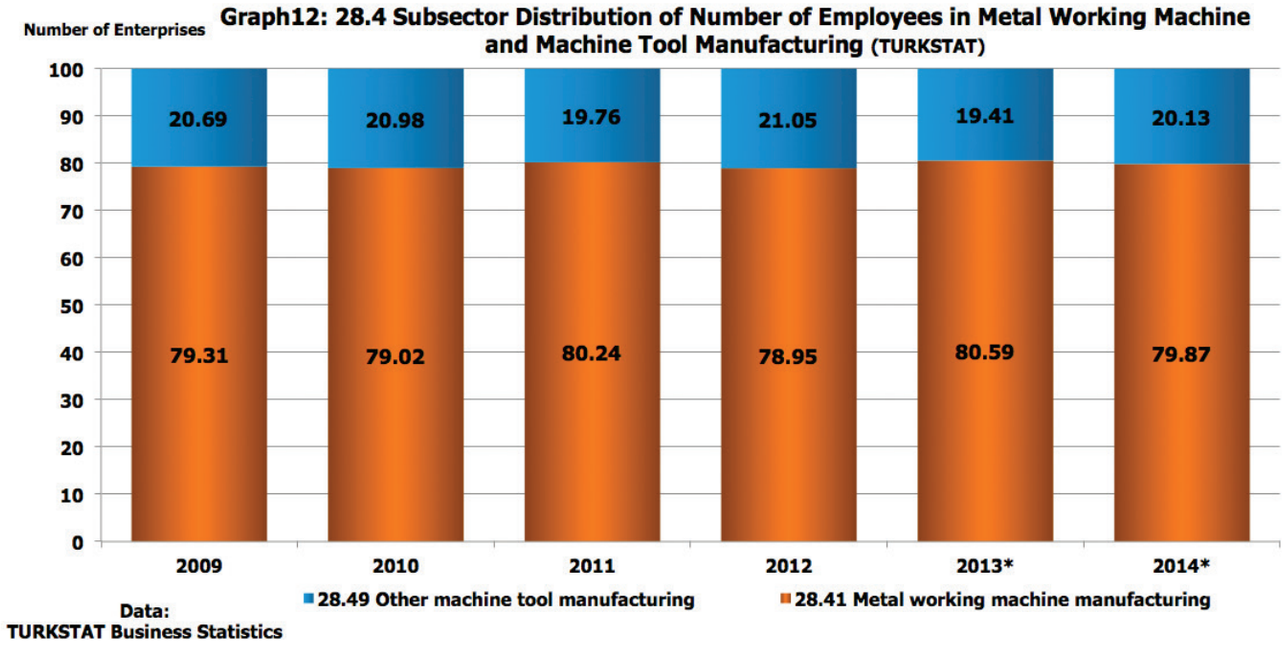
3.4 Employment and Developments in Employment

According to TURKSTAT Business Statistics, the number of people employed in Metal Working Machine Manufacturing and Other Machine Tool Manufacturing sectors increased from 10,370 in 2009 to 15,312 in 2012. During this period, employment in Other Machine Tool Manufacturing and Metal Working Machine Manufacturing increased by 50% and 47% respectively.
The most recent figures of TURKSTAT Business Statistics belong to 2012, which were published in 2014. The 2013-2014 projection based on the employment index of the sector shows that the number of people employed in the sector reached 17,328 in 2014.



Data: TURKSTAT Business Statistics, *Calculated using TURKSTAT 2013 and 2014 Employment Statistics for the sector.

In 2012, share of Metal Working Machine manufacturing subsector in total employment was 79%, whereas Other Machine Tool manufacturing took a share of 21%.



Graph12: 28.4 Subsector Distribution of Number of Employees in Metal Working Machine and Machine Tool Manufacturing (TURKSTAT)

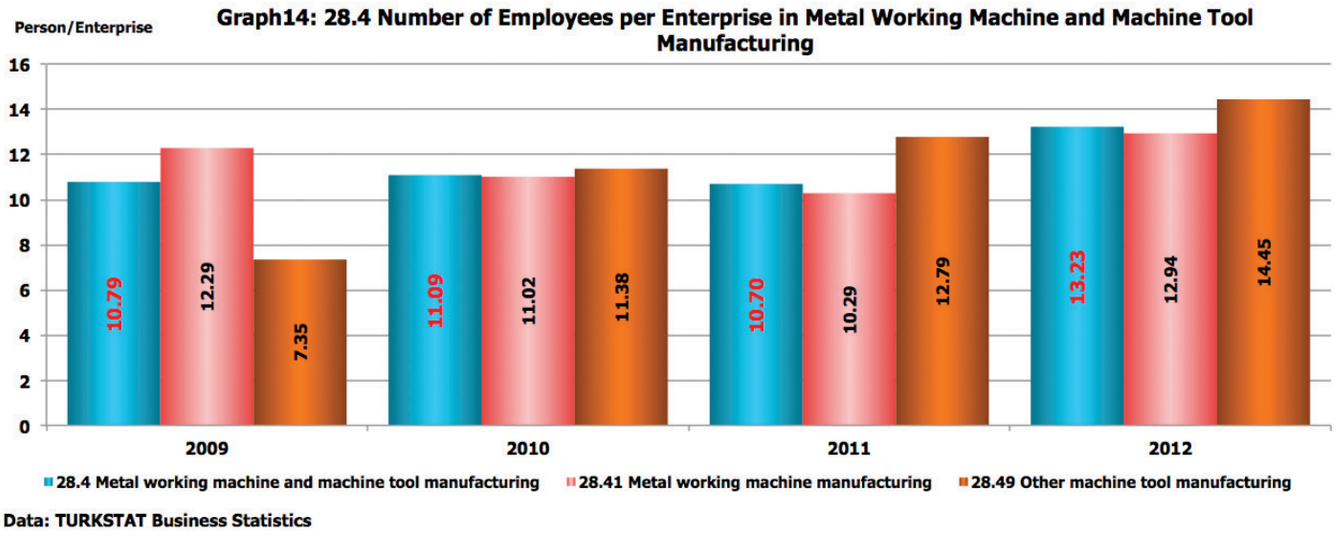
The number of people employed in the wholesale trade of Machine Tools increased from 2,444 in 2009 to 3,622 in 2012. During this period employment increased by 48%. According to the projection based on the employment index, the number of people employed in the wholesale trade of Machine Tools is 4,146 in 2014.

Graph13: 46.62 Number of Employees in the Wholesale Trade of Machine Tools (TURKSTAT)

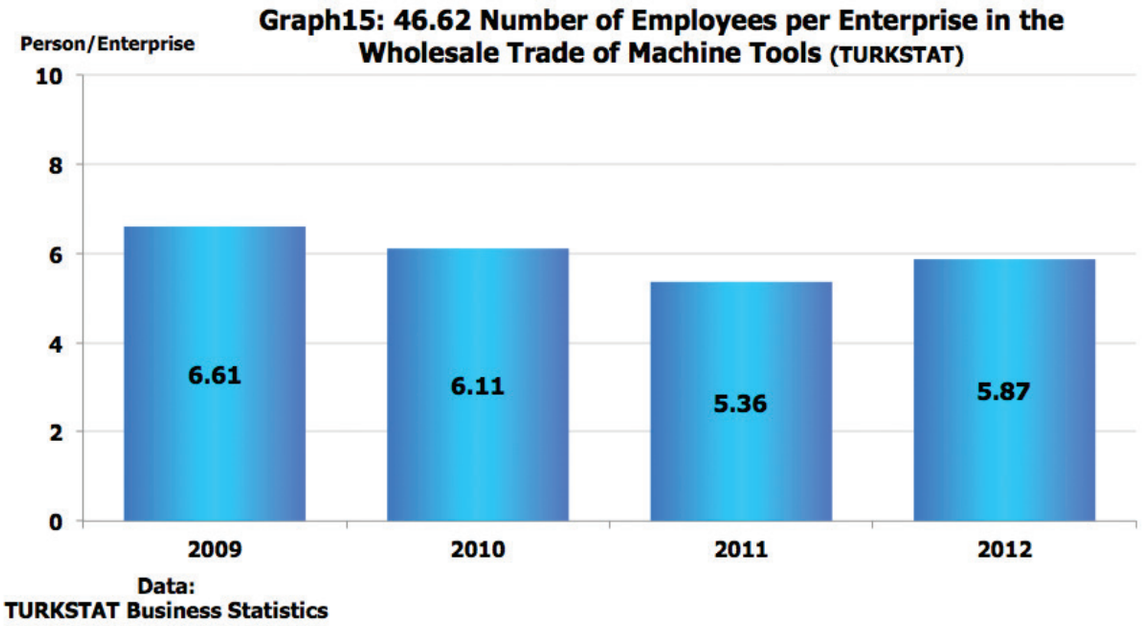
Data: TURKSTAT Business Statistics, *Calculated by using TURKSTAT Employment Statistics for the sector.

As forecasts show, total employment of the sector, including manufacturing and wholesale trade, increased by 67.5% in five years from 12,814 in 2009 to 21,474 in 2014,

Average employment per enterprise is considerably low. In the manufacturing sector, average number of people employed per enterprise was 10.8 in 2009. This number increased to 13.2 in 2012. In 2009, number of people employed per enterprise in Metal Working Machine manufacturing subsector and Other Machine Tool manufacturing subsector was 12.3 and 7.3 respectively.



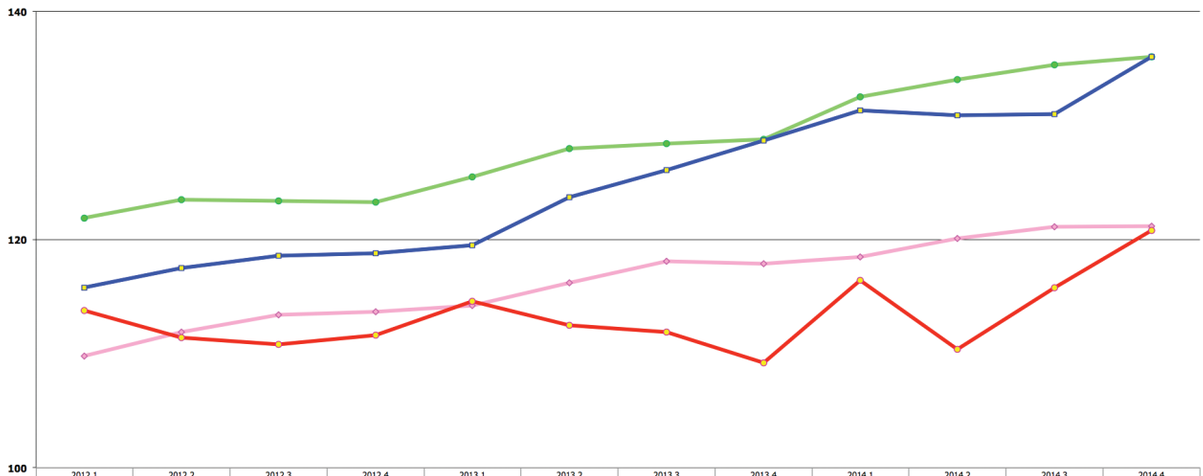
In terms of employment per enterprise, no significant change has occurred in Metal Working Machines subsector, yet there has been a rapid increase in Other Machine Tool manufacturing. In 2012, number of people employed per enterprise was 12.9 in Metal Working Machines and 14.4 in Other Machine Tool manufacturing. It is possible to say that scale of business has been improved in Other Machine Tool manufacturing. However, employment per enterprise in wholesale trade has not changed in years, with an average of 6 employees.



As for the employment index of the sector, it is observed that the sector has recently increased its contribution to employment. Employment index values of Metal Working Machine manufacturing sector is lower than the employment index of Machinery and Equipment Industry, and much higher than that of manufacturing industry.

Employment index of Metal Working Machine Manufacturing (28.41) almost remained the same in the first three quarters of 2014 at around 131. Though it increased to 136 in the last quarter of 2014. In brief, no significant improvement was observed in sector employment except the last quarter of 2014. However, employment index of Other Machine Tool Manufacturing (28.49) dropped from 116.4 in the first quarter of 2014 to 110.4 in the second quarter, later compensated by an increase to 120.8 in the last quarter.

Graph16: INDUSTRIAL EMPLOYMENT INDEX (TURKSTAT, 2010=100)



	2012.1	2012.2	2012.3	2012.4	2013.1	2013.2	2013.3	2013.4	2014.1	2014.2	2014.3	2014.4
C - Manufacturing	109.8	111.9	113.4	113.7	114.2	116.2	118.1	117.9	118.5	120.1	121.1	121.2
28. Machinery and equipment manufacturing	121.9	123.5	123.4	123.3	125.5	128	128.4	128.8	132.5	134	135.3	136
28.41 Metal working machine manufacturing	115.8	117.5	118.6	118.8	119.5	123.7	126.1	128.7	131.3	130.9	131	136
28.49. Other machine tool manufacturing	113.8	111.4	110.8	111.6	114.6	112.5	111.9	109.2	116.4	110.4	115.8	120.8

Data: TURKSTAT

3.5 Output per Employee

Output per employee index values of Metal Working Machine Manufacturing (28.41) is lower than the index values of Machinery and Equipment Industry (28) and manufacturing industry. The index followed a negative trend except the last quarter of 2014. Although it reached 99.74 in the last quarter, it was still below the index value of manufacturing industry.

As a matter of fact, the sector experienced problems in terms of productivity when compared to 2013. Output per employee index value, which was 102.01 in 2013, dropped by almost 10% to 95.45 in 2014. Although output per employee index value in Other Machine Tool Manufacturing (28.49) was high, increasing from 125.73 in the first quarter of 2014 to 152.7 in the second quarter, it declined dramatically to 101.8 in the third quarter. Fortunately, the index increased to 127.4 in the last quarter. This subsector is in a better position in terms of productivity. Yet, it has gone through a more negative period in output per employee when compared to 2013.

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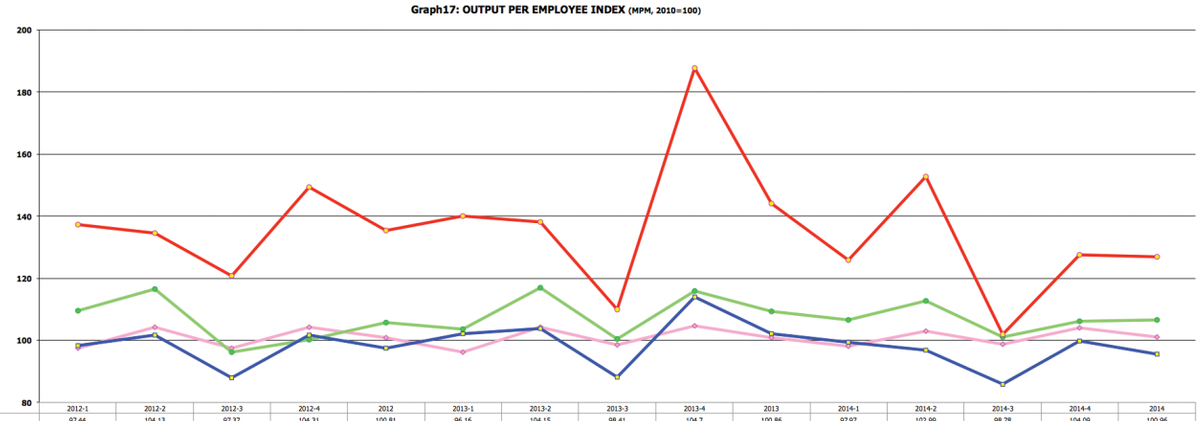
Graph17: OUTPUT PER EMPLOYEE INDEX (MPM, 2010=100)



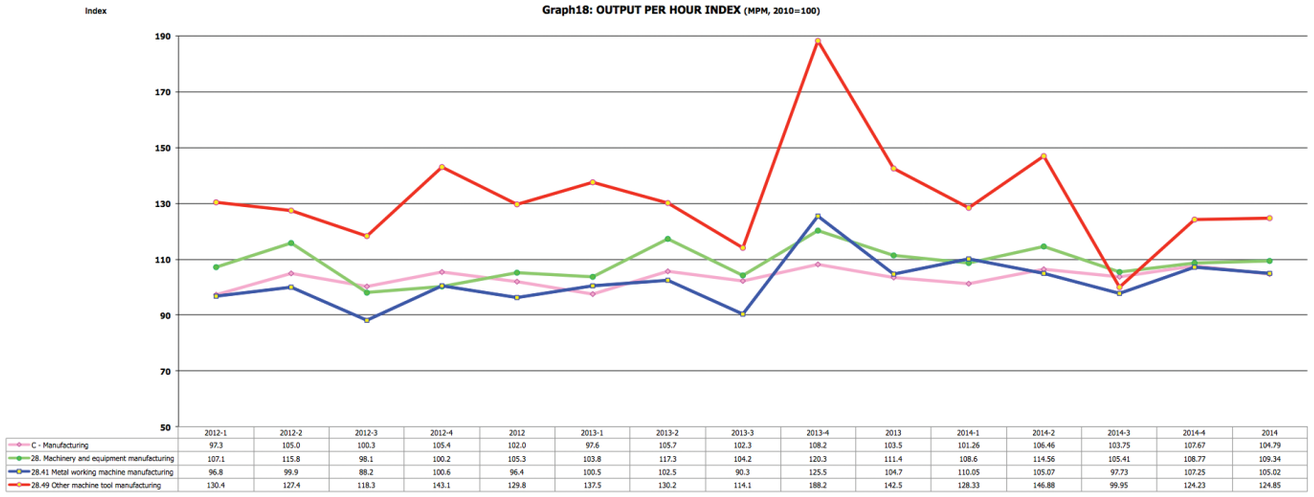
	2012-1	2012-2	2012-3	2012-4	2012	2013-1	2013-2	2013-3	2013-4	2013	2014-1	2014-2	2014-3	2014-4	2014
C - Manufacturing Industry	97.44	104.13	97.37	104.31	100.81	96.16	104.15	98.41	104.7	100.86	97.97	102.99	98.78	104.09	100.96
28. Machinery and equipment manufacturing	109.51	116.49	96.16	100.3	105.61	103.58	117.01	100.38	115.82	109.2	106.48	112.6	101.14	106.12	106.58
28.41 Metal working machine manufacturing	98.2	101.58	87.96	101.76	97.37	102.12	103.83	88.05	114.04	102.01	99.41	96.78	85.87	99.74	95.45
28.49 Other machine tool manufacturing	137.2	134.48	120.67	149.36	135.43	140.1	138.02	109.96	187.8	143.97	125.73	152.68	101.83	127.43	126.91

Data: MPM

3.6 Output per Hour

In 2014, a downward movement was prevalent in output per hour index values, similar to the output per employee index values of Metal Working Machine Manufacturing (28.41) and Other Machine Tool Manufacturing in the same year. The trends observed in these two index values point to the fact that the sector encountered some difficulties in productivity throughout 2014.
In Metal Working Machine Manafacturing sector, output per hour index did not change when compared to previous periods, and it decreased from 110.05 in the first quarter of 2014 to 107.2 in the last quarter. Annual average for 2014 was 105.02. This finding shows that in terms of production, labour productivity of Metal Working Machine Manufacturing industry is lower than the sector average of manufacturing industry.

Graph18: OUTPUT PER HOUR INDEX (MPM, 2010=100)



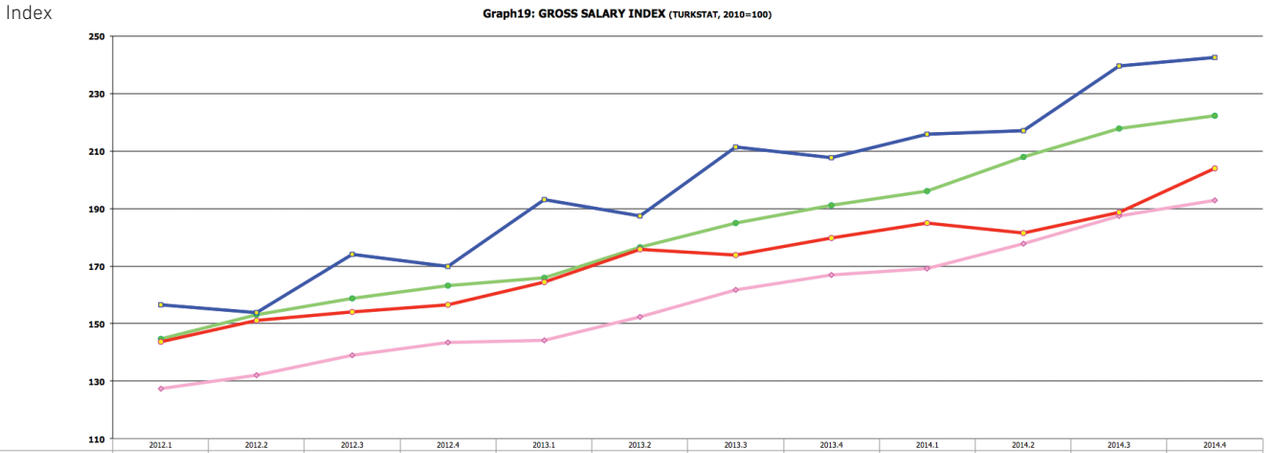
	2012-1	2012-2	2012-3	2012-4	2012	2013-1	2013-2	2013-3	2013-4	2013	2014-1	2014-2	2014-3	2014-4	2014
C - Manufacturing	97.3	105.0	100.3	105.4	102.0	97.6	105.7	102.3	108.2	103.5	101.26	106.46	103.75	107.67	104.79
28. Machinery and equipment manufacturing	107.1	115.8	98.1	100.2	105.3	103.8	117.3	104.2	120.3	111.4	108.6	114.56	105.41	108.77	109.34
28.41 Metal working machine manufacturing	96.8	99.9	88.2	100.6	96.4	100.5	102.5	90.3	125.5	104.7	110.05	105.07	97.73	107.25	105.02
28.49 Other machine tool manufacturing	130.4	127.4	118.3	143.1	129.8	137.5	130.2	114.1	188.2	142.5	128.33	146.88	99.95	124.23	124.85

Data: MPM

3.7 Developments in Gross Salaries

In 2014, Gross Salary Index of Metal Working Machine Manufacturing (28.41) continued its rapid upward trend. The index value increased from 215.9 in the first quarter to 239.7 in the last quarter. The index was much higher than the gross salary indexes of manufacturing industry, and machinery and equipment manufacturing industry.
Although lower than other sectors at first glance, gross salary index of Other Machine Tool Manufacturing (28.49) increased in the last two quarters. Despite the decline in output per employee and output per hour indexes in 2014, higher gross salary indexes indicate increasing share of labour in the expenditure items of the sector.

Graph19: GROSS SALARY INDEX (TURKSTAT, 2010=100)



	2012.1	2012.2	2012.3	2012.4	2013.1	2013.2	2013.3	2013.4	2014.1	2014.2	2014.3	2014.4
C - Manufacturing	127.4	132.1	139.1	143.5	144.1	152.3	161.7	166.9	169.1	177.9	187.5	192.8
28. Machinery and equipment manufacturing	144.6	153.2	158.7	163.2	165.9	176.5	184.9	191.2	196.1	208	217.9	222.3
28.41 Metal working machine manufacturing	156.6	153.8	174.2	169.9	193.2	187.4	211.4	207.6	215.9	217.1	239.7	242.5
28.49 Other machine tool manufacturing	143.7	151	154	156.6	164.4	175.8	173.8	179.7	184.9	181.5	188.6	204.1

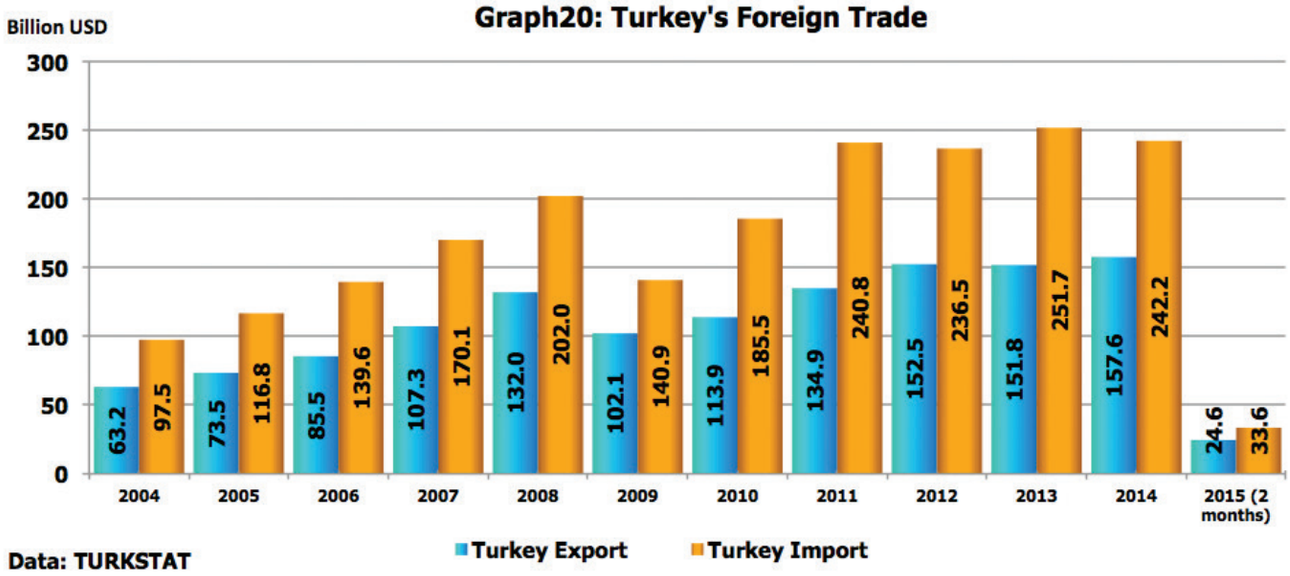
Data: TURKSTAT

4. TURKEY'S FOREIGN TRADE OF MACHINE TOOLS

4.1 Foreign Trade of Machine Tools

Turkey's total exports were consistenly on the rise until 2013, except 2009. In 2013, exports reached 151.8 billion USD, just below the figures of 2012. Turkey's total exports increased by 3.8% to 157.6 billion USD in 2014. Likewise, total imports showed a parallel trend. However, Turkey's total imports took on an opposite turn in the last year by decreasing from 251.7 billion USD in 2013 to 242.2 billion USD in 2014.

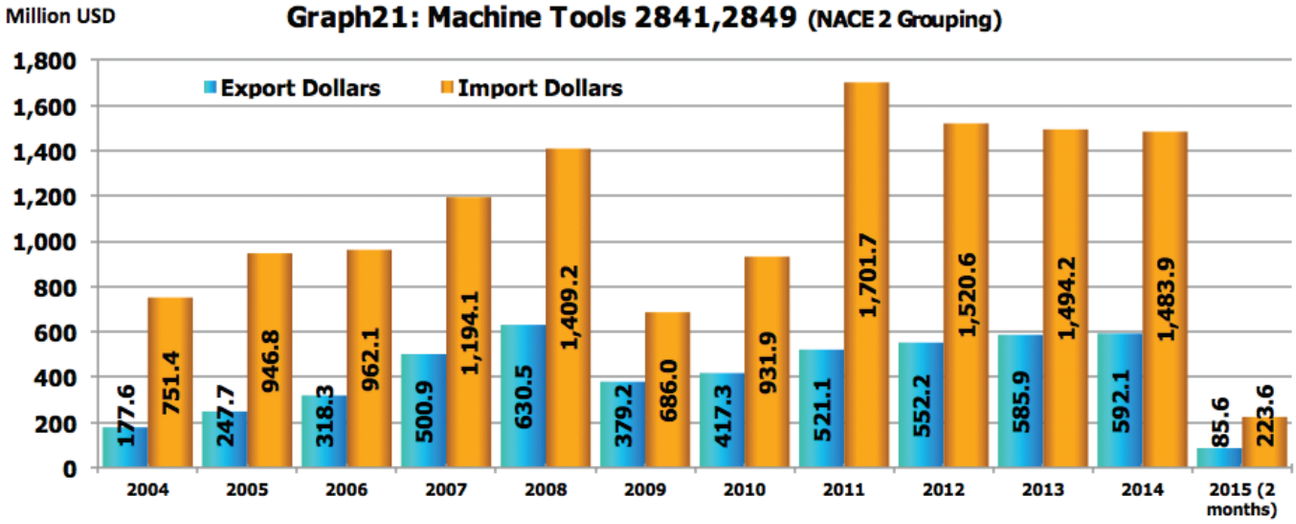
Graph20: Turkey's Foreign Trade



Data: TURKSTAT

Machine Tool exports show a similar trend to Turkey's total exports. Increasing 3.5 times between 2004 and 2008, Machine Tool exports increased from 177.6 million USD to 630.5 million USD during this period. In 2009, Machine Tool exports dropped dramatically to 379.2 million USD. Exports thereafter took on an upward movement, reaching 585.9 million USD in 2013. Generally recording a large trade deficit, the sector rapidly increased its imports between 2004 and 2011, except crisis periods. Imports reached 1.7 billion USD in 2011; and in the same year, exports to imports ratio was 31%. Imports of the sector almost reached 1.5 billion USD in 2013. Following year, imports of the sector slightly decreased to 1.48 billion USD, whereas exports increased by 1.2% to 592.1 million USD. 2014 exports to imports ratio was 39.9%.

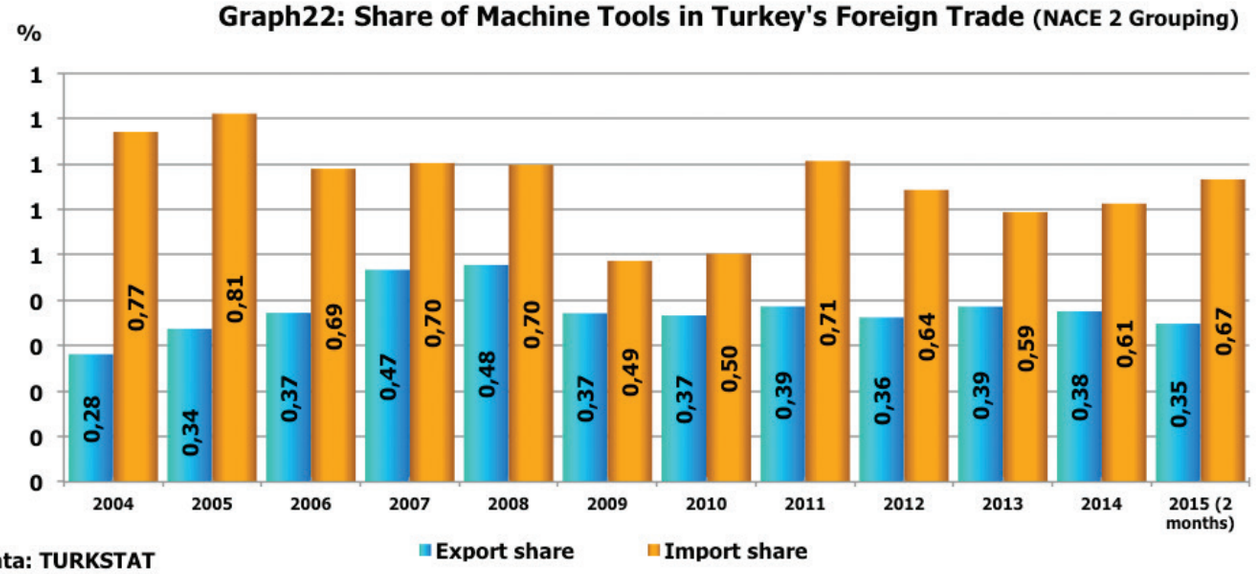
Graph21: Machine Tools 2841,2849 (NACE 2 Grouping)



Data: TURKSTAT, Export and import amounts of the sector have been calculated by using the HS Codes in the PRODCOM_2010/GTİP_2010 conversion table of NACE Rev.2. In the graphs, 12-digit HS Codes which are not in the conversion table have not been included in the 4-digit HS Code totals.

Although varying year by year, average share that the sector has in Turkey's exports is 0.004, whereas it has a share of 0.006 in Turkey's total imports. For the last three years, no significant change has been observed in these ratios. A general review on the shares of the sector in Turkey's total exports and imports points to a dependence on imports.

Graph22: Share of Machine Tools in Turkey's Foreign Trade (NACE 2 Grouping)

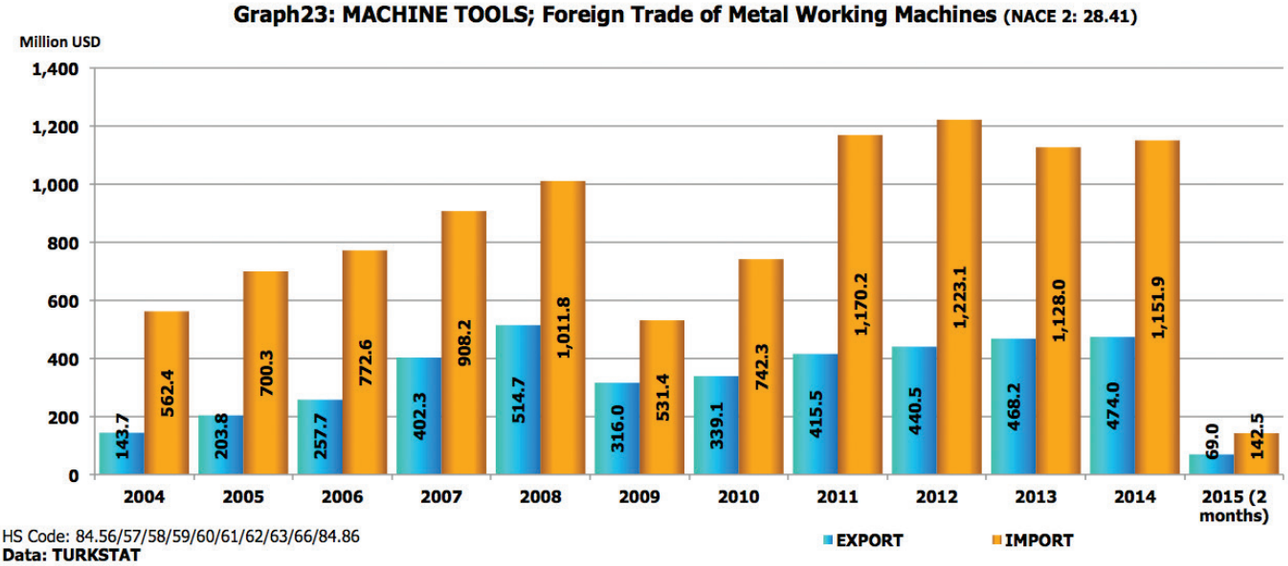


Data: TURKSTAT

4.2 Foreign Trade of Metal Working Machines

Exports to imports ratio of Metal Working Machine Manufacturing (28.41) subsector of Machine Tools sector increased from 26% in 2004 to 59% in 2009, which reflects the impacts of the economic crisis. Afterwards, this ratio was around 40%. In 2013, Metal Working Machine imports were about 1.13 billion USD, while exports were valued at 468.2 million USD. In 2014, exports rose by 1.26% to 474.1 million USD, whereas imports also increased by 2.1% to 1.15 billion USD. Exports to imports ratio in 2014 was 41.2%.

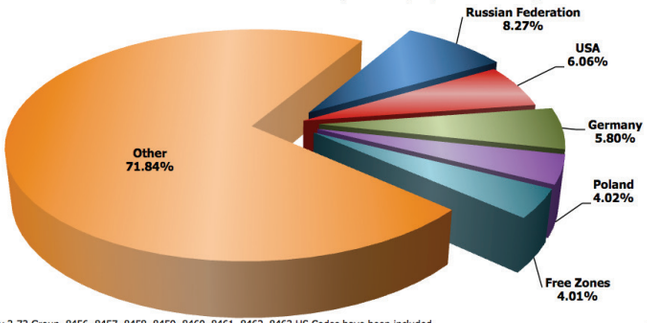
Graph23: MACHINE TOOLS; Foreign Trade of Metal Working Machines (NACE 2: 28.41)



HS Code: 84.56/57/58/59/60/61/62/63/66/84.86
Data: TURKSTAT

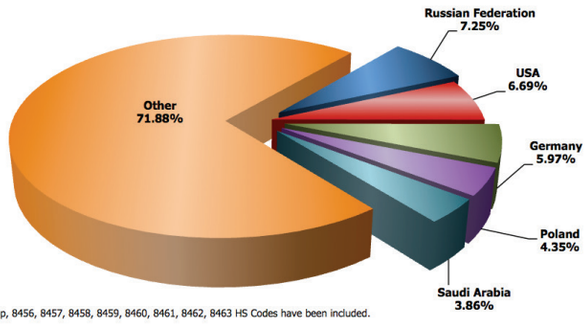
According to SITC Rev.3 grouping, Russian Federation has the largest share in Turkey's total five-year Metal Working Machine exports with 8.27% between 2010 and 2014. USA is second with a share of 6.06%. Remaining countries in the top five countries with largest shares in Turkey's exports are Germany (5.8%), Poland (4.02%) and Free Zones (4.01%) respectively. 71.84% of total exports are to other countries.

Graph24: Share of Top 5 Countries in Turkey's Total Metal Working Machine Exp between 2010-2014 (SITC Rev 3, 73*; NACE 28.41 Group)



* In SITC Rev 3-73 Group, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463 HS Codes have been included.
Data: Trademap

Graph25: Share of Top 5 Countries in Turkey's Metal Working Machine Exports in 2014 (SITC Rev 3, 73*; NACE 28.41 Group)

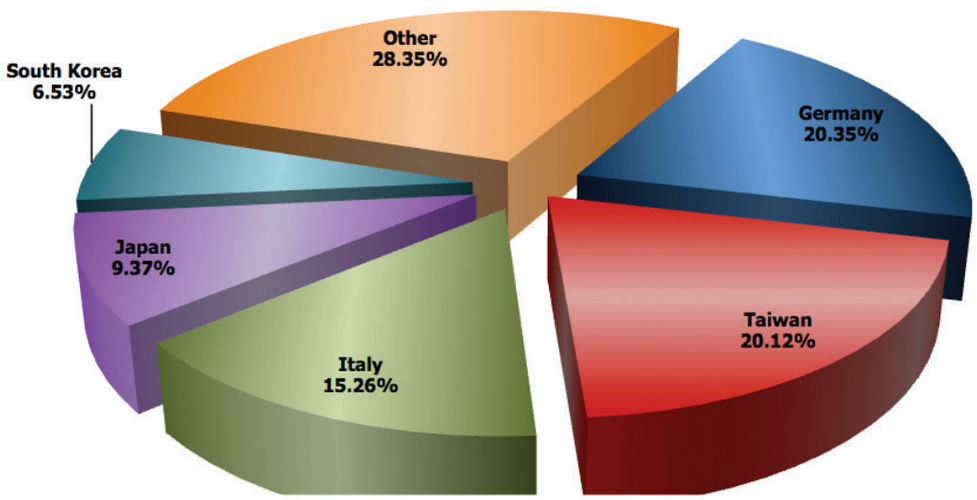


* In SITC Rev 3-73 Group, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463 HS Codes have been included.
Data: Trademap

When it comes to Turkey's 2014 exports, Russian Federation's share of 7.25% is lower than its five-year average; whereas, USA (6.69%), Germany (5.97%) and Poland (4.35%) take a slightly larger share. With a share of 3.86%, Saudi Arabia became one of the top five countries in Total Metal Working Machine exports in 2014. Share of other countries increased slightly to 71.88% by comparison with total five-year imports.

With a share of 20.35%, Germany is at the top on the list of countries with largest share in Turkey's total five-year Metal Working Machine imports between 2010 and 2014. Germany is closely followed by Taiwan (20.12%). Combined share of imports from these two countries within this five-year period reached 40.5%. These two countries are followed by Italy with 15.26%, Japan with 9.37% and South Korea with 6.53%. Within this five-year period, share of imports from other countries remained at 28.35%.

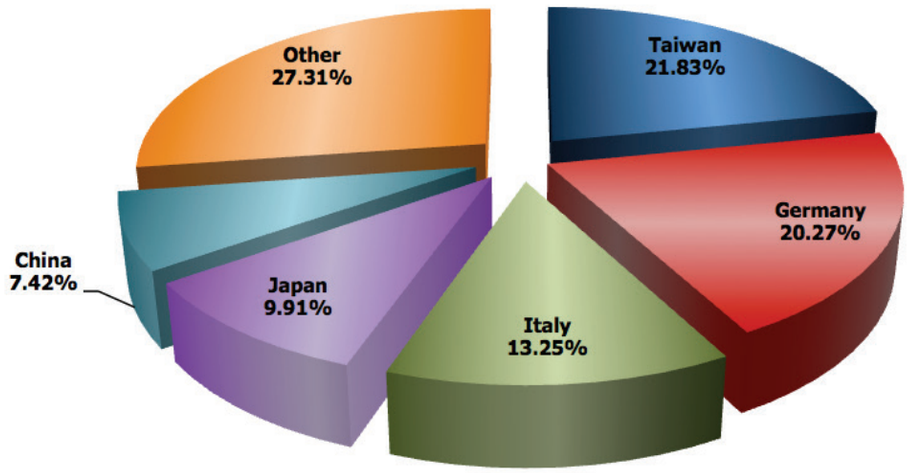
Graph26: Share of Top 5 Countries in Turkey's Total Metal Working Machine Imports between 2010-2014 (SITC Rev 3, 73*; NACE 28.41 Group)



* In SITC Rev 3-73 Group, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463 HS Codes have been included.
Data: Trademap

Having a share of 21.83%, Taiwan comes first in Turkey's Metal Working Machine imports in 2014. Germany has the second largest share in imports with 20.27%. Other countries on top-five list are Italy (13.25%), Japan (9.91%) and China (7.42%) respectively.
China entered the top-five list in 2014, while Italy's share for the year shrank when compared to its share in total five-year imports.

Graph27: Share of Top 5 Countries in Turkey's Metal Working Machine Imports in 2014 (SITC Rev 3, 73*; NACE 28.41 Group)

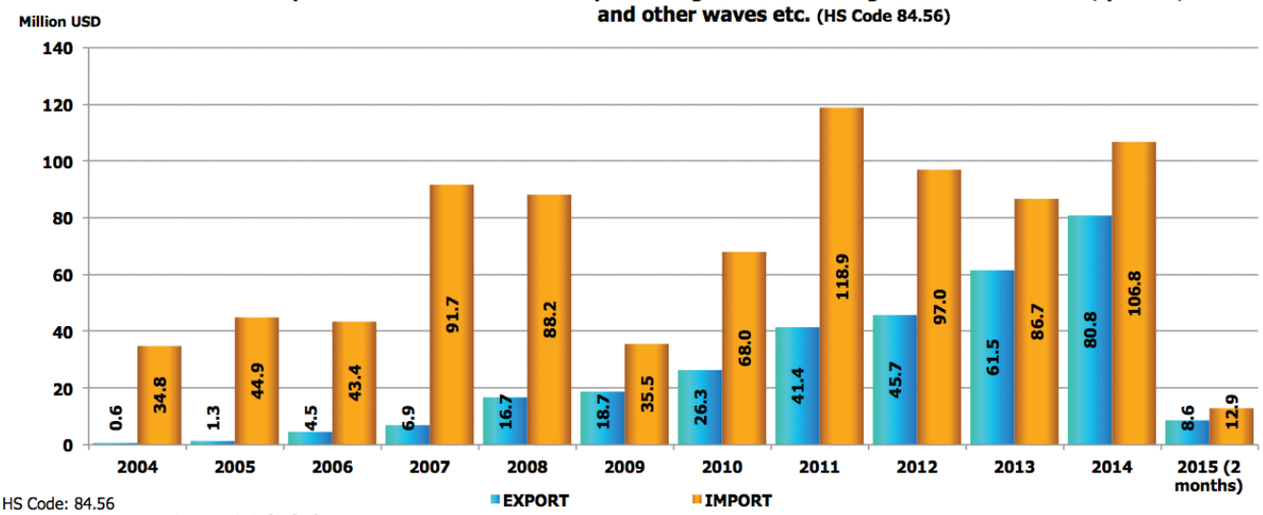


* In SITC Rev 3-73 Group, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463 HS Codes have been included.
Data: Trademap

4.2.1 Abrasive Material Processing Machines (HS Code 84.56)

Abrasive material processing machine and tool exports in the Metal Working Machine Manufacturing (28.41) sector have constantly increased throughout the years. Exports have substantially increased especially after 2011. Exports hiked from 41.4 million USD in 2011 to 80.8 million USD in 2014. Exports to imports to ratio also increased from 0.39 in 2010 to 0.76 in 2014.

Graph28: Machines and tools for processing materials through abrasion with laser, photon, ultrasonic and other waves etc. (HS Code 84.56)

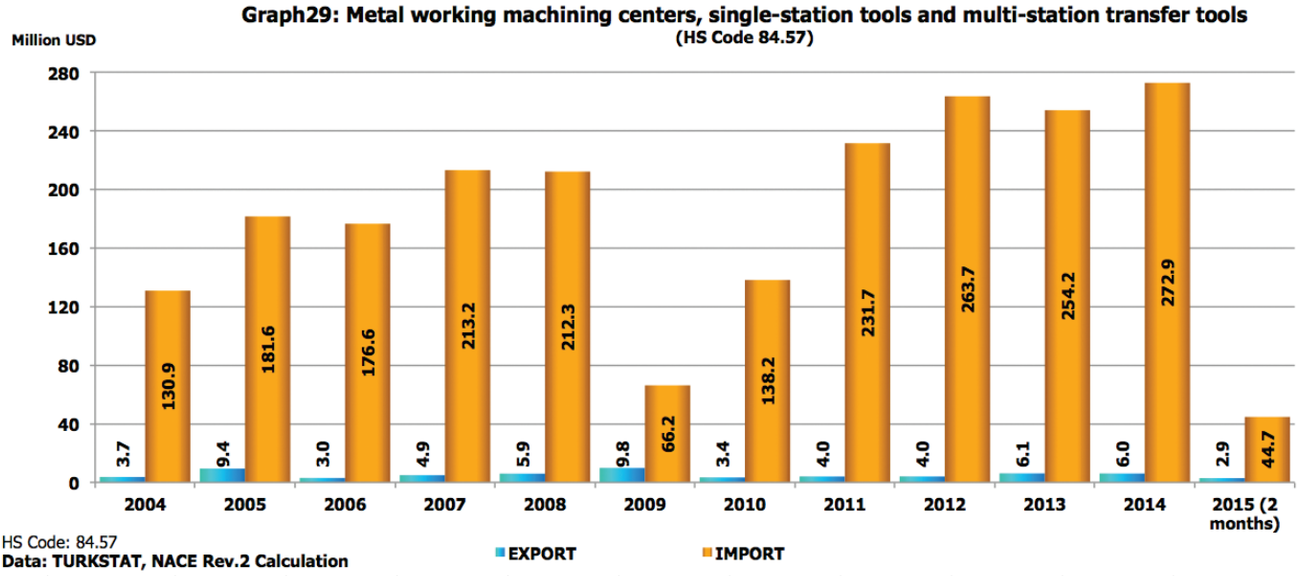


HS Code: 84.56
Data: TURKSTAT, NACE Rev.2 Calculation

4.2.2 Metal Working Machining Centers (HS Code 84.57)

It can be observed that Turkey is largely dependent on imports in metal working machining centers. While export amounts in general were negligibly low, imports reached 231.7 million USD in 2011 and 263.7 million USD in 2012. Having decreased from previous year in 2013, imports started to increase once again, reaching 272.9 million USD in 2014. Imports totaled 44.7 million USD in the first two months of 2015.

Graph29: Metal working machining centers, single-station tools and multi-station transfer tools (HS Code 84.57)

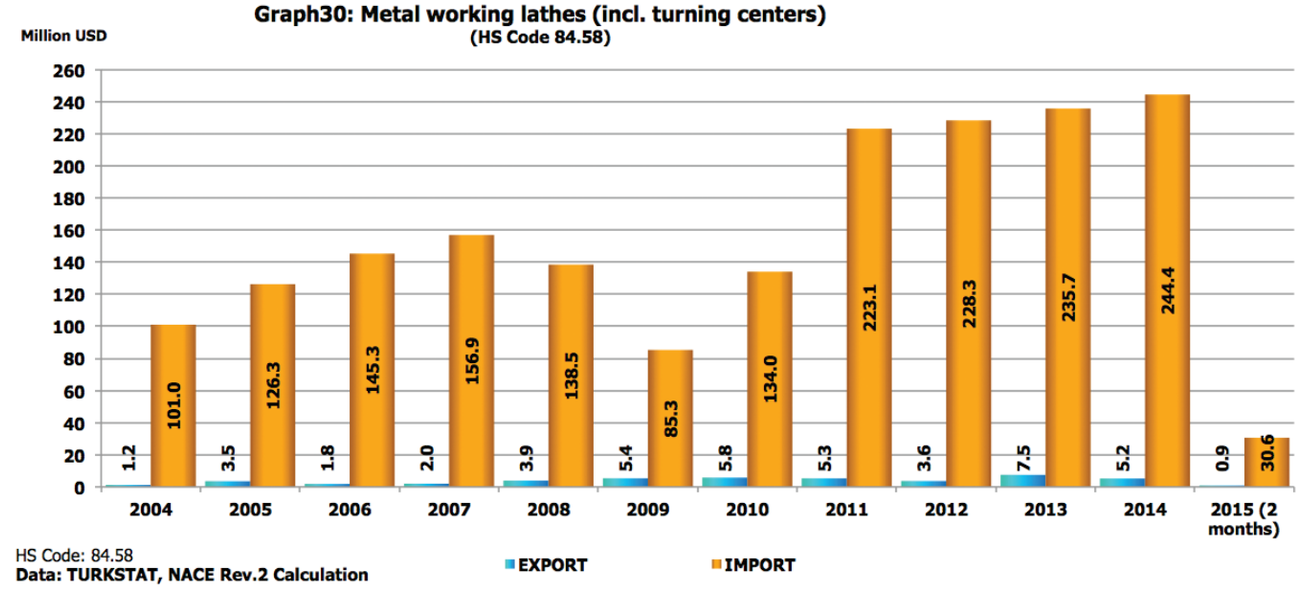


HS Code: 84.57
Data: TURKSTAT, NACE Rev.2 Calculation

4.2.3 Metal Working Lathes (HS Code 84.58)

Turkey is largely dependent on foreign sources in lathe industry, as well. Similar to the case in machining centers, lathe imports were over 200 million USD after 2010. Imports increased from 235.7 million USD in 2013 to 244.4 million USD in 2014. Exports of this group are also very low. Exports were only 7.5 million USD in 2013, and 5.2 million USD in 2014.

Graph30: Metal working lathes (incl. turning centers) (HS Code 84.58)

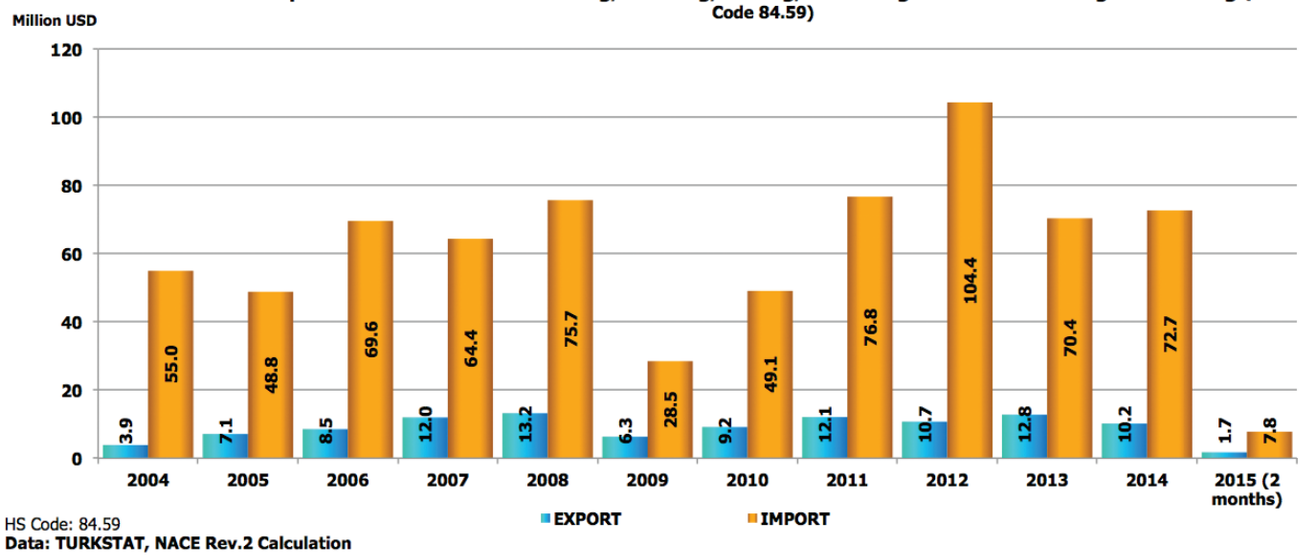


HS Code: 84.58
Data: TURKSTAT, NACE Rev.2 Calculation

4.2.4 Machine Tools for Boring, Milling etc. (Machining) (HS Code 84.59)

Exports to imports ratio of this group is also quite low. Exports to imports ratio was 15.7% in 2011, and was even lower in 2012; however along with the decline in imports, the ratio rose to 18.2% in 2013. The ratio decreased to 14% in 2014.

Graph31: Machine tools for boring, reaming, milling, threading etc. metals through machining (HS Code 84.59)

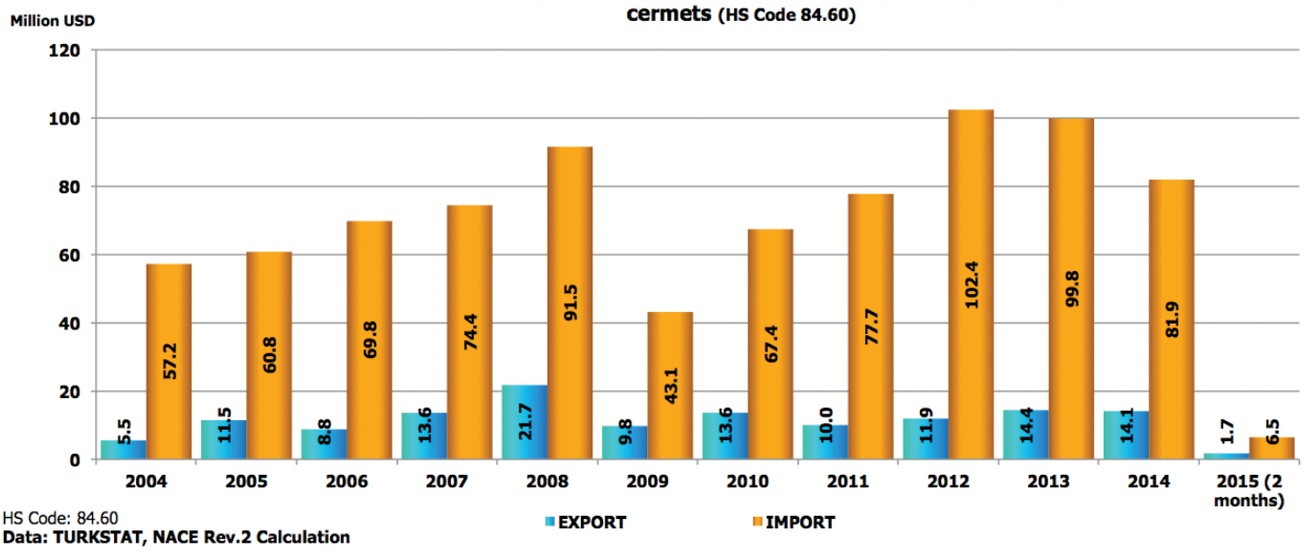


HS Code: 84.59
Data: TURKSTAT, NACE Rev.2 Calculation

4.2.5 Tools for Polishing, Deburring, Grinding etc. (HS Code 84.60)

Exports of this Metal Working Machine group reached an all-time high level of 21.7 million USD in 2008, and later on dropped to just over 10 million USD. Exports totaled 14.4 million USD in 2013 and 14.1 million USD in 2014. Imports reached the highest level of 102.4 million USD, yet dropped to 99.8 million USD in 2013 and 81.9 million USD in 2014. Dependence on imports is also very high in this group.

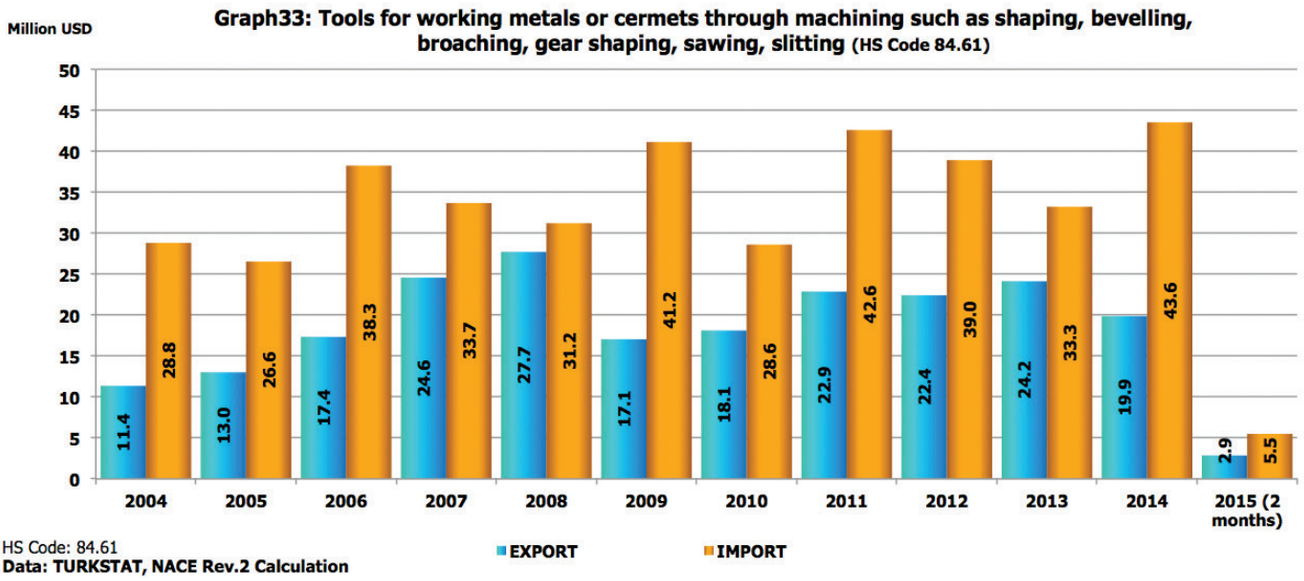
Graph32: Tools for polishing, deburring, sharpening, grinding, honing, lapping etc. metals and cermets (HS Code 84.60)



HS Code: 84.60
Data: TURKSTAT, NACE Rev.2 Calculation

4.2.6 Tools for Shaping, Bevelling, Broaching, Gear Shaping, Sawing etc. (HS Code 84.61)

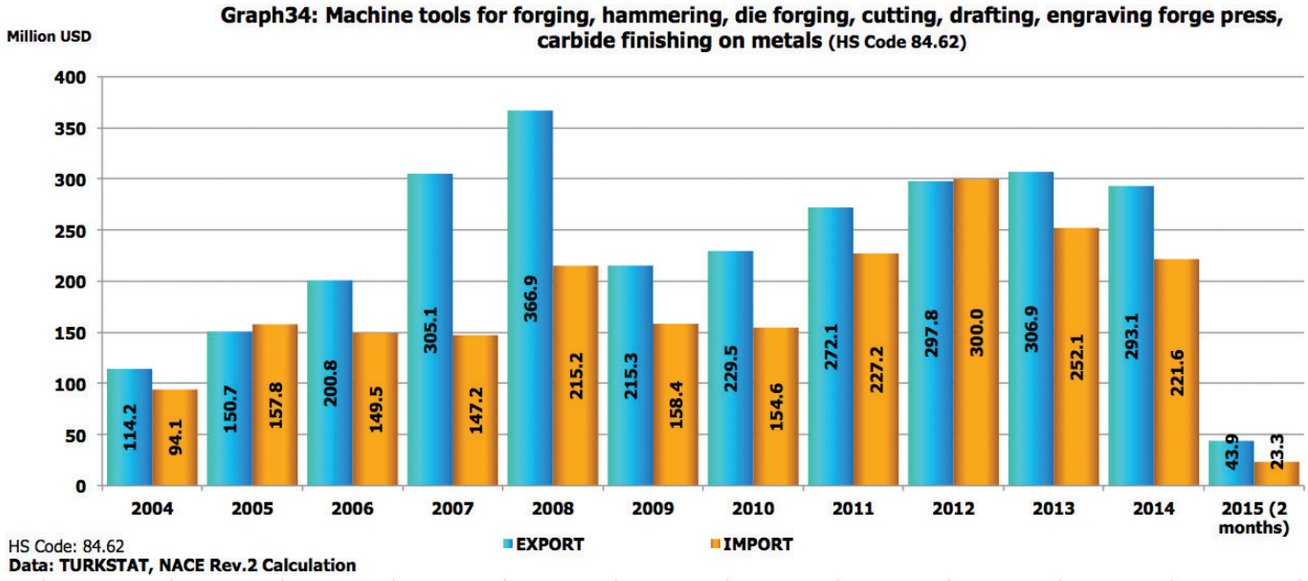
In terms of exports to imports ratio, this Metal Working Machine group is in a better position than many other groups in the sector, and its exports reached over 20 million USD after 2010. Exports totaled 24.2 million USD in 2013 and 19.9 million USD in 2014, whereas imports were 33.3 million USD in 2013 and 43.6 million USD in 2014.



HS Code: 84.61
Data: TURKSTAT, NACE Rev.2 Calculation

4.2.7 Tools for Forging, Hammering, Cutting, Drafting etc. (HS Code 84.62)

Exports to imports ratio of Machine Tools for forging, hammering, die forging, cutting, drafting, engraving forge press, carbide finishing on metals has been over 1 since 2004, only except 2005. Briefly, this subsector is the most competitive group among Metal Working Machines. Exports of the subsector reached an all-time high level of 366.9 million USD in 2008, along with a very high exports to imports ratio of 1.70 in the same year. Exports, which were on the decline in 2009 in the aftermath of economic crisis, started to increase after 2010, and reached 306.9 million USD in 2013. In 2014, exports totaled 293.1 million USD, and imports reached 221.6 million USD, resulting in an exports to imports ratio of 1.32.

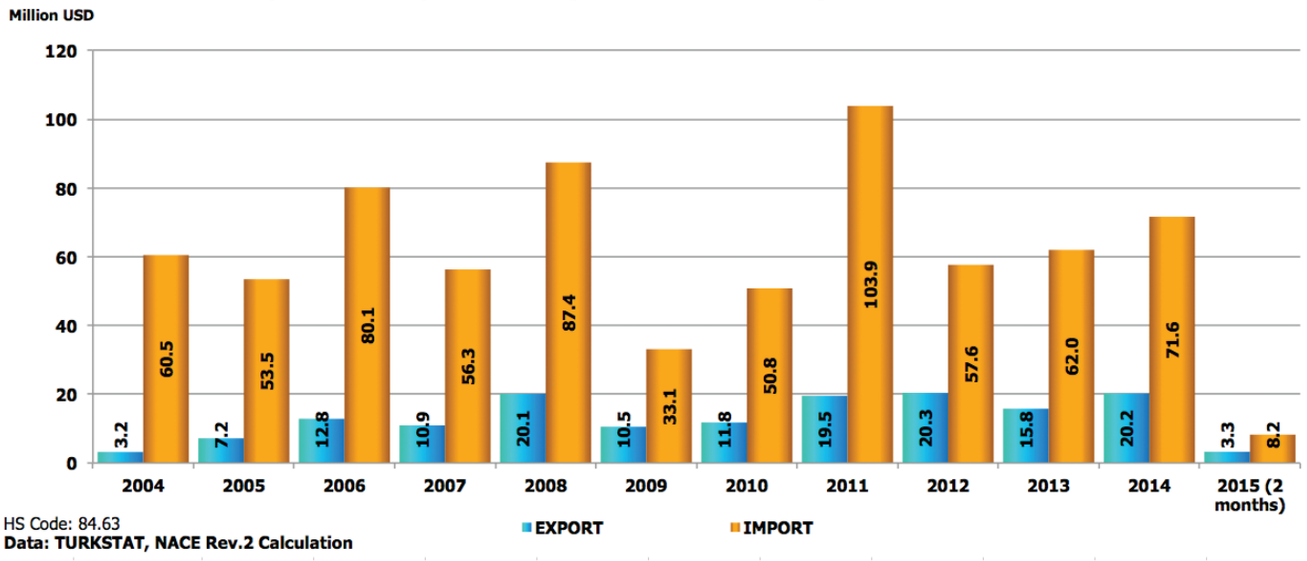


HS Code: 84.62
Data: TURKSTAT, NACE Rev.2 Calculation

4.2.8 Chipless Machining Metal and Cermet Working Machines (HS Code 84.63)

In Chipless Machining Metal and Cermet Working Machines group, Turkey's exports remained around 20 million USD after 2011, excluding 2013. Exports were valued at 20.3 million USD in 2012, dropped to 15.8 million USD in 2013, and increased back to 20.2 million USD in 2014. Imports were valued at 57.6 million USD in 2012, followed by 62 million USD and 71.6 million USD in 2013 and 2014 respectively.

Graph35: Other Chipless Machining metal or cermet working machines (HS Code 84.63)

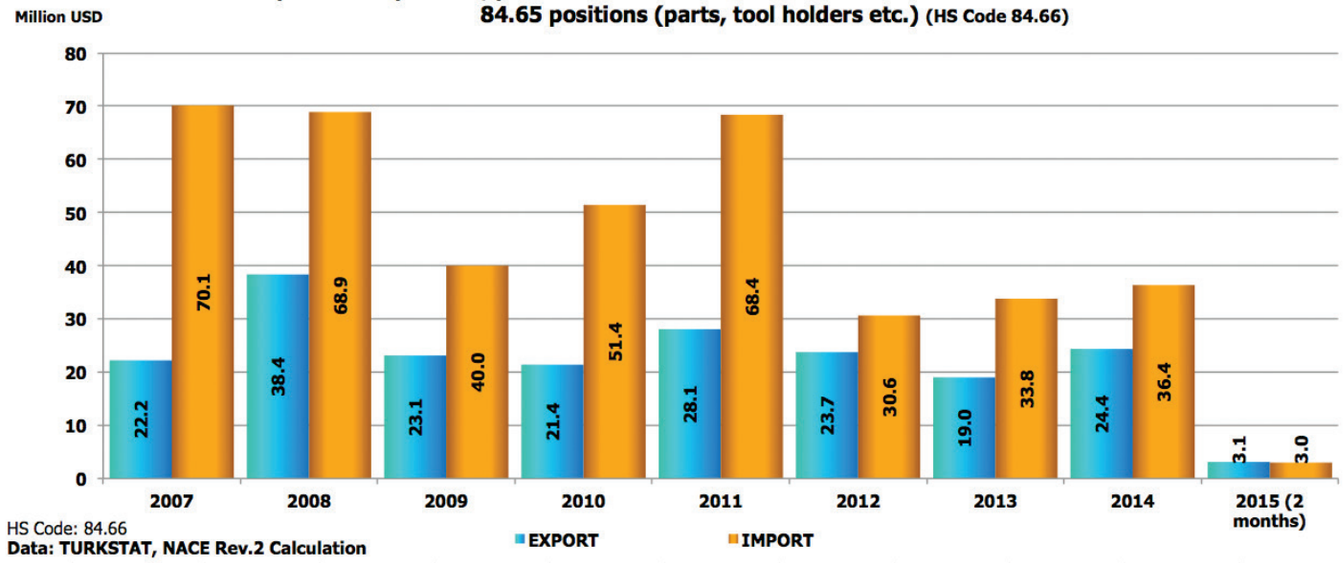


HS Code: 84.63
Data: TURKSTAT, NACE Rev.2 Calculation

4.2.9 Components, Parts, Accessories (HS Code 84.66) Used in Machines (84.56/84.65), and Machines etc. Used in the Manufacture of Discs, Ingots etc. (HS Code 84.86))

This group of Metal Working Machine components, parts, holders etc. had a total international trade of 60 million USD after 2012. In the last two years, total trade volume of HS Code 84.66 and 84.86 groups, which include components and parts related to machinery and equipment manufactured in the industry, was valued at around 20 million USD in exports and 30 million USD in imports.

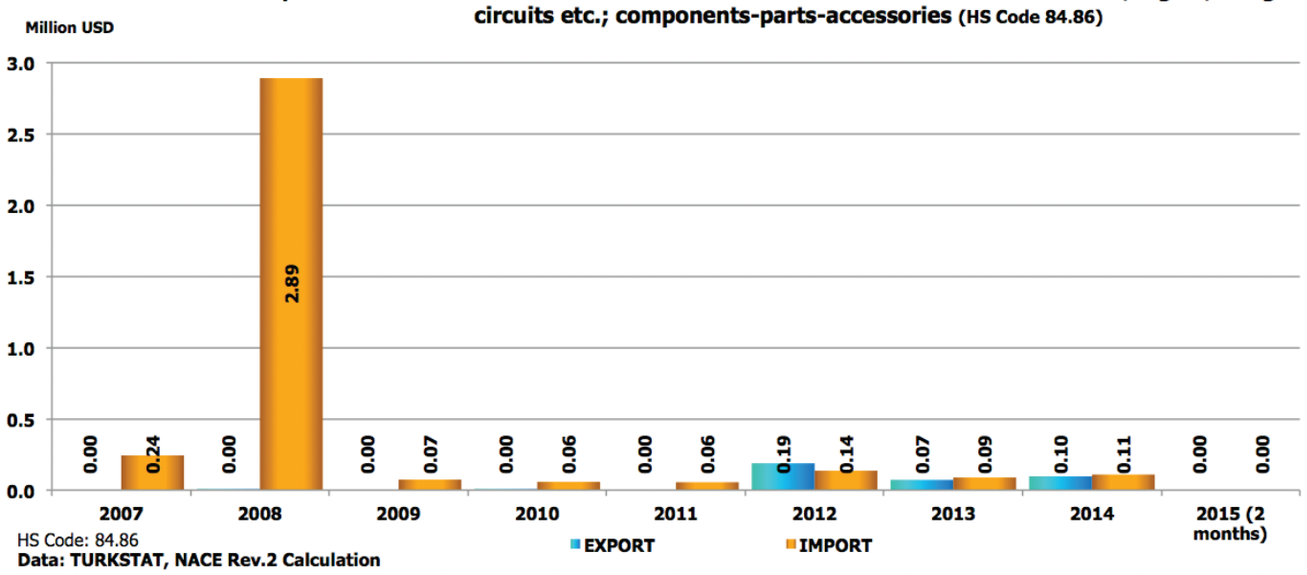
Graph36: Components, parts and accessories suitable for use in machines between 84.56 between 84.65 positions (parts, tool holders etc.) (HS Code 84.66)



HS Code: 84.66
Data: TURKSTAT, NACE Rev.2 Calculation

In 2014, exports of HS Code 84.66 group were valued at 24.4 million USD and its imports were 36.4 million USD. Within these two groups examined together, international trade volume of HS Code 84.86 group is negligibly low with only 205 thousand USD in 2014. Although this group has a low international trade volume, it holds a very good position among Metal Working Machine groups in terms of exports to imports ratio.

Graph37: Machines and devices used in the manufacture of semiconductor discs, ingots, integrated circuits etc.; components-parts-accessories (HS Code 84.86)

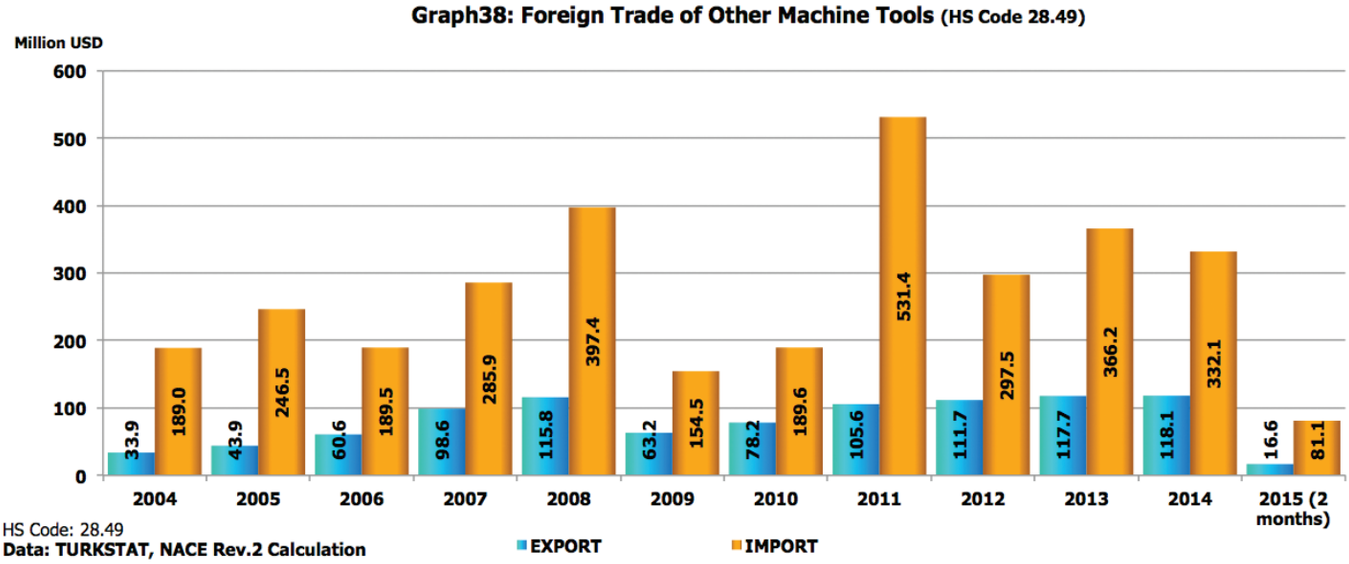


HS Code: 84.86
Data: TURKSTAT, NACE Rev.2 Calculation

4.3 *Foreign Trade of Other Machine Tools*

Exports to imports ratio of Other Machine Tool Manufacturing (28.49) sector, which was 17.5% in 2004, increased to over 40% in 2009-2010 as a result of the impacts of economic crisis. In 2013, imports of the sector were valued at 366.2 million USD, and exports were 117.7 million USD. In 2014, exports were 118.1 million USD, imports were 332.1 million USD and exports to imports ratio was 35.6%.

Graph38: Foreign Trade of Other Machine Tools (HS Code 28.49)

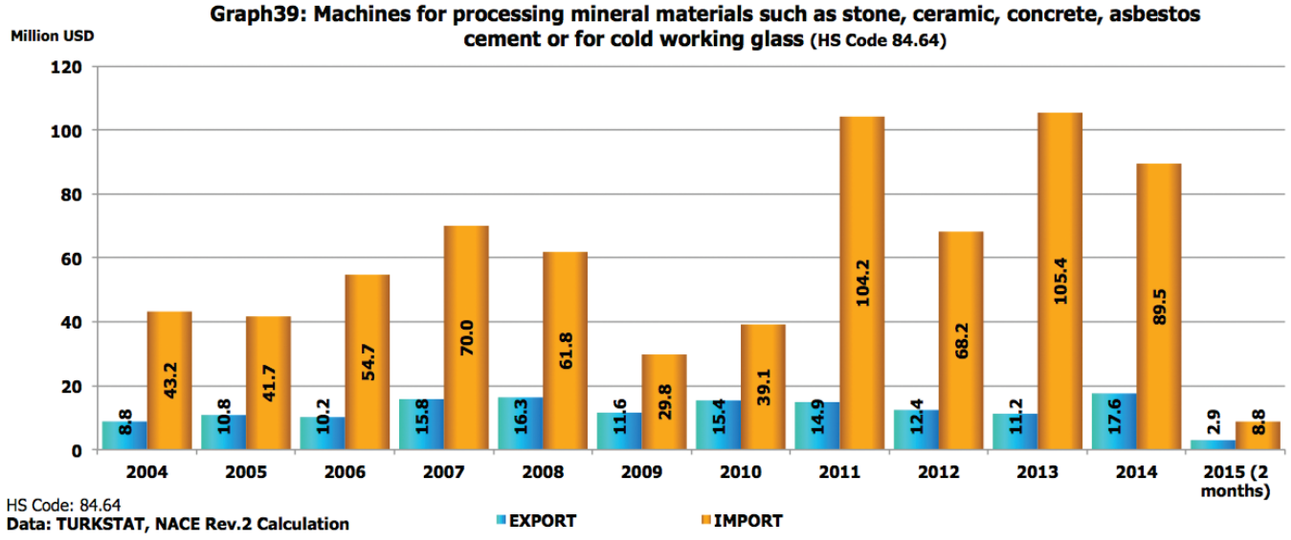


HS Code: 28.49
Data: TURKSTAT, NACE Rev.2 Calculation

4.3.1 Machines for Stone, Ceramic, Concrete etc. or Cold Working Machines for Glass (HS Code 84.64)

This group, which is categorized under Other Machine Tool Manufacturing, has a international trade volume of over 100 million USD. This group has a very high level of external dependence, and a low exports to imports ratio. In 2014, its exports were 17.6 million USD, while its imports were 89.5 million USD, resulting in an exports to imports ratio of 19.7%.

Graph39: Machines for processing mineral materials such as stone, ceramic, concrete, asbestos cement or for cold working glass (HS Code 84.64)

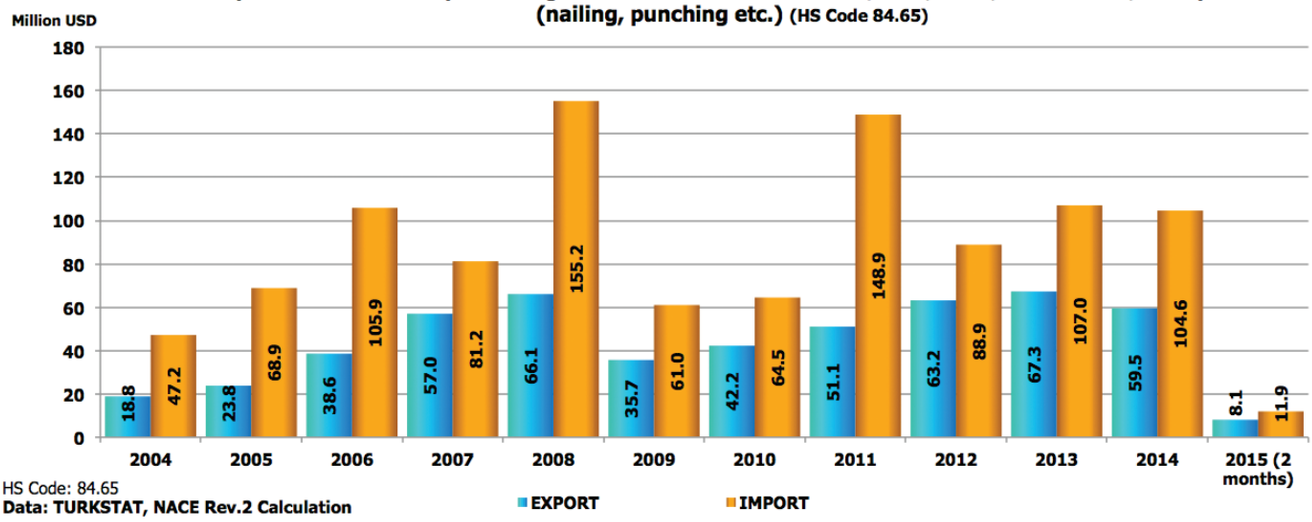


HS Code: 84.64
Data: TURKSTAT, NACE Rev.2 Calculation

4.3.2 Nailing, Punching etc. Machines for Wood, Hard Rubber etc. (HS Code 84.65)

The group with the largest international trade volume in Other Machine Tool Manufacturing is nailing, punching etc. machines. In 2013, this group reached a total international trade volume of 174.3 million USD, 67.3 million USD in exports and 107 million USD in imports. In 2014, its total trade volume was 164.2 million USD, and exports to imports ratio was 57%. Its exports were 59.5 million USD and imports were 104.6 million USD in 2014.

Graph40: Machines for processing hard materials such as wood, cork, bone, hard rubber, hard plastic (nailing, punching etc.) (HS Code 84.65)

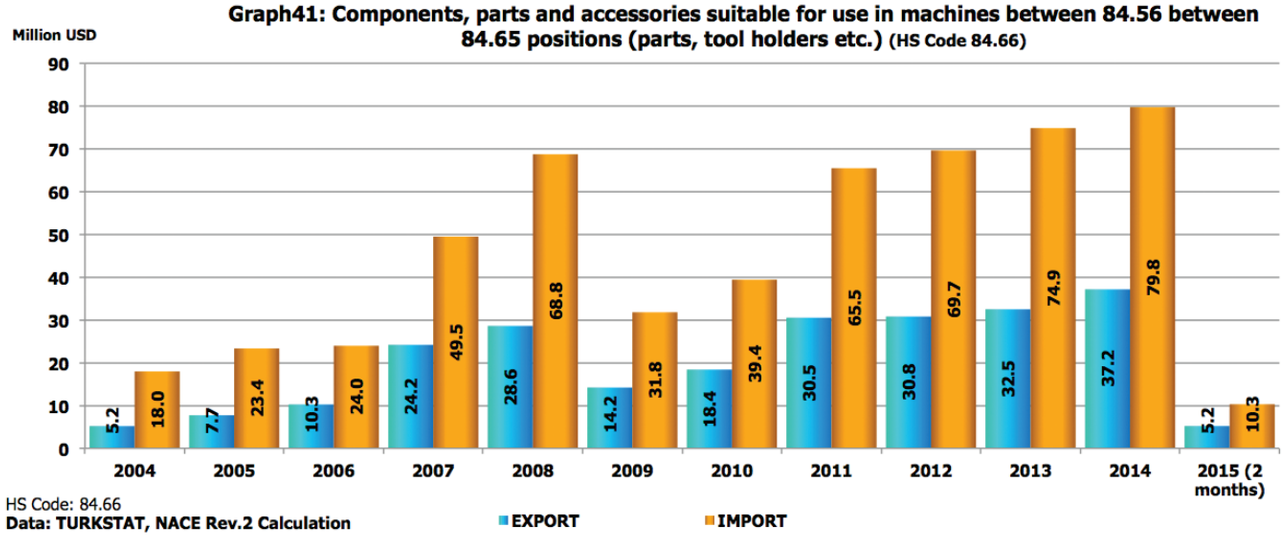


HS Code: 84.65
Data: TURKSTAT, NACE Rev.2 Calculation

4.3.3 Components, Parts, Holders etc. Used in Machines (HS Code 84.66

In 2014, exports and imports of components and parts (parts, tool holders etc. HS Code 84.66) suitable for use in machines included in this subsector were 37.2 million USD and 79.8 million USD respectively. This group holds a significant position in Other Machine Tools subsector thanks to its total international trade volume of over 100 million USD. Exports to imports ratio was 43.4% in 2013, and 46.6% in 2014.

Graph41: Components, parts and accessories suitable for use in machines between 84.56 between 84.65 positions (parts, tool holders etc.) (HS Code 84.66)

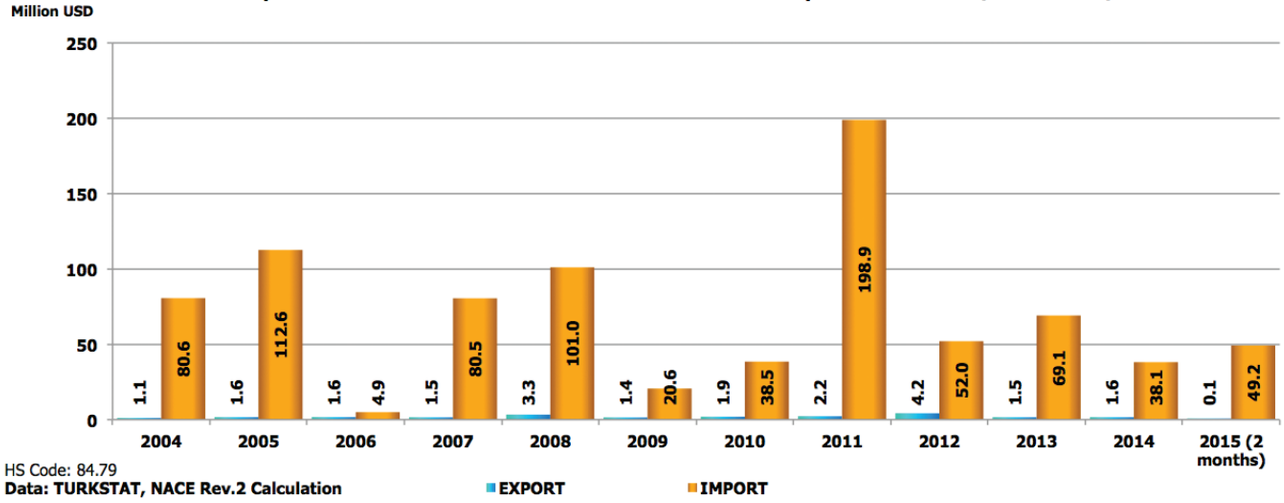


HS Code: 84.66
Data: TURKSTAT, NACE Rev.2 Calculation

4.3.4 Other Machines with Specific Functions (HS Code 84.79)

Classified under HS Code 84.79 as part of machines with specific functions, this group is dependent on imports and it has scarcely any exports. Depending on the needs of the subsector, its imports fluctuate dramatically year by year. The highest level of imports was recorded in 2011 with 198.9 million USD. It is very striking that the group imported 49.2 million USD worth of goods already in the first two months of 2015, while its imports totaled 38.1 million USD in 2014.

Graph42: Other machines and mechanical devices with specific functions (HS Code 84.79)

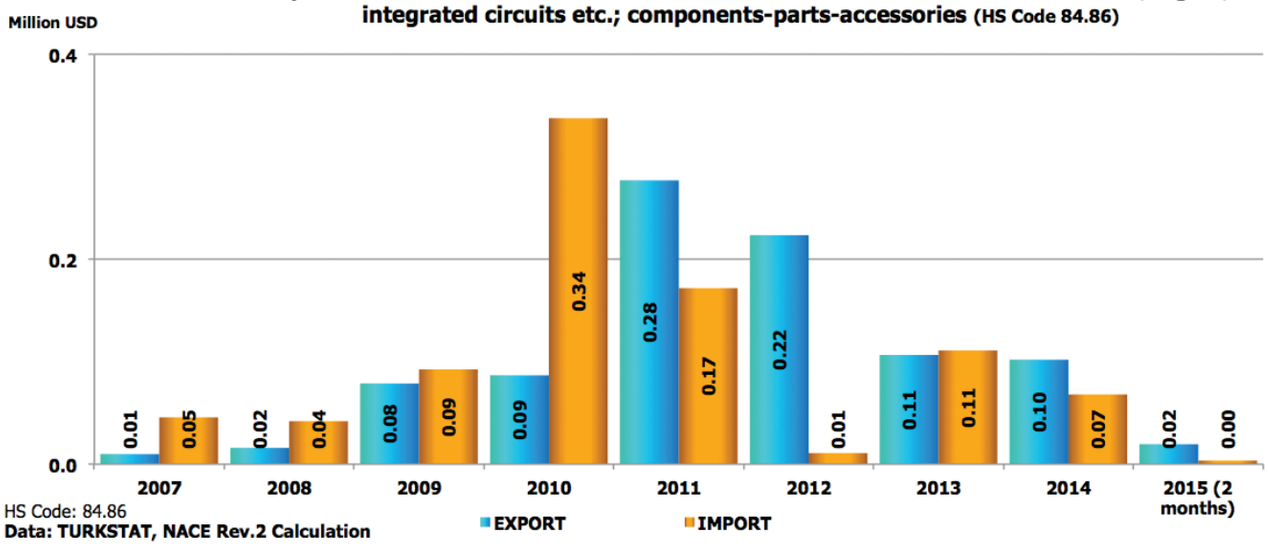


HS Code: 84.79
Data: TURKSTAT, NACE Rev.2 Calculation

4.3.5 Machines with Specific Functions (HS Code 85.43) such as Machines Used in the Manufacture of Discs, Ingots etc. (HS Code 84.86)

Total international trade of groups with HS Codes 84.86 ve 85.43 is very low. Especially, trade volume of HS Code 84.86 group is on a negligible level.

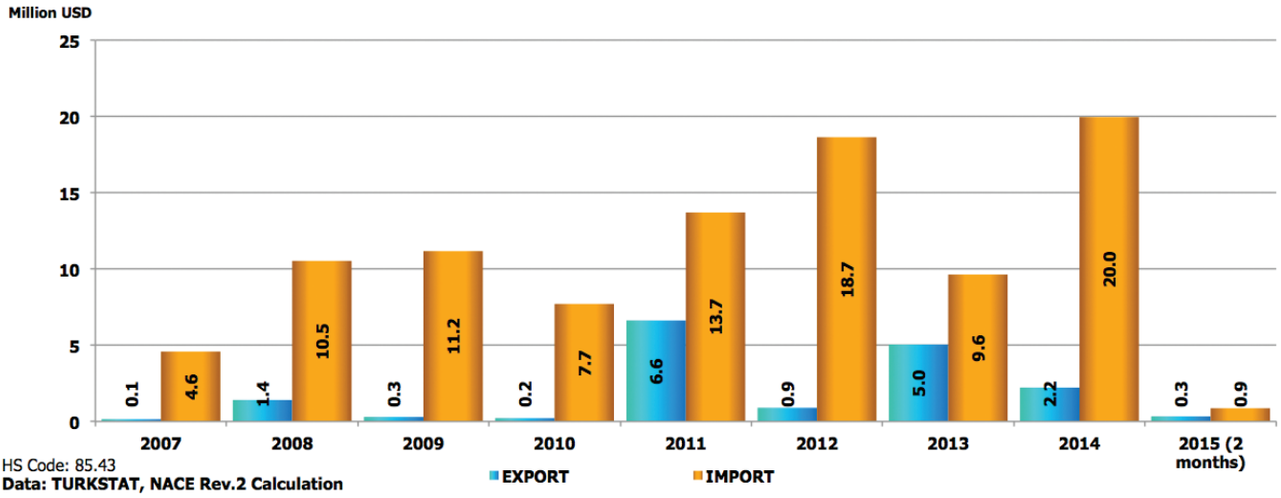
Graph43: Machines and devices used in the manufacture of semiconductor discs, ingots, integrated circuits etc.; components-parts-accessories (HS Code 84.86)



HS Code: 84.86
Data: TURKSTAT, NACE Rev.2 Calculation

In other machines and mechanical devices with specific functions, 2014 imports doubled the volume of 2013 and reached 20.2 million USD, which is almost the same with 2012 figures.

Graph44: Other machines and mechanical devices with specific functions (HS Code 85.43)



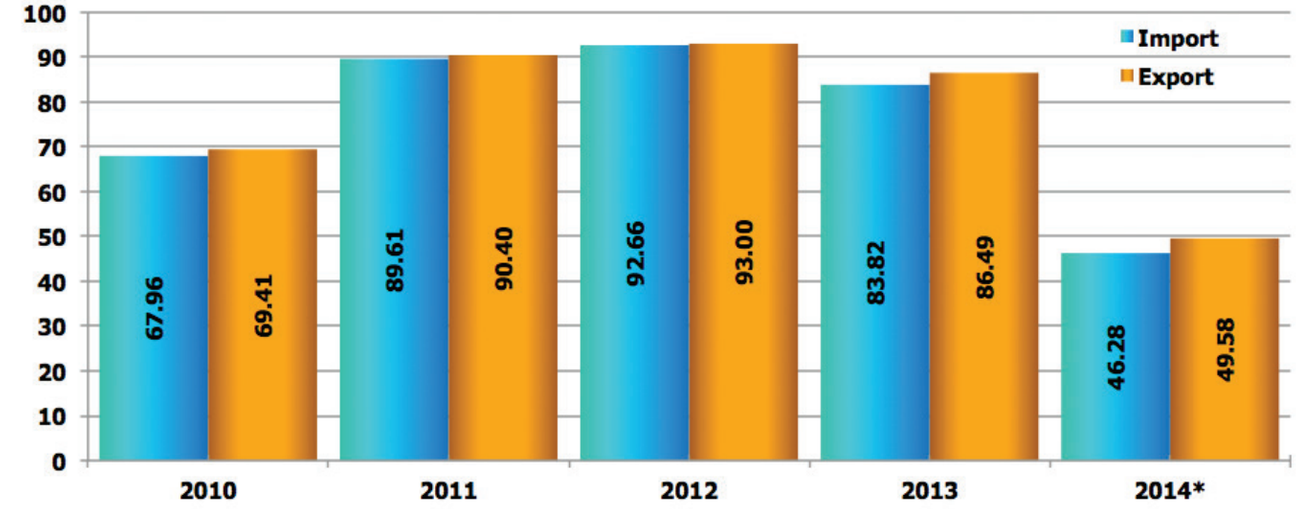
HS Code: 85.43
Data: TURKSTAT, NACE Rev.2 Calculation

5. GLOBAL PRODUCTION, CONSUMPTION, FOREIGN TRADE OF MACHINE TOOLS and TURKEY

5.1 Global Export and Import of Machine Tools

Metal Working and Machine Tools are grouped under Code 73 in SITC Rev.3 classification. This classification is different from NACE Rev.2 grouping, and is important in terms of providing information about the global trade of the sector. Included as Code 73 in SITC Rev.3 classification of UN COMTRADE database that consists of international trade data reported by countries, Machine Tools sector reached about 69 billion USD in global exports in 2010. Total global exports of the sector were valued at 90.4 billion USD in 2011 and 93 billion USD in 2012. However, global exports decreased to 86.5 billion USD in 2013, by a 7% percent drop from previous year. Variations in export and import figures in global trade are largely due to deviations between customs entry and clearance declarations of exporter and importer countries. Shares of top five countries in exports and imports between 2010 and 2013 provide information regarding the scale of export and import markets. As data pertaining to 2014 are incomplete, they have not been included in total figures. A notable change may occur in shares due to unavailability of data on various countries, especially China.

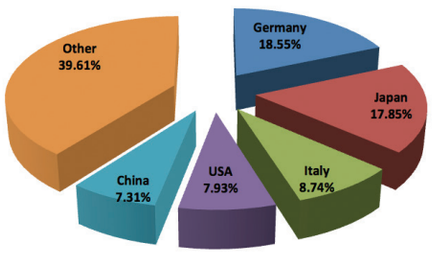
Graph45: GLOBAL TRADE OF METAL WORKING, MACHINE TOOLS
(SITC Rev 3, 73)



Data: United Nations, 2009, UN Comtrade Database
***2014 data are incomplete as figures of various countries have not yet been entered.**

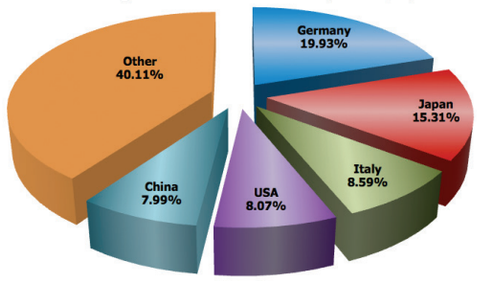
Germany has the largest share in total four-year global exports between 2010 and 2013. Germany is at the top of the list taking a share of 18.55% in total four-year global exports. Germany is followed by Japan with 17.85%, and Italy is third with 8.74%. The astonishing fact here is that Germany and Japan altogether assumed 36.4% of total global exports in this four-year period. Fourth top exporter country is USA, which is followed by China.

Graph46: Top 5 Countries in Metal Working and Machine Tool Exports
(SITC Rev 2, 73) (2010/2013 total exports in 4 years)



Data: UN COMTRADE

Graph47: Share of Top 5 Countries in 2013 Total Global Exports of Metal Working and Machine Tools Sector (SITC Rev 3, 73)

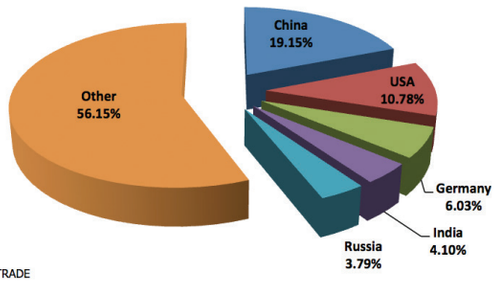


Data: UN COMTRADE

In 2013 stand-alone export figures, Germany hiked up its lion's share to 19.93%. Japan's share, on the other hand, is 15.31%, lower than four-year average. China and USA increased their shares in 2013 as compared to four-year average, whereas there was a slight decline in Italy's share in global exports. Nevertheless, the combined share of top five countries in total global exports has not gone through a signicant change. Other countries took a share of 39.61% in four-year average, and 40.11% in 2013 global exports.

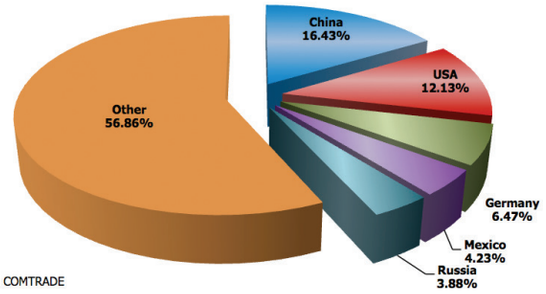
In total four-year global imports between 2010 and 2013, China has the largest share with 19.15%. USA is second with a share of 10.78% in total four-year global imports. Germany, which has the lion's share in exports, took a share of 6.03% in total four-year global imports. Another interesting point is that three of top five exporter countries are also on the list of top five importer countries. Fourth largest share in total four-year global imports belongs to India with 4.10%, followed by Russia with 3.79%.

Graph48: Top 5 Countries in Metal Working and Machine Tool Imports (2010/2013 total exports in 4 years)



Data: UN COMTRADE

Graph49: Share of Top 5 Countries in 2013 Total Global Imports of Metal Working and Machine Tools Sector (SITC Rev 3, 73)



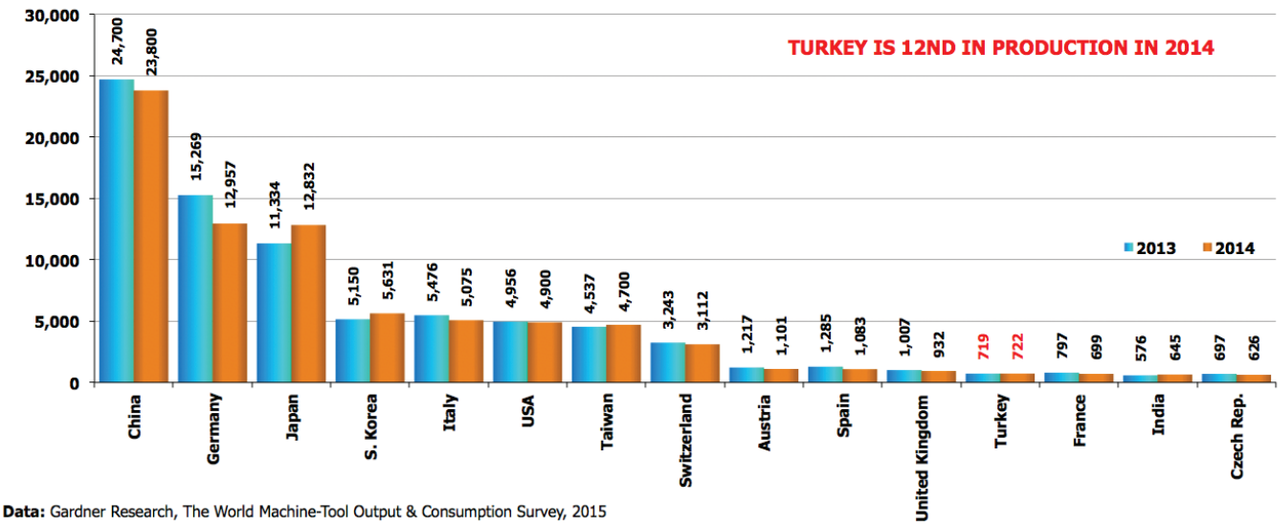
Data: UN COMTRADE

In terms of share distribution in global imports, 2013 is quite different from four-year import figures. Instead of India, which was one of the top five countries with largest shares in four-year global imports, Mexico joined 2013 stand-alone top global importers list. China's share in 2013 total global imports was 16.43%, substantially lower than four-year average. However, USA's share of 12.13% was higher than its four-year average. Germany took a share of 6.47% in 2013 global imports, showing no significant change compared to average figures. Mexico was fourth with a share of 4.23% in 2013 global imports, followed by Russia with a share of 3.88%.

5.2 Global Machine Tool Production/Manufacturing

Conducted and published annually by Gardner Research, The World Machine-Tool Output and Consumption Survey covers official data of 27 countries that undertake almost all of global Machine Tool output and consumption. According to the figures of the survey published at the beginning of 2015, total output of Machine Tool manufacturing sector in 2013 was about 83.9 billion USD. The survey reports that in 2014 output dropped by 3.1% to 81.3 billion USD from previous year.

Graph50: MACHINE TOOL MANUFACTURING BY COUNTRIES (MANUFACTURERS)

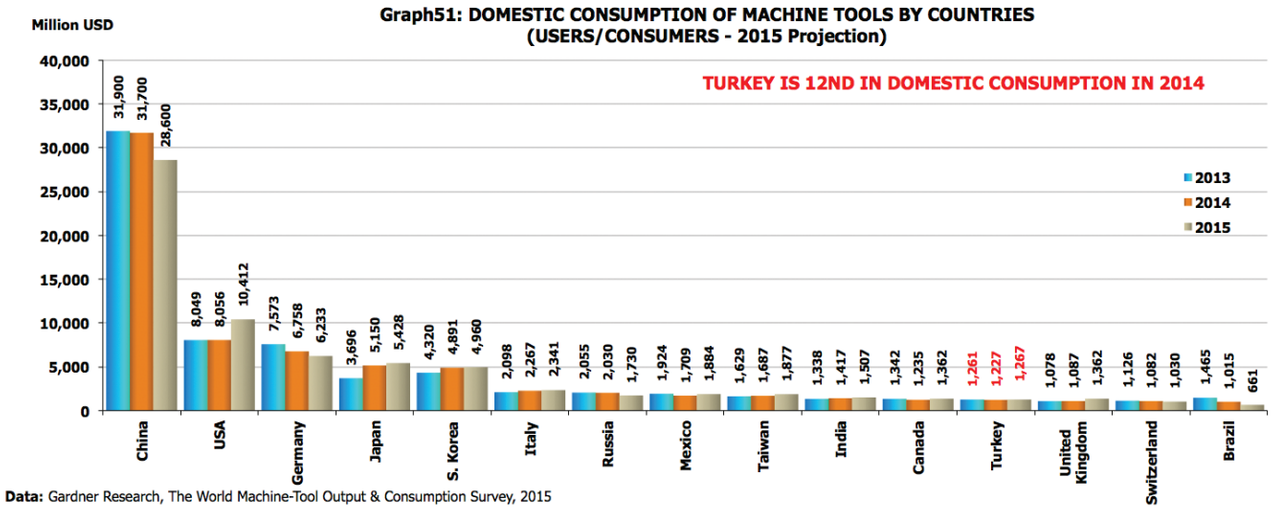


Data: Gardner Research, The World Machine-Tool Output & Consumption Survey, 2015

Despite a drop in 2014 output from previous year, China is at the top with 23.8 billion USD. Second country in manufacturing is Germany, whose output decreased by about 2.3 billion USD in 2014. Japan is third largest manufacturer, having boosted its output to 12.8 billion USD in 2014 from previous year. Turkey is the 12nd among 27 countries that undertake almost all of global Machine Tool production. No significant change occurred in Turkey's output, which increased by 0.4% from 719 million USD in 2013 to 722 million USD in 2014. 2014 data show that Turkey increased its share in total global output from previous year to 0.9%.

5.3 Global Consumption/Use of Machine Tools

Consumption figures obtained by adding balance of trade (+/-) to output amounts show that China is by far the top country in consumption. China's consumption fell by 200 million USD from 31.9 billion USD in 2013 to 31.7 billion USD in 2014. Decline in consumption is expected to speed up in 2015. In 2015, China's consumption is expected to decrease to 28.6 billion USD.

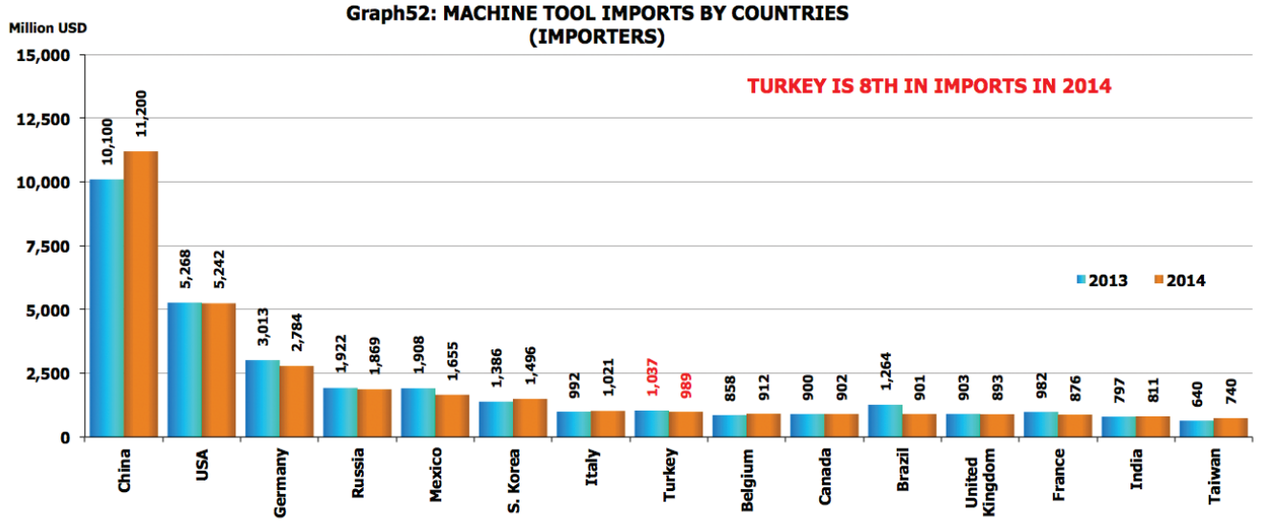


Data: Gardner Research, The World Machine-Tool Output & Consumption Survey, 2015

USA is second in the global consumption of Machine Tool products. In the last two years, USA's consumption was around 8 billion USD. According to forecasts, USA's consumption is expected to increase by about 25% to 10.4 billion USD in 2015. Germany, which is the top third country, is followed by Japan and South Korea. In 2015, a slight increase is expected in the consumption of both countries in 2015. As in the case with output, Turkey is the 12nd in consumption. In 2014, Turkey's consumption dropped by 34 million USD from previous year to 1.22 billion USD. According to projections, Turkey's consumption is expected to reach about 1.27 billion USD in 2015.

5.4 Global Import of Machine Tools

China is at the top global importer of Machine Tool products. China's imports were 10.1 billion USD in 2013, and increased to 11.2 billion USD in 2014. China is followed by USA, whose imports were nearly on same levels in 2013 and 2014. In 2014, USA's imports dropped by only 26 million USD from previous year to 5.2 billion USD.



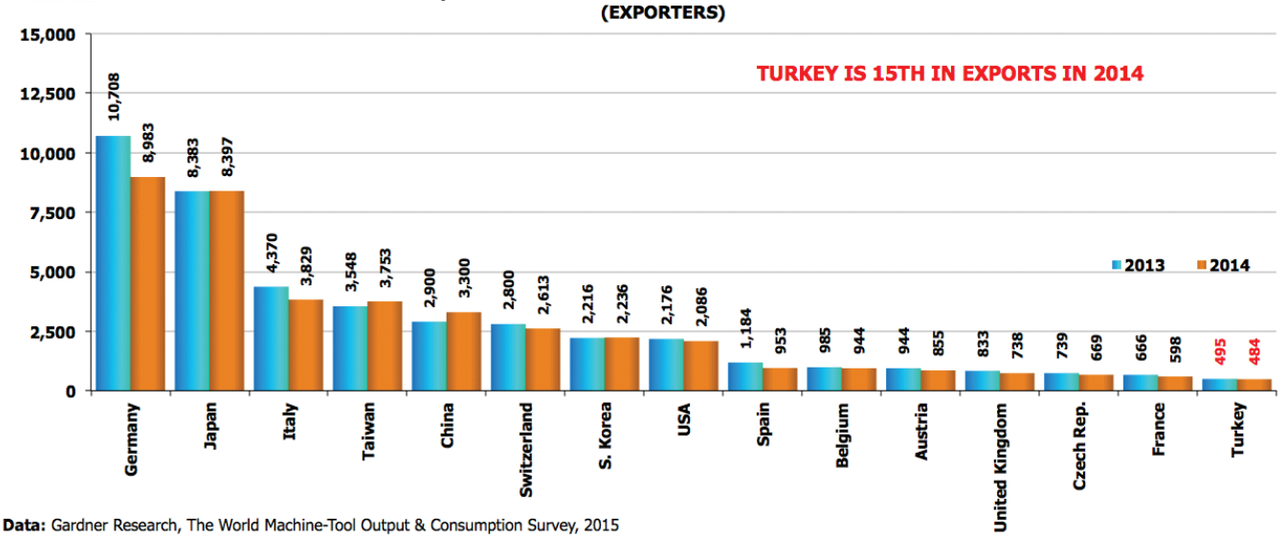
Data: Gardner Research, The World Machine-Tool Output & Consumption Survey, 2015

Germany, Russia and Mexico are the remaining countries within the top-five list of global importers. In 2014, imports by these countries shrank slightly from previous year. Germany's 2014 imports were about 2.8 billion USD, followed by Russia with 1.9 billion USD and Mexico with 1.6 billion USD in 2014. Turkey was the top 8th importer country. In 2013, Turkey's imports were valued at 1.04 billion USD, whereas this number fell to 989 million USD in 2014. Turkey is a high-potential key market among global Machine Tool markets.

5.5 Global Export of Machine Tools

Germany is the top exporter of Machine Tools industry products. However, the exports of the country considerably declined in 2014 from previous year. Germany's exports decreased from 10.7 billion USD in 2013 to about 9 billion USD in 2014. Second on the list, Japan's exports did not change considerably from 2013 to 2014. Japan's exports reached about 8.4 billion USD in 2014. Other countries in the top-five list of exporters are Italy, Taiwan and China. While Italy's exports fell from 2013, Taiwan and China's exports were on the rise. In 2014, Italy, Taiwan and China's exports were valued at 3.8 billion USD, 3.7 billion USD, and 3.3 billion USD respectively.

Graph53: MACHINE TOOL EXPORTS BY COUNTRIES (EXPORTERS)



Data: Gardner Research, The World Machine-Tool Output & Consumption Survey, 2015

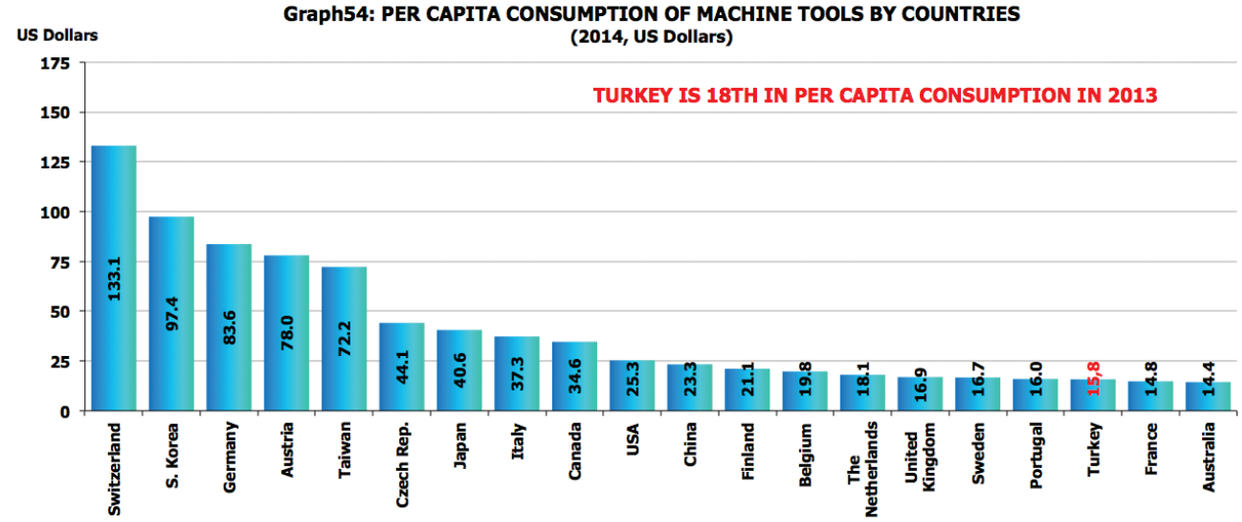
Turkey is 15th country in global exports. Turkey's exports fell from 495 million USD in 2013 to 484 million USD in 2014. Turkey is one of the leading exporters in the Machine Tools market, particularly in Machine Tools for forging, hammering, die forging, cutting, drafting, engraving forge press, and carbide finishing on metals. Gardner's data on Turkey's exports and imports vary from NACE Rev.2 grouping.

5.6 Per Capita Consumption of Machine Tools

Per capita consumption of Machine Tools is a key indicator that shows the industrial infrastructure of countries. Switzerland ranked first with 133.1 USD in per capita consumption of Machine Tools. Switzerland is followed by South Korea with 97.4 USD per capita. Other countries in the top five list are Germany, Austria and Taiwan respectively. A significant change is observed among the countries following top five countries.

Turkey is 18th in per capita Machine Tool consumption with 15.8 USD. This indicator is striking in terms of demonstrating Turkey's shortcomings in manufacturing industry infrastructure. The finding in question indicates that Turkey is a key market for Machine Tools.

Graph54: PER CAPITA CONSUMPTION OF MACHINE TOOLS BY COUNTRIES
(2014, US Dollars)

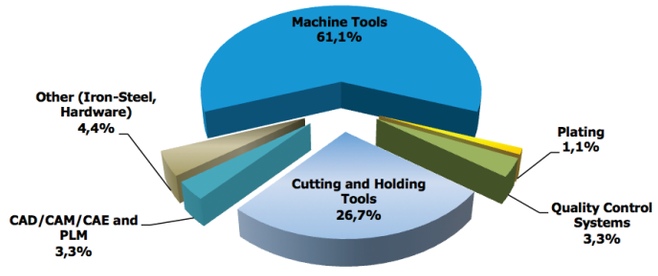


Data: Gardner Research, The World Machine-Tool Output & Consumption Survey, 2015

6. MACHINE TOOLS SECTOR AND TIAD MEMBERS' EXPECTATIONS FOR 2015

A survey has been conducted with TIAD members regarding the current situation of Machine Tools sector and their expectations for 2015. In terms of distribution by area of activity, 61.1% of TIAD members, an overwhelming majority, are Machine Tool distributors and nanufacturers. Those active in the field of cutting and holding tools rank second with 26.7%. Members who are in CAD/CAM/CAE and PLM, and quality control systems businesses are third and fourth in ranking. Distribution of TIAD members by their areas of activity is an important indicator showing TIAD's capability of representing the Machine Tools sector.

Graph55: Distribution of TIAD Members by Areas of Activity

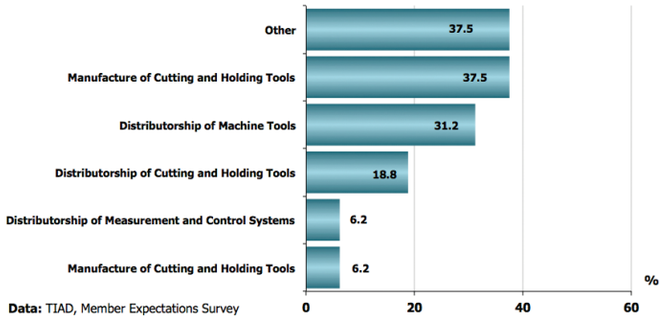


Data: TIAD

6.1 Survey Scope

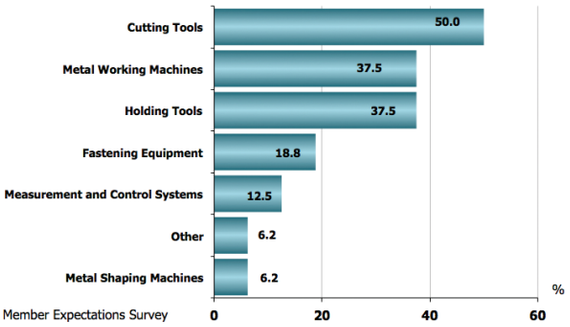
This field study conducted among TIAD members aims to determine the current situation, developments and 2015 expectations of the sector. Findings obtained from the responses given by participant enterprises have been briefly summarized in this section. Although participation rate has remained limited compared to the total number of TIAD members, this study functions as a trend analysis, and presents key findings related to the developments and expectations in the Machine Tools sector. Subsector and product group distributions of participant enterprises show that these findings can be used as indicators for the sector.
Proportional distributions are over 100% since participant enterprises are active in more than one field and product group. 50% of participant enterprises have stated that cutting tools are among their product groups, and 37.5% have stated that their business is related to Metal Working Machines.

Graph56: Distribution of Enterprises by Areas of Activity



Data: TIAD, Member Expectations Survey

Graph57: Distribution of Enterprises by Product Groups



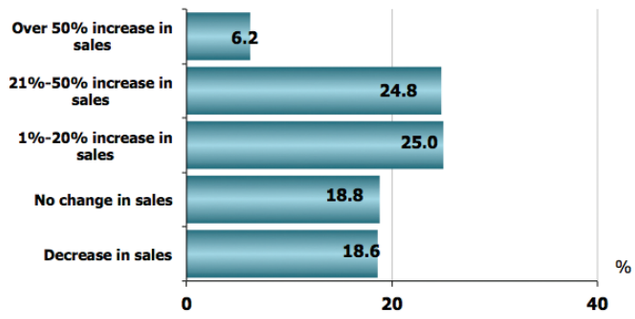
Data: TIAD, Member Expectations Survey

6.2 Sales Forecasts and Realizations

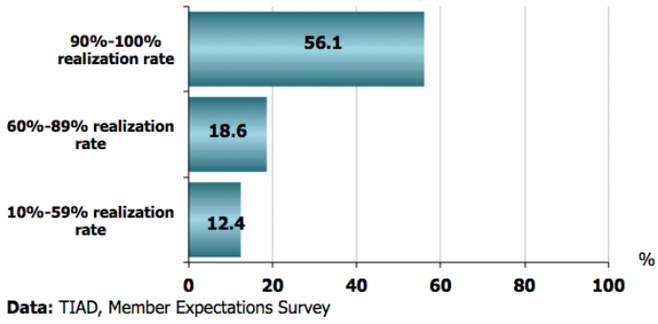
Responses given to questions about sales show that sales by 18.6% of the participating enterprises decreased from 2013 to 2014. This finding reveals that in 2014 a great majority of enterprises faced problems in sales. The ratio of enterprises whose sales remained the same is 18.8%. According to the survey, %25 of enterprises have stated that their sales increased by up to 20%, and sales of 24.8% increased by 21%-50%. In 2014, 6.2% of enterprises achieved a sales increase of over 50%.

Sales forecasts declared at the beginning of a new year is crucial for enterprises to plan their activities effectively throughout the year and for a more efficient budget management. 56% of the enterprises have stated that they largely reached their sales targets for 2014. Share of those who have stated that they fulfilled at least 60%-89% of their 2014 sales targets remained at 18.6%.

Graph58: Distribution of Enterprises by Sales Increase Rate in 2014



Grafik59: Distribution of Enterprises by Realization Rate of 2014 Sales Projections

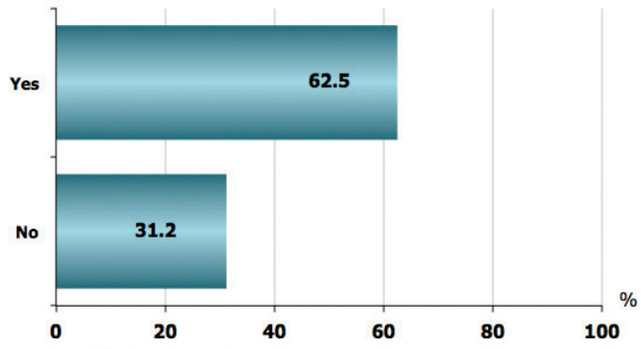


Data: TIAD, Member Expectations Survey

6.3 Profit Margin and Investments

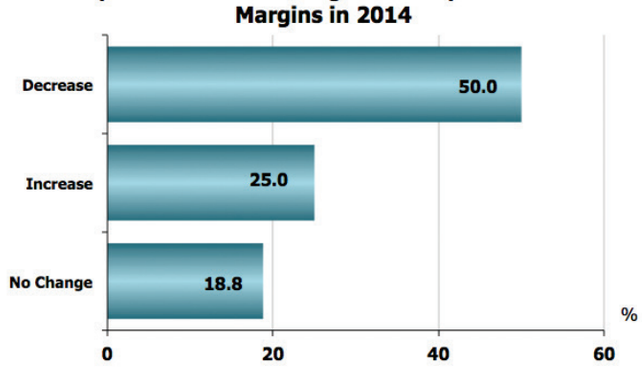
62.5%, which is a great majority, of participant enterprises have stated that they made investments in 2014. Another interesting finding of the survey is that the ratio of enterprises whose 2014 profit margins decreased from previous year reached 50%. 18.8% of enterprises have stated that they preserved their profit margins in 2014, which is to say that there was no improvement in their profit margins. In 2014, share of enterprises whose profit margins are said to have increased from previous year is 25%. When all data are taken into consideration, it is possible to say that 2014 did not turn out well in terms of profit margins, and competitiveness of the market escalated.

Graph60: Did you make any investments in 2014?



Data: TIAD, Member Expectations Survey

Graph61: Ratios of Change in Enterprises' Profit Margins in 2014

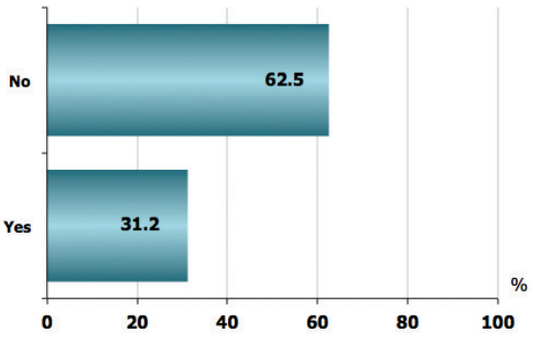


Data: TIAD, Member Expectations Survey

6.4 Exports and Imports

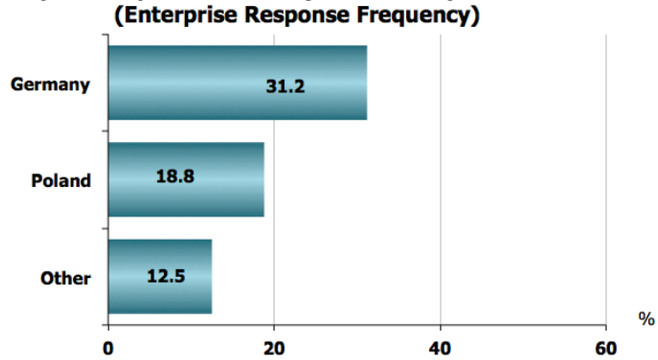
62.5% of enterprises have stated that they are not engaged in export activities. Considering the structure of the sector, it is possible to say that this ratio is consistent. Enterprises have been asked to indicate top three countries with largest shares in their exports. According to the findings obtained from the responses given to this question, Germany came first in terms of response frequency. 31.2% of enterprises have reported Germany as one of the top three countries by share in exports. Germany is followed by Poland with 18.8%. Group of other countries include Austria, Japan, Romania and Israel.

Graph62: Do you export goods or services?



Data: TIAD, Member Expectations Survey

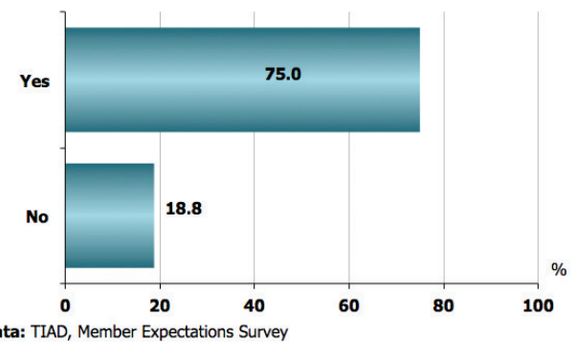
Graph63: Top 3 Countries by Share in Exports in 2014 (Enterprise Response Frequency)



Data: TIAD, Member Expectations Survey

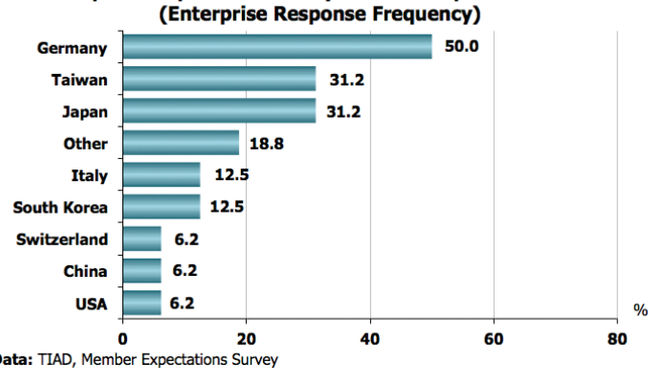
Importers make up 75% of the enterprises participating in the survey. Considering the fact that imports are inevitable for a lot of products in the sector, it can be said that this ratio is not very high. Germany comes first among top three countries with largest shares in the imports of participating enterprises. 50% of the enterprises have stated Germany among top three. 31.2% of the enterprises stated Taiwan and Japan in their responses. These two countries shared the second rank among top three countries. They are followed by Other (18.8%), Italy (12.5%) and South Korea (%12,5). China, USA and Switzerland took a share of 6.2% among top three countries in terms of response frequency.

Graph64: Do you import goods or services?



Data: TIAD, Member Expectations Survey

Graph65: Top 3 Countries by Share in Imports in 2014 (Enterprise Response Frequency)

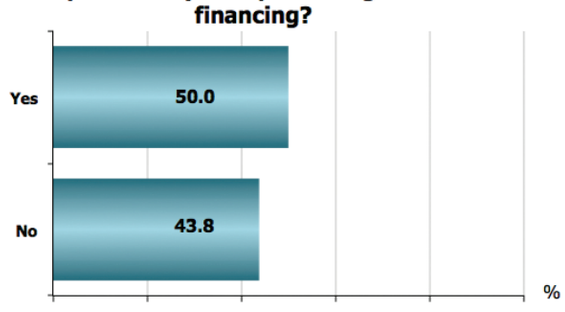


Data: TIAD, Member Expectations Survey

6.5 Financing

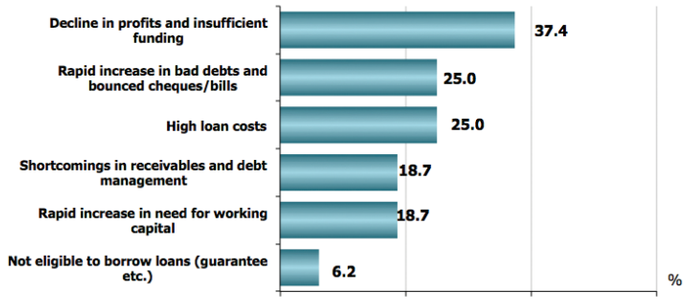
Financing issues, which stem from lack of capital accumulation, are among the most important problems faced by all industries. 50% of participating enterprises have stated that they have been experiencing financing issues. With a ratio of 37.4%, decline in profits and insufficient funding response is the first among the main reasons behind this problem Second top response is rapid increase in bad debts and bounced cheques/bills. %25 of enterprises have expressed that they have been encountering such issues. This ratio is highly interesting. High loan costs have been shown as one of the most important reasons behind financing problems by 25% of participating enterprises. Considering the fact that the sector is largely comprised of small and medium sized enterprises, it is possible to say that this problem affects a great number of enterprises. Top factors expressed by the enterprises indicate that 2014 was not that that positive in terms of entrepreneur climate.

Graph66: Are you experiencing issues in financing?



Data: TIAD, Member Expectations Survey

Graph67: Factors Leading to Issues in Financing, Ratio of "Important" and "Very Important" Responses

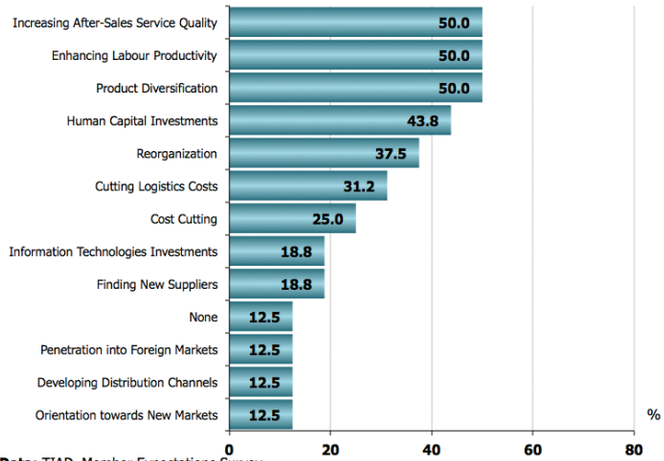


Data: TIAD, Member Expectations Survey

6.6 Areas of Improvement

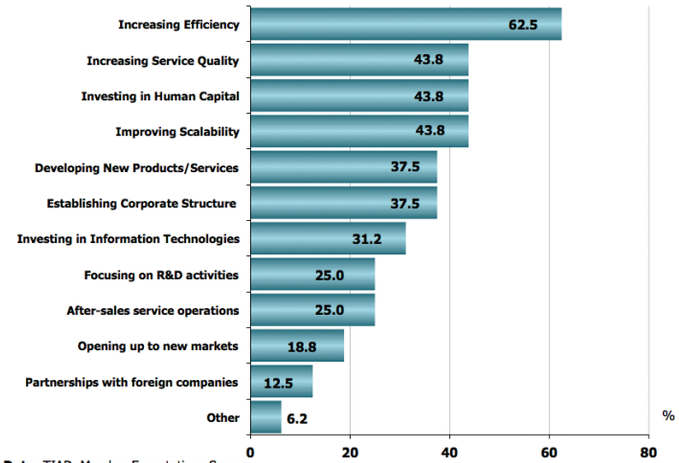
50% of enterprises have stated that they made improvements and progress in terms increasing after-sales service quality, labour productivity, and product diversification in 2014. The ratio of enterprises that have invested in human capital is 43.8%. Considering the area of activity of the sector, the importance of these focused-on factors for the sector becomes more evident. Reorganization (37.5%) and cutting logistics costs (31.2%) are other significant areas of improvement. These areas are followed by cost cutting, information technologies investments and finding new suppliers. These findings reveal that 2015 is going to be a period marked by concentration on efficiency for enterprises. 62.5% of enterprises have expressed that they are going to focus on enhancing efficiency. Increasing service quality, investing in human capital and improving scalability take the second largest share in focus-on areas with 43.8%. It is interesting that improving scalability takes the second place. This is a positive trend for the sector in terms of increasing competitiveness in the sector and achieving competitiveness in international markets. Establishing corporate structure and developing new products/services have been reported as focus-on areas by 37.5% of enterprises

Graph68: Areas Improved or Developed by Enterprises in 2014



Data: TIAD, Member Expectations Survey

Graph69: Focus-on and Investment Areas for 2015



Data: TIAD, Member Expectations Survey

6.7 Problems of the Sector

Within the scope of responses given to questions regarding the top priority problems of the sector, customs legislation ranks the first with 3.67 out of 5 points by degree of importance. 68.8% of participating enterprises have marked this problem as important or very important.

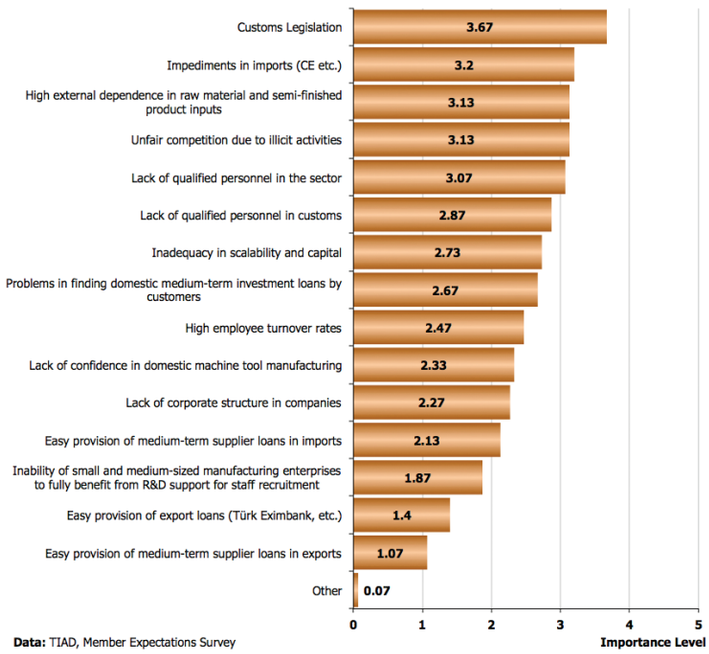
Impediments in imports rank second in point average (3.2 points). Yet, share of enterprises that have marked this problem as important or very important has remained at 56.3%, and therefore its rank has fallen back to fourth. In other words, although its point average is high, this problem has been indicated as important or very important by fewer enterprises.

Another interesting survey finding is that high external dependence problem in raw material and semi-finished product inputs ranks third by a narrow margin in points, yet second by degree of important/very important responses. This factor is evidently one of the most significant problems of the sector.

Other problems that are included within top five in both assessments are unfair competition due to illicit activities, and lack of qualified personnel in the sector. These two problems are clearly important and need to be overcome for Machinery and Equipment Manufacturing industry, as well as for its Machine Tools subsector.

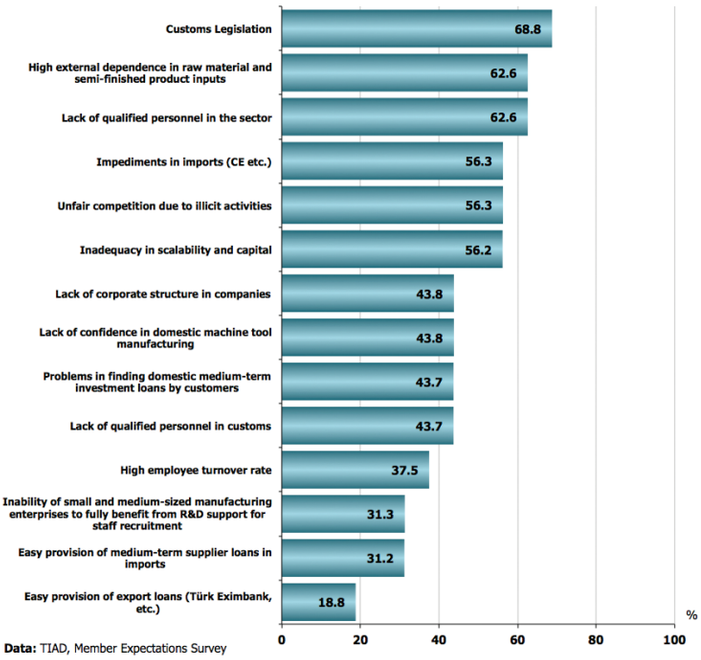
Moreover, issues such as high RUSF (Resource Utilization Support Fund) rates in deferred payment imports, gradual slowdown in profit margins, economic and social turmoils and wars in neighbouring countries, recent fluctuations in exchange rates, long-term payment plans in sales, and problems encountered in debt collection are also included among the problems faced by the industry. Problems related to high RUSF rates in deferred payment imports have been solved as the rate has recently been set to zero.

Graph70: Problems in Machine Tools Sector by Degree of Importance Stated by Participant Enterprises (Very important-5 points)



Data: TIAD, Member Expectations Survey

Graph71: Problems of Machine Tools Sector, Share of "Important" and "Very Important" Responses

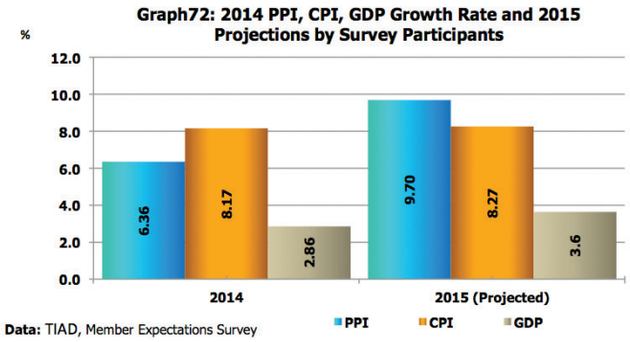


Data: TIAD, Member Expectations Survey

6.8 2015 Projections for Basic Economic Indicators

CPI, PPI, GDP

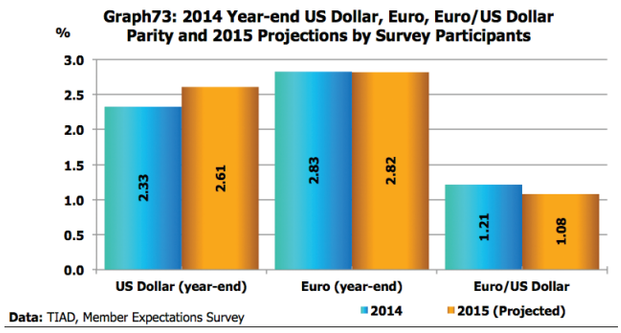
GDP growth rate of the last quarter is 2.6%, whereas 2014 overall GDP growth rate is 2.86% after adjustments in projections of the first three quarters. Enterprises participating in the survey expect a 0.78 percentage point increase in 2015 GDP growth rate, which totals 3.64%. This is the weighted average of participants' projections. Participant enterprises estimate that CPI will remain at 8.27% in 2015, which was 8.17% in 2014. Briefly, an increase of 1.2% is being expected in consumer prices.



No significant change is expected in consumer prices in 2015, yet producer prices are expected to increase by 52.5%. Participant enterprises estimate that PPI will hike to 9.7% in 2015 from 6.36% in 2014. This expectation leads to the anticipation that producer prices, which increase more slowly than consumer prices, will turn the tide in 2015.

Year-end US Dollar and Euro Projections

Year-end exchange rate projections show no tangible shift in Euro from 2014 year-end, on the other hand, a subtantial increase is expected in US Dollar exchange rate. 2015 estimates show that US Dollar, which was 2.33 TRY at the end of 2014, will close the year with 2.61 TRY. This projection translates into the expectation that US Dollar will appreciate by 12% against TRY. It also shows that US Dollar, which pushed up to 2.70 TRY by mid-April, is not expected to remain at this level. Despite the upward expectation in US Dollar, no change is expected in Euro. 2015 year-end projection shows that Euro, which was 2.83 TRY at the end of 2014, will remain at 2.82 TRY. This projection also reflects the expectation that Euro will remain around the same level it has reached since the beginning of 2015 against the US Dollar.



Projections show that Euro/US Dollar parity will drop from 1.21 in 2014 year-end to 1.08 in 2015 year-end. Given that the parity is very close to 2014 figures, it is possible to expect that the balance between Euro/US Dollar will be preserved until year-end. Despite the upward expectation in US Dollar, no change is expected in Euro. 2015 year-end projection shows that Euro, which was 2.83 TRY at the end of 2014, will remain at 2.82 TRY. This projection also reflects the expectation that Euro will remain around the same level it has reached since the beginning of 2015 against the US Dollar.

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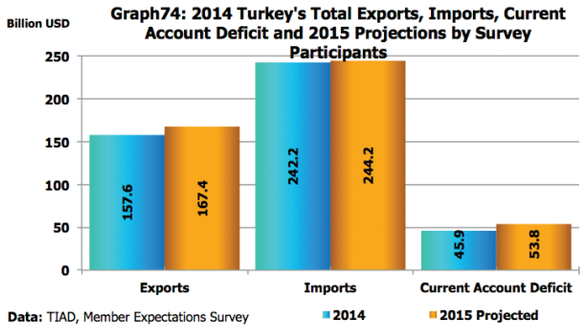
Exports, Imports and Current Account Deficit

Amidst economic and social turmoil in its neighbouring high-volume trade partners, Turkey succeeded in increasing its exports by 3.8% in 2014 despite a slowdown trend compared to previous years. Turkey's exports reached 157.6 billion USD in 2014.



The enterprises participating in the survey anticipate an increase in exports in 2015, as well. Their projection for 2015 total exports is 167.4 billion USD. This means a 6.2% increase in 2015 from previous year.

Turkey's imports, which were 251.7 billion USD in 2013 dropped to 242.2 billion USD in 2014. Participating enterprises predict that this downward trend in imports will not continue in 2015. Projection for 2015 imports is 244.2 billion USD, increasing by just 0.8%.

Projections for 2015 exports and imports reveal that no significant improvement is estimated in exports to imports ratio when compared to 2014. Exports to imports ratio was 65.1% in 2014, whereas it increased to 68.6% in 2015 projection. In 2014, trade deficit reached 84.6 billion USD. According to 2015 projections, trade deficit is expected to fall to 76.8 billion USD. Despite downward expectation in trade deficit, current account deficit is estimated to increase by 17% in 2015. 12-month current account deficit was 45.9 billion USD in 2014. 2015 current account deficit projection of participating enterprises is 53.8 billion USD.

2841 - Metal Working Machines Manufacturing, Export and Import

8456 (Machines and tools for processing materials through abrasion with laser, photon, ultrasonic and other waves etc.) EXPORT-USD													
Table1		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
845610001000	Machines for processing metals/metal carbides through rays such as laser, photon etc.				1.606.455	1.622.000	2.476.666	3.733.365	12.163.871	14.989.877	25.796.272	56.492.372	5.201.553
845610002000	Machines for processing stone, ceramic, concrete, asbestos cement etc. through rays such as laser, photon etc.				61.201	21.058	49.541	43.392	7.249	99.819	18.567	25.317	
845610003000	Machines for processing wood, cork, bone, ebonite through rays such as laser, photon etc.				39.901	456.810	210.280	30.784	194.572	96.161	146.507	366.382	10.451
845610009000	Machines for processing other materials through rays such as laser, photon etc.			697.311	498.071	4.882.415	4.759.798	10.096.262	11.204.088	17.924.195	21.817.590	9.495.658	1.985.613
845620001000	Machines for processing metals/metal carbides through ultrasonic method	2.694	3.225	747	3.363	25.906	17.584	36.751	4.355	27.912	426.536	19.351	2.643
845620002000	Machines for processing stone, ceramic, concrete, asbestos cement etc. through ultrasonic method	0	22.625	1.236	7.749	0	3.329	4.244	0	0	0	1.900	
845620009000	Machines for processing other materials through ultrasonic method	6.876	16.003	129.269	23.217	7.722	7.114	148.550	200.894	207.872	99.430	468.170	0
845630110000	Numerical control electrical discharge machines for wire cutting	163.098	0	11.933	316.796	336.577	204.232	134.189	391.290	233.451	84.140	1.701.705	1.069
845630191000	Numerical control electrical discharge machines for processing metals/metal carbides	326.245	1.203.623	3.004.753	2.798.503	5.268.817	4.659.922	5.827.323	8.542.030	7.944.667	8.792.199	6.638.472	169.512
845630192000	Numerical control electrical discharge machines for processing stone, ceramic, concrete etc.	6.322	9.000	44.466	0	34.962		51.422	175.041	2.480	0	2.576	
845630199000	Numerical control electrical discharge machines for processing other materials	0	10.037	108.485	226.787	1.350	30.446	383	11.000	6.700	312.067	1.078.005	747.794
845630901000	Other control type electrical discharge machines for processing metals/metal carbides	106.375	30.748	474.709	40.389	1.045.435	1.511.054	1.482.176	1.697.383	3.797.805	3.070.053	3.363.920	324.035
845630902000	Other control type electrical discharge machines for processing stone, ceramic, concrete etc.		1.640	0		3.973	195	67.774		8.620	10.477	0	
845630909000	Other control type electrical discharge machines for processing other materials	14.577	16.882	73.032	732.876	141.732	32.245	200.405	417.245	394.877	919.913	1.144.051	146.992
845690001000	Other machines for processing metals/metal carbides				200.358	2.401.063	4.303.118	4.289.172	6.185.953				
845690002000	Other machines for processing other mineral materials such as stone, ceramic, concrete, asbestos cement etc.				17.634	37.106	22.514	44.606	178.536				
845690003000	Other machines for processing wood, cork, bone, ebonite and artificial plastic materials				94.176	48.117	55.872	18.021	260				
845690004000	Electrolytic polishing machines				226.443	393.982	370.110	122.022	66.791				
		626.187	**1.313.783**	**4.545.941**	**6.893.919**	**16.729.025**	**18.714.020**	**26.330.841**	**41.440.558**	**45.734.436**	**61.493.751**	**80.797.879**	**8.589.662**

8457 (Metal working machining centers, single-station machines and multi-station transfer machines) EXPORT-USD													
Table2		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
845710100000	Horizontal machining centers for metal working	468.469	7.233.305	392.077	2.676.909	154.285	810.485	264.819	646.629	567.415	898.901	446.107	435.499
845710900000	Other machining centers for metal working	3.114.297	1.806.809	2.304.016	1.665.185	2.130.012	8.439.930	2.761.947	1.749.256	2.588.172	2.685.592	4.788.712	2.419.386
845720000000	Single-station machines for metal working	20.494	3.865	0	63.789	26.289	29.107	91.915	99.200	116.165	112.920	45.506	0
845730100000	Numerical control multi-station transfer machines	0	117.829	10.607	13.417	626.571	34.368	30.944	76.237	60.360	42.409	65.344	0
845730900000	Other multi-station transfer machines	105.690	277.921	306.308	455.063	3.010.103	506.991	217.756	1.444.535	697.649	2.377.988	689.901	65.496
		3.708.950	**9.439.729**	**3.013.008**	**4.874.363**	**5.947.260**	**9.820.881**	**3.367.381**	**4.015.857**	**4.029.761**	**6.117.810**	**6.035.570**	**2.920.381**

8458 (Metal working lathes [incl. turning centers]) EXPORT-USD													
Table3		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
845811200000	Numerical control horizontal turning centers	0	0	52.448	133.565	235.990	950.316	970.434	1.148.203	109.154	923.693	793.498	21.148
845811410000	Numerical control single-spindle automatic horizontal lathes	240.687	1.439.680	348.233	465.365	1.206.332	429.816	504.080	220.334	856.331	658.696	321.280	87.238
845811490000	Numerical control multi-spindle automatic horizontal lathes	21.527	54.500	115.377	52.555	40.000	846.925	63.107	21.029	117.612	61.895	206.359	0
845811800011	Numerical control horizontal facing lathes	0	0	0	0	29.904	25.748	2.363	33.806	25.018	20.766	65.260	
845811800012	Numerical control horizontal banding lathes	0	0		0		0	0	1.876		20.039	0	
845811800013	Numerical control horizontal eccentric turning lathes			25.100	12.609	0	22.970	10.933	1.628	25.132	73.096	62.386	
845811800014	Numerical control horizontal single-spindle rod and chuck automatic lathes	22.551	31.427	25.492	4.365	0	0	10.133	0	0	0	700	0
845811800015	Numerical control horizontal multi-spindle rod and chuck automatic lathes	10.019	0		0	0	3.903	0	0	0	0	0	0
845811800016	Numerical control horizontal automatic lathes	0		0	0	101.771	0	0	0	2.043	7.618	49.800	0
845811800019	Other numerical control horizontal metal working lathes	51.303	331.525	133.746	263.644	597.522	154.272	212.101	281.878	842.603	603.945	703.136	246.160
845819000000	Other lathes for metal working						1.107.531	1.093.718	697.483	854.679	2.488.572	1.257.924	299.959
845891200000	Other numerical control turning centers	62.583	920.711	0	0	99.000		162.497	62.709	11.897	106.861	6.432	8.383
845891800000	Other numerical control lathes	57.597	268.123	351.386	376.493	143.803	257.308	1.078.776	328.867	239.090	556.906	681.021	27.202
845899000000	Other non-numerical control lathes	771.455	479.503	767.445	713.493	1.480.418	1.577.171	1.669.904	2.550.612	564.860	1.969.661	1.078.502	177.540
		1.237.722	**3.525.469**	**1.819.227**	**2.022.089**	**3.934.740**	**5.375.960**	**5.778.046**	**5.348.425**	**3.648.419**	**7.491.748**	**5.226.298**	**867.630**

8459 (Machine tools for boring, reaming, milling, threading etc. metals through machining) EXPORT-USD													
Table4		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
845910000000	Slide processing units	291.551	19.662	19.151	0	88.309	0	2.797	979	34.866	47.655	191.861	6.204
845921000000	Other numerical control drilling machines	**110.946**	**555.445**	**97.120**	**341.394**	**1.276.678**	566.280	1.409.875	2.511.153	2.217.104	3.643.541	3.992.913	121.646
845921000011	Numerical control bench type drilling machines	13.917	400	370	2.677	0							
845921000012	Numerical control pillar drilling machines (single-spindle)	10.761	14.581	26.365	17.431	58.003							
845921000013	Numerical control coordinate drilling machines		3.516	0	0	0							
845921000014	Numerical control special drilling machines	5.100	470.619	8.521	106.114	439.477							
845921000019	Other numerical control drilling machines	81.168	66.329	61.864	215.172	779.198							
845929000000	Other non-numerical control drilling machines	**460.143**	**455.505**	**688.237**	**772.276**	**920.570**	503.740	633.893	523.633	1.016.275	1.229.761	1.485.000	294.220
845929000011	Non-numerical control bench type drilling machines	28.843	16.064	16.017	3.650	37.020							
845929000012	Non-numerical control pillar drilling machines (single-spindle)	79.484	62.072	96.323	103.228	191.223							
845929000013	Non-numerical control coordinate drilling machines	3.400	40.000	1.189		108.998							
845929000014	Non-numerical control special drilling machines	4.131	2.474	60.016	110.069	28.024							
845929000019	Other non-numerical control drilling machines	344.285	334.895	514.692	555.329	555.305							
845931000000	Numerical control reaming, milling machines	1.550	16.122	30.526	13.162	4.490	0	259.232	99.307	0	0	70.393	35.935
845939000000	Non-numerical control reaming, milling machines	30.896	624.738	40.550	1.171.077	132.139	157.669	317.180	228.917	319.265	168.852	39.160	3.289
845940100000	Other numerical control reaming machines		0	0	0		0	0	0	0	15.000	0	
845940900000	Other non-numerical control reaming machines	7.173	540	2.626	4.631	5.346	20.462	336	91.040	2.830	58.401	25.000	0
845951000000	Numerical control console type milling machines		0	0		500	0	507	0	4.851	0	11.679	0
845959000000	Non-numerical control console type milling machines	15.092	16.865	140.419	55.824	428.997	59.807	133.738	209.495	93.432	168.650	226.643	94.470
845961100000	Numerical control gang mills	7.190	93.098	13.758	22.945	9.992	55.679	245.086	84.277	74.420	197.637	743.851	230.782
845961900000	Other numerical control milling machines	**651.602**	**2.030.406**	**3.347.796**	**5.276.073**	**4.028.329**	2.651.309	3.236.678	4.046.861	2.910.422	4.017.258	836.878	711.386
845961900011	Numerical control vertical milling machines	572.265	1.922.967	2.983.055	4.508.255	3.656.155							
845961900012	Numerical control horizontal milling machines	3.988	5.517	0	6.965	0							
845961900013	Numerical control moulder milling machines	42.007	0	96.390	38.639	41.724							
845961900019	Other numerical control milling machines	33.342	101.922	268.351	722.214	330.450							
845969100000	Non-numerical control gang mills	1.539	0	398.409	1.340.520	1.916.332	867.186	676.022	1.317.517	1.230.381	1.428.172	880.188	100.274
845969900000	Other milling machines	**1.894.898**	**2.190.940**	**3.484.279**	**1.948.833**	**1.212.432**	1.041.424	1.868.473	1.247.073	2.375.185	1.252.352	1.085.566	86.246
845969900011	Non-numerical control universal milling machines	28.502	90.413	20.697	52.090	178.658							
845969900012	Non-numerical control vertical milling machines	99.355	36.566	24.792	109.762	237.897							
845969900013	Non-numerical control horizontal milling machines	6.385	4.700	42.491	63.981	0							
845969900014	Non-numerical control moulder milling machines	39.056	78.372	479.557	79.565	98.497							
845969900019	Other non-numerical control milling machines	1.721.600	1.980.889	2.916.742	1.643.435	697.380							
845970000000	Other thread/screw cutting machines	387.677	1.098.489	266.526	1.018.710	3.173.335	400.730	369.570	1.709.861	437.345	562.508	573.237	46.101
		3.860.257	**7.101.810**	**8.529.397**	**11.965.445**	**13.197.449**	**6.324.286**	**9.153.387**	**12.070.113**	**10.716.376**	**12.789.787**	**10.162.369**	**1.730.553**

8460 (Tools for polishing, deburring, sharpening, grinding, honing, lapping etc. metals and cermets) EXPORT-USD													
Table5		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846011000000	Numerical control flat surface grinding machines (0, 01 mm. adjusted)	120.010	35.805	1.643	25.490	13.959	86.684	6.670	32.000	54.317	1.644.247	1.809	124
846019000000	Non-numerical control flat surface grinding machines (0, 01 mm. adjusted)	200.794	327.099	173.377	499.701	314.492	472.719	639.992	529.227	820.217	280.919	2.701.750	135.951
846021110000	Numerical control internal cylindrical grinding machines (0, 01 mm. adjusted)	1.437	947.903	29.092	5.100	0	11.944	411.126	683	547.917	99.387	187.361	0
846021150000	Numerical control centerless grinding machines (0, 01 mm. adjusted)	0	0	1.341	576	132	250	9.612	1.364	0	0	122.880	0
846021190000	Other numerical control grinding machines for cylindrical surfaces (0, 01 mm. adjusted)	35.900	20.204	17.013	532.357	90.404	41.339	225.749	138.217	646.990	360.693	280.217	125.161
846021900000	Other numerical control grinding machines for other surfaces	416.351	2.135.231	715.462	314.596	1.258.902	589.506	1.073.169	579.880	572.030	541.589	426.703	14.207
846029100000	Other non-numerical control grinding machines for cylindrical surfaces (0, 01 mm. adjusted)	**102.121**	**136.145**	**460.642**	**172.427**	**73.937**	119.287	146.019	108.714	363.397	65.523	12.636	9.477
846029110000	Non-numerical control internal cylindrical grinding machines (0, 01 mm. adjusted)	26.205	14.085	11.823	5.001	5.102							
846029190000	Other non-numerical control grinding machines for cylindrical surfaces (0, 01 mm. adjusted)	75.916	122.060	448.819	167.426	68.835							
846029900000	Other non-numerical control grinding machines for other surfaces (0, 01 mm. adjusted)	682.732	1.052.714	642.148	1.186.360	3.131.202	1.699.297	1.305.524	727.984	840.627	784.409	421.021	184.019
846031000000	Numerical control sharpening machines	6.311	196.468	19.247	27.000	1.635	9.686	134.241	64.943	337.154	953.735	511.822	14.506
846039000000	Non-numerical control sharpening machines	654.196	869.279	1.157.960	2.115.409	2.353.629	838.882	1.150.726	1.519.709	1.786.392	962.229	2.360.971	320.258
846040100011	Numerical control honing machines	32.997	10.454	36.490	19.559	105.487	98.954	95.539	96.034	37.822	49.350	127.244	97.000
846040100012	Numerical control lapping machines	0	323	48.000	0	0	636	0	0	13.024	366.639	0	0
846040900011	Non-numerical control honing machines	146.902	153.342	225.849	147.256	625.233	581.420	254.598	112.275	140.011	86.937	190.837	8.900
846040900012	Non-numerical control lapping machines	3.237	7.965	0	1.757	14.441	34.552	26.590	65.033	84.425	3.076	9.867	0
846090100011	Rectifying machines (Less than 0, 01 mm. adjusted)	0	28.486		4.988	37.256	49.260	70.160		14.280	50.000	130.001	
846090100019	Other micrometric adjustment system machines (Less than 0, 01 mm. adjusted)	177.165	2.553.516	78.002	41.635	440.122	0	9.857	0	28.876	23.738	62.433	0
846090900011	Rectifying machines (Over 0, 01 mm. adjusted)	390.338	317.487	171.643	325.014	923.851	161.305	272.506	548.572	493.115	348.184	145.415	8.444
846090900019	Other micrometric adjustment system machines (Over 0, 01 mm. adjusted)	2.562.921	2.658.999	5.006.295	8.196.779	12.356.643	4.954.866	7.816.357	5.506.789	5.152.741	7.771.274	6.407.853	810.146
		5.533.412	**11.451.420**	**8.784.204**	**13.616.004**	**21.741.325**	**9.750.587**	**13.648.435**	**10.031.424**	**11.933.335**	**14.391.929**	**14.100.820**	**1.728.193**

8461 (Tools for working metals or cermets through machining such as shaping, bevelling, broaching, gear shaping, sawing, slitting) EXPORT-USD													
Table6		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846120000011	Shaper machines	9.279	2.654	7.363	1.995	2.799	7.766	1.476	42.782	3.296	20.298	0	0
846120000012	Bevelling machines	2.000	57.193	64.718	287.031	783.081	142.414	6.373	62.359	118.021	102.835	24.576	6.037
846130100000	Numerical control broaching machines	30.912	379.884	0		9.080	0	0		0	0	0	
846130900000	Non-numerical control broaching machines	288.453	90.510	16.307	114.501	147.305	109.605	30.002	19.565	38.193	42.342	335.226	0
846140110000	Numerical control gear shaping machines for gear wheels	5.178	346	229	0	93.403	0	0	0	136.358	178.384	131.908	0
846140190000	Non-numerical gear shaping machines for gear wheels	23.939	14.082	27.767	66.062	12.586	677.770	40.312	3.754	19.561	10.867	78.114	8.404
846140310000	Numerical control gear shaping machines for other gears		0	0	0	0	0	0	7.786	0	0	18.749	4.138
846140390000	Non-numerical control gear shaping machines for other gears	68.259	78.984	55.380	146.036	63.875	51.361	105.487	101.279	86.225	38.232	138.793	81.912
846140710011	Numerical control gear grinding machines (0, 01 mm. adjusted) (0, 01 mm. adjusted)	0	158.999	8.982	40.870	375.561	3.336	186	1.630	1.618	0	0	0
846140710012	Numerical control gear finishing machines (0, 01 mm. adjusted)	0	788.139	0	5.374	0	0	0	0	0	0	0	
846140790011	Non-numerical control gear grinding machines (0, 01 mm. adjusted)	0	1.592	0	0	364.656	0	4.723	7.302	0	0	8.461	227.402
846140790012	Non-numerical control gear finishing machines (0, 01 mm. adjusted)		0	0	0	29.651		0	0	0		0	
846140900011	Non-micrometric adjustment system gear grinding machines	45.746	9.098	104.218	14.888	37.784	0	30.564	43.774	5.916	6.425	330.832	23.015
846140900012	Non-micrometric adjustment system gear finishing machines	0	0	5.791	32.539	0	0	3.633	110	18.200	56.707	33.823	0
846150110000	Sawing machines with circular saws	107.237	120.238	551.981	1.145.754	1.750.987	1.295.338	1.386.731	1.072.951	1.339.328	1.920.032	2.044.281	368.042
846150190000	Sawing machines with other saws	4.957.167	4.702.252	6.443.617	9.658.676	11.455.744	5.610.486	5.739.517	7.646.801	7.551.518	7.873.548	8.339.837	1.145.693
846150900000	Slittering machines	4.034.137	5.273.053	7.793.289	7.901.166	7.200.016	5.589.993	8.291.961	12.046.922	10.976.686	9.517.371	7.040.416	844.851
846190000000	Other various metal machines	1.796.293	1.351.021	2.273.938	5.180.548	5.414.553	3.577.551	2.494.824	1.827.340	2.149.976	4.386.775	1.364.942	151.849
		11.368.600	**13.028.045**	**17.353.580**	**24.595.440**	**27.741.081**	**17.065.620**	**18.135.789**	**22.884.355**	**22.444.896**	**24.153.816**	**19.889.958**	**2.861.343**

8462 (Machine tools for forging, hammering, die forging, cutting, drafting, engraving forge press, carbide finishing on metals) EXPORT-USD													
Table7		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846210100011	Numerical control forging machines	102.294	1.050	0	0	0	688.456	2.162.518	94.000	166.000	163.555	0	240.557
846210100019	Numerical control die forging machines and hammers	218.505	124.106	373.442	624.279	352.153	193.255	391.401	113.764	987.610	813.256	217.181	13.397
846210900011	Non-numerical control forging machines	370.026	310.450	368.368	447.414	491.565	432.056	227.262	788.807	189.071	193.343	835.856	17.328
846210900019	Non-numerical control die forging machines and hammers	995.367	660.909	1.102.617	1.444.020	1.057.032	2.724.460	1.135.270	1.419.603	2.143.902	2.198.706	5.774.344	858.614
846221100000	Numerical control folding, straightening machines for flat products	12.550.392	20.781.798	33.305.102	38.808.623	75.524.637	35.545.980	43.141.009	55.009.342	56.091.500	58.666.652	56.718.709	6.162.326
846221800000	Numerical control folding, straightening machines for other products	747.293	1.221.319	2.360.871	3.210.320	3.495.606	2.821.956	2.539.166	5.967.084	7.586.045	8.677.108	14.612.661	2.114.390
846229100000	Non-numerical control folding, straightening machines for flat products	3.504.899	5.199.525	6.454.154	11.587.293	11.831.993	9.424.849	8.866.189	11.509.758	14.446.839	14.951.415	11.363.995	1.471.940
846229910000	Non-numerical control hydraulic folding, straightening machines for other products	29.159.839	38.891.511	45.177.613	85.737.546	84.130.358	43.916.577	39.950.442	54.185.981	54.990.397	52.462.741	57.460.917	7.557.999
846229980000	Other non-numerical control folding, straightening machines for other products	8.302.250	9.039.785	12.027.856	18.531.217	23.716.889	12.889.573	14.494.507	18.192.793	16.242.421	19.691.747	19.172.930	1.974.609
846231000011	Numerical control shearing machines	12.118.398	14.778.223	18.615.264	28.123.787	30.996.121	13.655.823	12.500.244	17.340.641	15.450.155	19.756.118	13.022.686	1.855.851
846231000019	Numerical control press machines	115.173	199.491	381.500	274.460	346.056	495.284	458.800	698.943	526.742	1.888.218	691.667	105.058
846239100011	Non-numerical control shearing machines for flat products	7.519.472	8.797.157	12.231.715	16.815.068	21.053.515	9.421.213	8.719.813	10.271.273	10.028.133	9.414.959	9.819.096	1.371.147
846239100019	Other non-numerical control machines for flat products	7.928.342	9.838.890	11.455.186	15.128.191	17.977.218	9.819.669	8.817.029	11.253.906	11.824.737	11.058.211	8.111.596	1.115.528
846239910011	Non-numerical control hydraulic shearing machines for other products	8.286.156	8.775.775	12.817.567	18.194.380	22.439.823	12.241.430	13.755.715	12.489.454	14.550.082	11.404.845	9.670.871	1.198.395
846239910012	Non-numerical control hydraulic press machines for other products	15.476.109	20.761.441	28.726.205	39.950.393	44.585.968	23.891.564	27.216.830	28.083.955	33.702.551	30.076.900	26.923.472	4.713.007
846239990011	Other non-numerical control shearing machines for other products	536.610	1.176.220	2.495.369	4.597.137	3.037.851	1.546.575	2.576.335	3.246.092	3.337.252	3.686.011	4.531.044	816.494
846239990012	Other non-numerical control press machines for other products	177.713	255.731	921.998	1.208.136	1.033.762	1.095.204	1.039.631	953.832	744.596	2.130.968	2.312.613	605.691
846241100011	Numerical control punch cutting machines for flat products	3.154.809	4.340.822	5.841.501	10.022.804	10.086.551	4.361.370	7.116.594	8.008.690	7.342.983	7.300.825	4.927.390	1.506.778
846241100012	Numerical control press machines for flat products	7.612	27.751	30.965	97.551	459.531	2.589.764	971.410	107.091	1.045.468	493.475	440.810	0
846241100019	Other numerical control machines for flat products	16.613	496.349	439.292	31.754	293.234	290.693	546.957	839.778	195.108	321.029	468.245	102.179
846241900011	Numerical control punch cutting machines for other products	0	31.338	0	122.958	895.826	440.755	23.219	0	11.655	0	2.181	0
846241900012	Numerical control press machines for other products	7.287	23.115	4.286	224.470	2.437.781	903.687	25.100	29.225	1.992	43.568	28.737	45.630
846241900019	Other numerical control machines for other products	36.523	328.263	253.446	109.399	703.370	33.846	303.617	34.252	636.520	766.904	354.614	23.960
846249100011	Non-numerical control punch cutting machines for flat products	52.322	58.540	5.910	922	41.673	1.639	57.347	113.290	115.474	74.774	99.946	78.391
846249100012	Non-numerical control press machines for flat products	987.274	1.325.747	1.568.993	4.016.975	3.805.791	2.106.979	2.192.737	3.353.070	2.739.237	3.357.243	3.900.268	521.838
846249100019	Other non-numerical control machines for flat products	89.997	94.453	73.431	303.968	716.891	286.692	296.360	520.076	1.083.561	517.916	338.250	299.687
846249900011	Non-numerical control punch cutting machines for other products	1.142.688	1.678.274	2.176.483	3.490.816	3.642.100	2.539.227	3.785.624	4.191.227	4.506.056	6.260.228	6.518.931	1.052.149
846249900012	Non-numerical control press machines for other products	214.644	185.053	276.927	324.947	253.192	287.875	898.940	3.726.949	5.962.111	6.036.872	5.997.725	832.050
846249900019	Other non-numerical control machines for other products	402.526	1.330.552	1.289.319	1.717.691	1.539.994	1.125.613	1.531.267	2.008.190	4.611.245	1.447.848	1.494.124	205.790
846291201000	Hydraulic press machines for moulding/baling metal powder, waste						100.214	551.305	172.037	874.314	143.311	126.594	0
846291209000	Other numerical control hydraulic press machines						3.735.849	2.555.791	1.550.890	1.750.412	3.002.253	1.932.118	191.217
846291801000	Hydraulic press machines, non-numerical control for moulding metal waste by sintering						203.653	51.629	620.857	1.413.704	853.760	2.465.435	31.239
846291809000	Other non-numerical control hydrolic press machines						4.292.719	4.606.119	8.077.514	10.825.455	17.280.995	14.828.328	5.112.009
846299201000	Other press machines; numerical control, for moulding and baling						951.416	6.709.630	0	8.960	500.000	0	
846299209000	Other press machines; numerical control						2.045.356	2.408.533	863.947	917.103	549.376	391.882	5.216
846299801000	Other press machines; for moulding and baling						37.882	0	86.639	4.504	635.527	39.113	0
846299809000	Other press machines						8.144.844	6.885.736	6.151.911	10.727.900	10.125.580	7.517.027	1.690.915
		114.221.133	**150.733.638**	**200.775.380**	**305.146.519**	**366.946.481**	**215.283.997**	**229.510.076**	**272.074.861**	**297.781.795**	**306.946.237**	**293.111.356**	**43.891.379**

8463 (Other chipless machining metal or cermet working machines) EXPORT - USD													
Table8		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846310100000	Wire drawing machines	250.496	585.900	3.591.861	1.430.805	5.213.199	1.232.132	344.576	3.108.919	2.650.817	2.922.813	5.528.258	559.389
846310900000	Bar, tube, profile, wire etc. drawing machines	876.415	1.178.986	3.210.367	1.824.335	5.049.335	2.612.247	4.759.167	9.262.272	7.192.101	5.135.639	4.661.187	1.171.386
846320000011	Machines for screw cutting by crushing	681	33.025	8.310	68.335	36.033	394.979	439.741	458.713	992.737	155.899	620.068	0
846320000019	Other thread cutting machines	20.810	954.859	1.460.313	99.642	224.231	333.503	65.088	288.845	156.039	181.898	223.878	126.938
846330000000	Wire processing machines	1.361.689	2.129.753	2.298.948	4.712.291	3.443.069	2.788.633	3.240.473	3.714.416	5.393.525	4.485.721	7.168.788	925.860
846390000000	Other machines for working metals/cermets without machining	672.419	2.287.860	2.276.676	2.810.216	6.169.964	3.163.644	2.907.196	2.698.121	3.933.043	2.889.677	2.007.742	478.046
		3.182.510	**7.170.383**	**12.846.475**	**10.945.624**	**20.135.831**	**10.525.138**	**11.756.241**	**19.531.286**	**20.318.262**	**15.771.647**	**20.209.921**	**3.261.619**

8466 (Components, parts and accessories suitable for use in machines between 84.56 between 84.65 positions [parts, tool holders etc.]) EXPORT-USD													
Table9		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846693000000	Components-parts of machines categorized under 84.56-84.61				9.628.069	15.973.090	10.687.430	10.489.384	14.949.780				
846694001000	Components-parts of press machines for moulding, baling metal powder				501.367	1.912.171	403.718	231.358	214.358	545.015	333.952	481.236	129.978
846694009000	Components-parts of machines for cutting, punching, processing metals				12.076.577	20.465.228	12.022.507	10.673.747	12.889.457	23.199.993	18.666.570	23.871.556	2.986.481
		0	**0**	**0**	**22.206.013**	**38.350.489**	**23.113.655**	**21.394.489**	**28.053.595**	**23.745.008**	**19.000.522**	**24.352.792**	**3.116.459**

8486 (Machines and devices used in the manufacture of semiconductor discs, ingots, integrated circuits etc.; components-parts-accessories) EXPORT-USD													
Table10		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
848620100000	Ultrasonic processing machines and devices				0	2.385	0	2.300	0	188.000	70.395	81.698	0
848690700000	Components-parts of ultrasonic processing machines and devices				0	1.086	0	0	0	0	928	14.280	0
		0	**0**	**0**	**0**	**3.471**	**0**	**2.300**	**0**	**188.000**	**71.323**	**95.978**	**0**

8456 (Machines and tools for processing materials through abrasion with laser, photon, ultrasonic and other waves etc.) IMPORT-USD													
Table11		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
845610001000	Machines for processing metals/metal carbides through rays such as laser, photon etc.				32.149.265	31.849.333	8.908.366	27.862.942	39.630.355	35.233.834	28.575.120	33.742.533	2.479.154
845610002000	Machines for processing stone, ceramic, concrete, asbestos cement etc. through rays such as laser, photon etc.				177.362	47.990	1.076.026	55.570	84.645	171.798	398.697	451.596	
845610003000	Machines for processing wood, cork, bone, ebonite through rays such as laser, photon etc.				2.503.390	4.265.239	1.900.721	1.711.214	2.779.256	1.847.027	1.495.660	2.040.076	185.310
845610009000	Machines for processing other materials through rays such as laser, photon etc.	764.631	0	256.802	25.342.751	21.212.895	11.242.967	19.238.780	25.201.445	32.570.213	29.977.199	27.945.281	5.398.236
845620001000	Machines for processing metals/metal carbides through ultrasonic method			17.732.807	314.432	123.605	51.266	35.595	247.850	222.977	317.692	253.609	25.243
845620002000	Machines for processing stone, ceramic, concrete, asbestos cement etc. through ultrasonic method	10.017.887	13.426.333		0	2.238	930	225	20.038	4.484	3.442	10.920	
845620009000	Machines for processing other materials through ultrasonic method	1.200.698	61.013	121.056	464.595	545.112	258.361	153.912	318.788	1.382.708	1.131.540	2.215.069	84.828
845630110000	Numerical control electrical discharge machines for wire cutting	798.354	0	0	15.262.674	10.204.341	4.861.765	6.589.617	10.020.329	10.589.138	10.574.655	15.071.055	2.736.811
845630191000	Numerical control electrical discharge machines for processing metals/metal carbides	885.645	799.080	455.094	3.200.460	6.260.296	1.560.433	3.060.118	6.034.051	5.167.702	4.117.238	6.778.909	1.174.063
845630192000	Numerical control electrical discharge machines for processing stone, ceramic, concrete etc.	11.661.390	13.273.398	11.946.692	599.969	180.865		0	0	0	394.723	0	
845630199000	Numerical control electrical discharge machines for processing other materials	1.865.974	8.402.890	4.605.773	2.984.881	3.081.999	589.747	1.186.744	3.591.873	3.087.674	3.903.223	6.771.992	0
845630901000	Other control type electrical discharge machines for processing metals/metal carbides	0	0	0	3.336.083	921.541	321.373	1.254.561	1.461.566	952.359	549.941	3.716.643	256.598
845630902000	Other control type electrical discharge machines for processing stone, ceramic, concrete etc.	2.046.212	1.902.017	5.452.918		0	0	0		0	0	30.700	
845630909000	Other control type electrical discharge machines for processing other materials	3.915.402	3.411.749	2.050.253	663.474	347.079	602.655	1.672.408	19.424.035	5.735.617	5.262.627	7.742.556	546.198
845690001000	Other machines for processing metals/metal carbides		0	2.241	3.926.300	7.464.740	2.734.528	4.485.357	8.048.333				
845690002000	Other machines for processing other mineral materials such as stone, ceramic, concrete, asbestos cement etc.	1.657.057	3.612.142	779.696	0	0	7.265	16.644	12.731				
845690003000	Other machines for processing wood, cork, bone, ebonite and artificial plastic materials				286.437	1.147.774	1.205.963	481.681	1.335.993				
845690004000	Electrolytic polishing machines				447.113	526.229	223.657	184.194	639.602				
		34.813.250	**44.888.622**	**43.403.332**	**91.659.186**	**88.181.276**	**35.546.023**	**67.989.562**	**118.850.890**	**96.965.531**	**86.701.757**	**106.770.939**	**12.886.441**

8457 (Metal working machining centers, single-station machines and multi-station transfer machines) IMPORT-USD													
Table12		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
845710100000	Horizontal machining centers for metal working	23.947.175	28.064.477	44.416.596	46.061.688	46.977.328	15.473.028	37.004.123	68.302.531	73.811.736	42.018.026	61.325.362	7.806.120
845710900000	Other machining centers for metal working	95.437.450	124.093.072	116.255.109	151.785.524	132.882.409	41.912.904	89.312.973	145.039.351	173.208.516	193.303.638	190.762.593	31.894.785
845720000000	Single-station machines for metal working	3.495.730	13.366.273	2.077.073	1.121.530	1.531.327	3.398.683	338.320	1.330.327	598.018	496.204	1.439.078	4.801
845730100000	Numerical control multi-station transfer machines	3.754.526	12.414.250	9.565.197	11.072.391	20.979.684	4.241.051	11.015.394	11.715.534	11.540.936	10.736.160	14.593.925	1.843.786
845730900000	Other multi-station transfer machines	4.297.773	3.687.080	4.333.592	3.189.669	9.885.231	1.213.194	577.382	5.267.918	4.523.284	7.663.243	4.753.548	3.147.593
		130.932.654	**181.625.152**	**176.647.567**	**213.230.802**	**212.255.979**	**66.238.860**	**138.248.192**	**231.655.661**	**263.682.490**	**254.217.271**	**272.874.506**	**44.697.085**

8458 (Metal working lathes [incl. turning centers]) IMPORT-USD													
Table13		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
845811200000	Numerical control horizontal turning centers	8.293.550	7.819.501	7.983.368	15.940.164	18.990.152	7.456.099	11.570.478	22.513.617	19.693.092	24.939.834	32.065.692	4.700.476
845811410000	Numerical control single-spindle automatic horizontal lathes	42.019.858	60.987.728	72.515.706	80.872.941	66.207.106	26.538.397	57.413.570	87.817.321	84.555.332	75.754.367	90.706.646	11.949.143
845811490000	Numerical control multi-spindle automatic horizontal lathes	16.094.770	25.845.807	7.714.725	5.760.803	7.968.871	14.776.823	6.793.354	7.139.837	17.007.560	27.559.643	17.203.421	565.776
845811800011	Numerical control horizontal facing lathes	100.879	67.421	74.826	181.841	1.813.099	202.145	8.649	231.032	523.481	740.823	38.110	
845811800012	Numerical control horizontal banding lathes	18.219	20.292		1.059.974		1.179.424	38.398	1.026.957		0	25.756	
845811800013	Numerical control horizontal eccentric turning lathes			6.004	11.776	156.153	0	0	0	19.803	0	0	
845811800014	Numerical control horizontal single-spindle rod and chuck automatic lathes	458.735	671.802	1.393.414	1.436.988	956.684	473.611	1.352.988	811.256	449.208	164.473	462.996	53.813
845811800015	Numerical control horizontal multi-spindle rod and chuck automatic lathes	0	74.006		104.318	79.716	123.661	524.107	713.990	308.545	313.459	556.981	26.649
845811800016	Numerical control horizontal automatic lathes	179.000		54.415	85.188	59.846	56.000	300.290	250.084	229.229	271.985	565.680	9.425
845811800019	Other numerical control horizontal metal working lathes	16.358.394	13.179.786	17.360.798	16.658.446	18.120.609	15.633.236	21.012.065	30.755.544	30.079.270	26.908.288	28.784.001	4.525.623
845819000000	Other lathes for metal working						5.787.275	10.392.375	20.844.516	20.016.844	18.473.899	18.892.052	2.301.566
845891200000	Other numerical control turning centers	5.424.635	3.963.345	2.825.314	2.468.734	1.110.464		2.068.099	8.844.600	8.318.997	16.977.400	13.077.555	1.290.267
845891800000	Other numerical control lathes	7.948.157	9.920.167	27.121.201	23.677.166	13.918.434	10.322.042	18.896.345	38.025.932	43.272.746	39.850.798	40.542.557	4.862.442
845899000000	Other non-numerical control lathes	4.147.081	3.735.703	8.255.109	8.667.572	9.078.597	2.757.057	3.678.929	4.128.309	3.837.078	3.710.171	1.471.755	358.979
		101.043.278	**126.285.558**	**145.304.880**	**156.925.911**	**138.459.731**	**85.305.770**	**134.049.647**	**223.102.995**	**228.311.185**	**235.665.140**	**244.393.202**	**30.644.159**

8459 (Machine tools for boring, reaming, milling, threading etc. metals through machining) IMPORT-USD													
Table14		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
845910000000	Slide processing units	176.922	23.650	393.876	38.218	4.000	488.365	326.740	1.108.098	1.819.925	625.123	497.826	24.721
845921000000	Other numerical control drilling machines	**4.853.269**	**2.163.145**	**10.787.620**	**8.129.020**	**6.307.940**	2.296.730	3.957.435	9.346.236	12.822.497	7.158.628	6.655.140	531.012
845921000011	Numerical control bench type drilling machines	0	19.136	71.787	35.301	968.745							
845921000012	Numerical control pillar drilling machines (single-spindle)	129.100	48.718	152.059	45.715	50.371							
845921000013	Numerical control coordinate drilling machines		178.831	1.091.741	310.309	375.634							
845921000014	Numerical control special drilling machines	1.385.253	373.726	2.023.875	1.704.423	2.106.918							
845921000019	Other numerical control drilling machines	3.338.916	1.542.734	7.448.158	6.033.272	2.806.272							
845929000000	Other non-numerical control drilling machines	**6.677.321**	**8.531.974**	**6.421.695**	**6.370.700**	**7.207.098**	2.613.660	4.928.477	9.977.044	5.272.994	5.947.566	9.533.467	594.123
845929000011	Non-numerical control bench type drilling machines	86.010	141.508	224.797	123.428	618.116							
845929000012	Non-numerical control pillar drilling machines (single-spindle)	1.075.035	1.808.481	2.367.648	2.165.224	2.217.405							
845929000013	Non-numerical control coordinate drilling machines	1.872	0	8.740		196.411							
845929000014	Non-numerical control special drilling machines	402.467	18.705	389.581	306.983	573.723							
845929000019	Other non-numerical control drilling machines	5.111.937	6.563.280	3.430.929	3.775.065	3.601.443							
845931000000	Numerical control reaming, milling machines	3.809.627	3.766.053	3.928.384	3.728.642	2.815.116	1.473.432	7.035.948	5.273.847	10.755.972	8.811.088	8.326.423	2.215
845939000000	Non-numerical control reaming, milling machines	173.408	453.031	140.247	349.042	1.080.623	41.178	99.056	757.665	387.393	184.835	545.468	25.182
845940100000	Other numerical control reaming machines		51.625	489.295	536.429		538.307	206.838	1.192.482	2.706.132	1.076.720	428.605	
845940900000	Other non-numerical control reaming machines	0	34.862	1.317.622	545.833	291.957	0	130.379	221.477	744.484	219.644	1.109.353	34.274
845951000000	Numerical control console type milling machines		51.444	394.669		0	58.306	43.013	354.606	409.127	462.616	659.630	181.815
845959000000	Non-numerical control console type milling machines	661.314	579.830	2.182.002	1.536.579	1.508.374	459.637	308.810	1.602.767	1.172.876	1.209.589	1.251.995	298.911
845961100000	Numerical control gang mills	6.268.626	3.518.679	11.582.382	12.064.546	18.448.491	5.335.652	8.390.177	16.454.513	21.557.878	11.019.435	8.428.047	326.909
845961900000	Other numerical control milling machines	**18.169.545**	**11.082.501**	**13.669.860**	**14.699.872**	**22.376.232**	8.521.525	11.335.983	12.602.101	26.828.670	19.063.587	20.052.131	3.295.740
845961900011	Numerical control vertical milling machines	4.196.407	4.133.176	3.558.347	3.041.736	2.333.097							
845961900012	Numerical control horizontal milling machines	936.800	2.516.226	491.942	425.536	2.318.495							
845961900013	Numerical control moulder milling machines	8.367.953	731.363	2.087.701	4.405.282	2.760.359							
845961900019	Other numerical control milling machines	4.668.385	3.701.736	7.531.870	6.827.318	14.964.281							
845969100000	Non-numerical control gang mills	317.952	541.817	1.172.373	1.171.617	483.934	370.408	721.173	934.995	1.469.047	446.299	544.435	124.763
845969900000	Other milling machines	**12.447.190**	**16.790.905**	**15.209.643**	**14.016.659**	**14.171.275**	4.119.636	7.341.838	12.695.212	9.309.536	9.408.353	9.699.051	1.385.008
845969900011	Non-numerical control universal milling machines	1.260.152	2.005.037	1.084.158	1.901.928	1.548.867							
845969900012	Non-numerical control vertical milling machines	1.502.733	1.329.534	852.507	1.232.542	646.744							
845969900013	Non-numerical control horizontal milling machines	131.131	748.032	2.449.270	921.849	480.596							
845969900014	Non-numerical control moulder milling machines	4.553.874	8.062.811	5.884.070	6.785.035	5.563.175							
845969900019	Other non-numerical control milling machines	4.999.300	4.645.491	4.939.638	3.175.305	5.931.893							
845970000000	Other thread/screw cutting machines	1.440.869	1.243.773	1.922.370	1.197.452	1.019.122	2.168.118	4.261.540	4.241.258	9.144.460	4.763.214	4.970.971	960.071
		54.996.043	**48.833.289**	**69.612.038**	**64.384.609**	**75.714.162**	**28.484.954**	**49.087.407**	**76.762.301**	**104.400.991**	**70.396.697**	**72.702.542**	**7.784.744**

8460 (Tools for polishing, deburring, sharpening, grinding, honing, lapping etc. metals and cermets) IMPORT-USD													
Table15		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846011000000	Numerical control flat surface grinding machines (0, 01 mm. adjusted)	4.198.658	661.586	1.057.720	761.134	2.408.746	1.998.921	5.449.328	3.678.551	10.385.497	9.833.716	4.179.752	141.018
846019000000	Non-numerical control flat surface grinding machines (0, 01 mm. adjusted)	3.199.660	4.728.177	5.148.563	4.878.709	3.790.438	2.698.278	3.462.436	4.774.249	5.234.737	5.820.327	3.214.762	892.387
846021110000	Numerical control internal cylindrical grinding machines (0, 01 mm. adjusted)	1.552.240	2.520.068	9.779.665	4.872.968	13.976.972	2.194.154	4.544.905	3.048.768	10.752.945	20.574.096	10.608.311	772.404
846021150000	Numerical control centerless grinding machines (0, 01 mm. adjusted)	1.098.576	251.622	2.313.729	1.935.135	2.299.010	170.028	618.294	1.345.503	5.006.221	4.235.791	5.843.595	141.484
846021190000	Other numerical control grinding machines for cylindrical surfaces (0, 01 mm. adjusted)	1.591.984	7.991.106	5.797.312	15.915.530	5.937.796	11.374.516	8.264.911	16.614.919	19.801.094	22.845.246	18.495.587	575.965
846021900000	Other numerical control grinding machines for other surfaces	7.315.815	21.497.612	16.056.555	15.930.459	23.441.348	9.232.203	29.979.667	19.672.737	15.349.177	12.879.384	8.677.616	1.285.799
846029100000	Other non-numerical control grinding machines for cylindrical surfaces (0, 01 mm. adjusted)	**1.289.457**	**1.852.888**	**2.682.680**	**3.129.091**	**4.034.229**	827.429	1.816.537	2.285.760	1.702.504	1.470.580	4.481.881	1.105.929
846029110000	Non-numerical control internal cylindrical grinding machines (0, 01 mm. adjusted)	845.644	987.666	1.097.908	540.750	1.783.711							
846029190000	Other non-numerical control grinding machines for cylindrical surfaces (0, 01 mm. adjusted)	443.813	865.222	1.584.772	2.588.341	2.250.518							
846029900000	Other non-numerical control grinding machines for other surfaces (0, 01 mm. adjusted)	13.262.137	7.557.779	3.960.220	9.198.562	3.710.150	5.196.910	2.325.088	4.614.217	9.861.519	3.767.377	2.895.992	150.742
846031000000	Numerical control sharpening machines	2.079.574	1.871.643	3.809.144	3.871.247	3.084.350	680.778	2.054.156	5.544.933	5.416.473	3.482.911	4.438.395	0
846039000000	Non-numerical control sharpening machines	1.261.332	2.077.181	2.482.959	1.263.011	1.892.706	1.287.431	2.062.919	2.312.135	2.158.185	1.982.105	2.379.864	212.675
846040100011	Numerical control honing machines	86.228	133.316	3.465.497	951.699	449.855	4.486.137	813.393	1.409.921	2.950.121	4.078.140	1.721.386	320.187
846040100012	Numerical control lapping machines	8.156	59.276	638.088	68.200	19.005	1.646	268.983	84.767	329.462	515.715	451.141	244.754
846040900011	Non-numerical control honing machines	2.550.324	598.934	755.725	3.964.318	1.478.117	249.004	1.254.534	2.155.970	1.988.425	622.330	1.884.200	89.562
846040900012	Non-numerical control lapping machines	173.009	162.331	54.753	44.670	147.543	161.344	167.387	330.896	732.276	1.010.770	338.257	11.673
846090100011	Rectifying machines (Less than 0, 01 mm. adjusted)	111.148	93.157		54.520	0	0	69.484		2.096	22.930	21.926	
846090100019	Other micrometric adjustment system machines (Less than 0, 01 mm. adjusted)	12.081.076	893.282	3.828.824	203.787	14.033.260	71.671	656.443	479.713	903.665	1.518.666	2.302.319	24.876
846090900011	Rectifying machines (Over 0, 01 mm. adjusted)	121.948	140.661	70.613	37.692	44.217	4.188	155.954	401.249	18.526	38.122	152.734	2.520
846090900019	Other micrometric adjustment system machines (Over 0, 01 mm. adjusted)	5.222.805	7.699.924	7.868.192	7.329.188	10.799.389	2.502.290	3.424.728	8.978.844	9.804.402	5.083.966	9.828.194	479.193
		57.204.127	**60.790.543**	**69.770.239**	**74.409.920**	**91.547.131**	**43.136.928**	**67.389.147**	**77.733.132**	**102.397.325**	**99.782.172**	**81.915.912**	**6.451.168**

8461 (Tools for working metals or cermets through machining such as shaping, bevelling, broaching, gear shaping, sawing, slitting) IMPORT-USD													
Table16		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846120000011	Shaper machines	223.740	68.481	105.316	194.428	108.504	119.904	59.941	1.766.964	13.352	75.406	86.418	12.398
846120000012	Bevelling machines	273.156	146.390	236.130	1.987.236	1.376.770	166.457	156.266	486.654	717.047	555.474	470.321	44.012
846130100000	Numerical control broaching machines	0	0	1.032.703		0	118.907	26.612		2.412.488	61.882	226.849	
846130900000	Non-numerical control broaching machines	406.834	815.967	95.215	579.924	212.591	327.848	134.423	664.865	91.062	1.910.264	885.554	6.647
846140110000	Numerical control gear shaping machines for gear wheels	1.732.471	539.767	2.522.376	196.868	633.711	3.277.097	1.349.348	6.392.553	5.524.120	3.342.820	2.835.041	390.329
846140190000	Non-numerical gear shaping machines for gear wheels	803.416	845.539	984.062	962.907	1.737.372	489.050	1.539.392	2.272.250	2.418.273	1.341.218	1.315.665	1.791.554
846140310000	Numerical control gear shaping machines for other gears		891.958	5.148.162	4.165.485	2.627.808	4.086.219	2.531.188	2.473.490	2.142.822	1.901.337	2.234.986	0
846140390000	Non-numerical control gear shaping machines for other gears	2.729.226	2.827.207	3.520.899	1.717.977	1.793.700	4.438.740	3.849.088	1.185.982	1.428.229	2.183.672	2.722.484	24.374
846140710011	Numerical control gear grinding machines (0, 01 mm. adjusted) (0, 01 mm. adjusted)	1.063.013	2.391.163	2.331.201	871.117	2.120.268	2.691.044	1.813.991	3.577.487	2.495.145	3.803.941	2.923.453	32.262
846140710012	Numerical control gear finishing machines (0, 01 mm. adjusted)	388.088	24.529	365.270	31.831	8.329	132.024	1.209.710	261.465	22.329	26.516	129.193	
846140790011	Non-numerical control gear grinding machines (0, 01 mm. adjusted)	4.551.507	432.679	386.157	181.438	113.608	61.505	262.164	193.201	132.391	191.157	199.400	0
846140790012	Non-numerical control gear finishing machines (0, 01 mm. adjusted)		777.867	1.590.891	41.740	17.119		7.189	7.192	48.082		447.896	
846140900011	Non-micrometric adjustment system gear grinding machines	2.403.489	768.419	2.338.526	1.337.009	494.942	117.950	324.938	3.665.290	313.233	1.070.523	1.286.773	14.431
846140900012	Non-micrometric adjustment system gear finishing machines	173.882	566.547	1.276.309	1.209.948	856.031	1.116.140	200.636	143.407	301.180	234.019	163.425	67.462
846150110000	Sawing machines with circular saws	2.490.084	3.745.483	2.889.201	3.629.767	3.953.309	4.579.551	4.637.843	4.247.841	5.738.005	4.604.747	7.330.094	1.379.222
846150190000	Sawing machines with other saws	1.396.501	1.899.884	2.562.388	5.837.520	3.652.015	7.243.761	3.052.244	3.501.717	6.809.227	4.958.067	5.549.278	414.319
846150900000	Slittering machines	857.374	5.992.922	5.371.526	6.033.533	7.951.392	6.530.928	5.571.813	7.788.070	4.218.018	4.420.441	10.303.947	1.206.188
846190000000	Other various metal machines	9.356.701	3.833.116	5.530.527	4.730.217	3.587.928	5.678.030	1.905.877	4.006.157	4.125.622	2.580.742	4.460.986	118.948
		28.849.482	**26.567.918**	**38.286.859**	**33.708.945**	**31.245.397**	**41.175.155**	**28.632.663**	**42.634.585**	**38.950.625**	**33.262.226**	**43.571.763**	**5.502.146**

8462 (Machine tools for forging, hammering, die forging, cutting, drafting, engraving forge press, carbide finishing on metals) IMPORT-USD													
Table17		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846210100011	Numerical control forging machines	819.905	9.940.113	2.514.961	2.198.883	4.957.346	175.717	1.240.208	2.731.274	12.951.695	5.842.167	5.727.955	429.984
846210100019	Numerical control die forging machines and hammers	4.225.290	5.151.745	4.545.697	5.950.031	13.547.750	27.226.773	9.217.993	7.913.435	8.290.537	15.047.179	15.818.965	3.066.487
846210900011	Non-numerical control forging machines	1.791.585	1.637.325	6.217.795	2.831.626	5.220.407	1.500.825	2.971.874	6.892.477	4.808.893	5.934.813	7.586.830	189.896
846210900019	Non-numerical control die forging machines and hammers	7.495.749	11.722.486	30.633.953	17.454.801	11.925.826	3.962.740	5.230.854	18.692.912	22.752.303	5.529.375	4.058.484	153.180
846221100000	Numerical control folding, straightening machines for flat products	13.995.661	29.533.402	27.618.787	20.684.145	66.416.943	10.247.841	16.514.654	17.793.052	49.499.711	27.502.867	28.329.603	1.419.602
846221800000	Numerical control folding, straightening machines for other products	6.606.592	8.261.573	13.940.937	13.767.177	14.040.670	7.472.711	9.095.748	20.779.361	12.973.888	22.387.398	29.479.749	1.634.486
846229100000	Non-numerical control folding, straightening machines for flat products	8.353.177	10.832.960	11.508.751	15.221.845	8.681.575	24.777.632	4.925.001	8.631.976	40.563.270	9.798.235	7.240.508	2.193.012
846229910000	Non-numerical control hydraulic folding, straightening machines for other products	1.414.067	3.847.542	1.622.594	3.177.264	6.111.998	2.508.141	2.150.660	19.607.413	2.775.500	3.938.881	3.864.174	312.416
846229980000	Other non-numerical control folding, straightening machines for other products	15.321.585	17.605.747	10.548.887	16.174.786	13.398.944	3.534.535	5.015.270	7.747.009	5.757.472	7.424.104	4.837.661	209.342
846231000011	Numerical control shearing machines	859.677	1.646.029	4.219.045	797.776	8.029.594	10.924.567	10.930.416	8.597.968	2.433.977	1.199.151	2.231.858	211.307
846231000019	Numerical control press machines	4.177.726	2.247.629	2.845.152	4.916.478	1.260.085	186.451	1.957.425	391.755	590.566	6.117.205	837.166	570
846239100011	Non-numerical control shearing machines for flat products	1.008.813	5.594.020	1.222.633	4.314.709	3.468.761	1.759.012	6.753.278	572.436	1.365.171	165.792	2.390.397	352
846239100019	Other non-numerical control machines for flat products	2.229.726	4.061.922	3.383.185	2.289.148	22.922.480	7.722.766	1.068.257	9.794.306	22.924.351	14.643.251	2.079.991	38.922
846239910011	Non-numerical control hydraulic shearing machines for other products	402.870	331.517	264.382	2.664.894	1.705.957	3.773.738	5.431.570	1.148.848	4.606.715	2.473.443	2.349.750	5.264
846239910012	Non-numerical control hydraulic press machines for other products	399.914	2.680.725	2.919.442	1.529.902	2.661.509	856.256	989.672	508.206	183.959	59.672	760.630	17.941
846239990011	Other non-numerical control shearing machines for other products	407.576	1.316.036	1.375.307	700.073	3.872.855	1.260.110	2.084.697	3.575.113	974.308	1.431.731	625.852	306.025
846239990012	Other non-numerical control press machines for other products	355.135	1.097.694	1.049.725	2.238.265	437.713	195.638	105.602	1.694.539	351.190	853.306	24.584	0
846241100011	Numerical control punch cutting machines for flat products	9.341.358	1.701.125	3.879.386	7.892.974	3.646.892	5.381.197	10.668.942	5.762.343	2.964.845	4.387.201	3.481.820	578.947
846241100012	Numerical control press machines for flat products	6.579.944	22.080.540	6.902.520	5.616.626	7.088.572	3.302.272	4.456.363	574.993	6.232.839	10.034.294	4.723.911	23.200
846241100019	Other numerical control machines for flat products	3.771.690	8.899.275	6.199.718	7.307.492	4.607.744	3.267.047	11.155.502	6.726.324	12.872.671	11.154.085	2.369.594	359.092
846241900011	Numerical control punch cutting machines for other products	131.074	139.508	703.314	2.054.120	1.167.539	374.079	746.141	976.043	87.780	488.088	547.890	24.776
846241900012	Numerical control press machines for other products	896.049	736.433	815.236	1.328.223	1.234.887	165.195	143.680	517.133	473.763	1.762.428	290.539	2.001
846241900019	Other numerical control machines for other products	1.030.181	1.892.165	1.148.450	754.739	1.462.268	692.292	1.385.916	3.747.636	5.530.152	4.756.362	3.355.857	5.400
846249100011	Non-numerical control punch cutting machines for flat products	84.500	173.161	21.652	13.801	47.641	46.449	440.495	286.531	0	35.326	671.159	0
846249100012	Non-numerical control press machines for flat products	1.170.038	1.306.138	1.647.819	1.939.400	4.155.852	1.732.404	5.221.379	2.188.956	3.403.661	661.841	2.495.640	12.637
846249100019	Other non-numerical control machines for flat products	154.505	567.116	473.707	502.069	65.279	245.601	298.278	1.247.902	272.581	514.791	54.849	47.317
846249900011	Non-numerical control punch cutting machines for other products	38.175	103.950	372.030	196.526	16.181	85.524	13.653	37.264	356.159	63.828	8.023	0
846249900012	Non-numerical control press machines for other products	248.147	1.239.362	86.425	665.431	889.971	544.278	116.658	624.525	966.075	1.230.853	716.964	388.427
846249900019	Other non-numerical control machines for other products	739.946	1.485.521	782.077	2.053.154	2.152.926	4.245.192	1.081.717	912.251	1.487.907	388.269	1.173.847	7.322
846291201000	Hydraulic press machines for moulding/baling metal powder, waste						349.439	122.909	302.108	3.245.108	1.722.471	563.674	6.495
846291209000	Other numerical control hydraulic press machines						7.528.395	5.728.155	11.560.248	6.972.729	10.471.199	28.235.353	5.873.752
846291801000	Hydraulic press machines, non-numerical control for moulding metal waste by sintering						13.929	635.856	1.282.059	193.881	0	342.463	0
846291809000	Other non-numerical control hydrolic press machines						4.136.580	6.712.299	13.411.975	10.618.156	10.477.328	12.699.538	2.062.693
846299201000	Other press machines; numerical control, for moulding and baling						185.345	33.567	295.347	30.000	0	173.004	
846299209000	Other press machines; numerical control						5.667.045	7.019.931	7.418.607	12.757.300	14.043.261	12.195.137	1.821.768
846299801000	Other press machines; for moulding and baling						366.095	740.848	114.790	1.835.107	65.674	27.884	190.660
846299809000	Other press machines						11.944.551	12.210.314	32.138.556	35.859.273	49.513.645	29.188.860	1.727.031
		94.050.655	**157.832.759**	**149.463.567**	**147.236.358**	**215.196.165**	**158.358.362**	**154.615.782**	**227.197.671**	**299.963.493**	**252.119.514**	**221.560.163**	**23.320.304**

8463 (Other chipless machining metal or cermet working machines) IMPORT- USD													
Table18		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846310100000	Wire drawing machines	16.680.311	14.106.409	11.746.934	6.811.257	21.437.811	11.150.047	16.440.955	23.412.177	9.803.407	12.497.520	15.559.422	2.247.827
846310900000	Bar, tube, profile, wire etc. drawing machines	17.692.803	11.158.325	15.333.163	13.038.410	12.723.398	4.679.111	5.743.762	38.984.950	18.003.156	7.670.580	6.557.869	257.971
846320000011	Machines for screw cutting by crushing	722.402	1.188.057	1.626.587	1.970.362	2.024.507	947.895	1.525.258	3.184.413	1.504.255	2.429.895	2.141.878	299.021
846320000019	Other thread cutting machines	1.445.736	2.047.136	1.145.057	1.375.183	1.100.180	951.027	1.241.709	2.489.266	1.842.492	4.548.646	2.425.449	732.203
846330000000	Wire processing machines	16.071.776	14.789.282	17.633.326	20.801.965	21.503.719	6.980.381	14.375.808	23.421.547	17.294.899	16.158.197	17.939.291	1.545.239
846390000000	Other machines for working metals/cermets without machining	7.854.513	10.162.069	32.635.058	12.306.490	28.618.225	8.393.518	11.471.687	12.357.786	9.183.192	18.674.798	26.994.810	3.152.215
		60.467.541	**53.451.278**	**80.120.125**	**56.303.667**	**87.407.840**	**33.101.979**	**50.799.179**	**103.850.139**	**57.631.401**	**61.979.636**	**71.618.719**	**8.234.476**

2849 - Other Machine Tools Manufacturing, Export and Import

8466 (Components, parts and accessories suitable for use in machines between 84.56 between 84.65 positions [parts, tool holders etc.]) IMPORT-USD													
Table19		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846693000000	Components-parts of machines categorized under 84.56-84.61				34.424.228	34.335.076	21.899.661	30.963.432	45.882.174				
846694001000	Components-parts of press machines for moulding, baling metal powder				709.931	643.466	198.867	516.008	351.742	639.207	1.139.228	624.823	232.700
846694009000	Components-parts of machines for cutting, punching, processing metals				34.976.924	33.906.006	17.907.855	19.950.902	22.137.366	29.998.328	32.654.893	35.737.291	2.758.544
		0	**0**	**0**	**70.111.083**	**68.884.548**	**40.006.383**	**51.430.342**	**68.371.282**	**30.637.535**	**33.794.121**	**36.362.114**	**2.991.244**

8486 (Machines and devices used in the manufacture of semiconductor discs, ingots, integrated circuits etc.; components-parts-accessories) IMPORT-USD													
Table20		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
848620100000	Ultrasonic processing machines and devices				14.972	2.888.802	41.890	45.353	54.057	134.055	60.019	81.785	0
848690700000	Components-parts of ultrasonic processing machines and devices				228.639	210	31.472	12.304	1.080	2.570	28.305	27.136	0
		0	**0**	**0**	**243.611**	**2.889.012**	**73.362**	**57.657**	**55.137**	**136.625**	**88.324**	**108.921**	

8464 (Machines for processing mineral materials such as stone, ceramic, concrete, asbestos cement or for cold working glass) EXPORT-USD													
Table21		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846410000000	Sawing machines for minerals such as stone, ceramic, concrete, cement etc. and cold working glass	**3.009.018**	**2.879.186**	**2.754.041**	1.410.806	3.230.468	1.733.501	1.944.172	1.823.204	1.192.709	1.729.578	2.362.185	276.536
846410100000	Sawing machines for cutting semiconductor ingots into slices	56.548	360.215	251.600									
846410900000	Other sawing machines	2.952.470	2.518.971	2.502.441									
846420110000	Grinding/polishing machines for optical glass	41.956	38.305	60.152	95.195	235.694	118.735	136.780	53.498	455.262	122.642	98.637	55.195
846420190000	Grinding/polishing machines for other glass	1.446.801	2.892.093	3.654.480	5.448.940	3.021.261	2.826.808	4.140.310	5.848.866	3.982.936	2.817.957	5.177.739	136.048
846420800000	Other grinding/polishing machines							1.914.983	1.606.125	1.355.363	1.279.563	1.772.729	518.611
846490000000	Other machines for cold working stone, ceramic, concrete, asbestos cement or glass	**4.297.062**	**4.998.133**	**3.693.689**	**8.832.799**	**9.849.457**	**6.878.541**	7.241.188	5.537.128	5.409.030	5.262.817	8.164.869	1.961.686
846490100000	Other machines for carving/bevelling semiconductor discs		0										
846490200000	Machines for processing ceramic	160.863	178.910	273.401	2.742.809	1.116.082	208.201						
846490800000	Other machines for processing stone, concrete, cement, cold glass	4.136.199	4.819.223	3.420.288	6.089.990	8.733.375	6.670.340						
		8.794.837	**10.807.717**	**10.162.362**	**15.787.740**	**16.336.880**	**11.557.585**	**15.377.433**	**14.868.821**	**12.395.300**	**11.212.557**	**17.576.159**	**2.948.076**

8465 (Machines for processing hard materials such as wood, cork, bone, hard rubber, hard plastic [nailing, punching etc.]) EXPORT-USD													
Table22		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846510100000	Machines operating by manual loading and without changing tools	185.418	293.074	672.890	1.214.262	292.644	662.739	982.471	2.075.958	2.560.115	964.827	546.474	31.914
846510900000	Machines operating by automatic loading and without changing tools	790.559	1.215.292	2.239.695	1.298.529	1.311.432	2.019.943	2.304.903	3.077.532	3.565.999	6.310.222	5.911.658	753.589
846591100000	Band saws; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	605.890	964.259	1.486.885	2.441.083	1.652.266	1.226.865	1.405.374	2.195.546	2.428.069	2.568.112	2.897.981	249.881
846591200000	Circular saws; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	1.595.956	2.360.124	4.419.058	7.159.409	9.065.342	5.751.630	10.366.222	12.058.009	15.390.609	16.084.618	15.126.448	2.138.967
846591900000	Other sawing machines for processing hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	5.865.690	5.995.036	9.391.209	14.327.276	15.396.867	6.339.691	6.384.141	7.620.306	9.683.645	9.411.022	7.409.702	969.414
846592000011	Planing machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	589.902	669.284	404.482	704.687	538.955	406.289	562.827	425.788	1.149.135	1.300.113	1.282.260	105.974
846592000012	Milling machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	2.839.433	4.785.968	9.351.249	13.263.401	16.003.612	7.984.140	8.484.492	9.309.621	10.665.224	11.131.864	10.740.782	2.101.900
846592000013	Machines for moulding by cutting; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	694.565	640.758	490.807	855.326	1.272.117	821.781	758.987	1.206.785	1.848.252	1.998.116	1.245.569	173.234
846593000011	Grinding machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	135.061	205.792	405.015	628.765	831.482	457.307	467.721	689.558	681.587	1.401.593	797.830	70.256
846593000012	Sanding machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	158.764	591.851	548.388	1.830.397	3.207.475	894.513	1.019.519	1.194.330	773.608	786.679	757.135	69.000
846593000013	Polishing machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	80.482	169.561	111.152	193.990	106.072	295.237	287.354	340.098	416.059	474.811	322.777	71.279
846594000000	Bending or joining machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	2.400.699	2.502.119	3.308.766	5.310.103	9.868.314	4.982.968	5.599.199	6.595.730	8.056.354	9.030.035	7.936.955	823.409
846595000000	Drilling or mortising machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	1.107.952	1.565.392	1.788.567	2.331.587	2.394.800	1.987.047	2.071.781	2.226.169	3.492.880	4.104.122	2.314.345	336.446
846596000000	Splitting, slitting or stripping machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic et	1.781.766	1.861.886	3.963.053	5.467.264	4.131.672	1.821.636	1.554.651	2.049.454	2.458.674	1.731.566	2.200.996	160.966
		18.832.137	**23.820.396**	**38.581.216**	**57.026.079**	**66.073.050**	**35.651.786**	**42.249.642**	**51.064.884**	**63.170.210**	**67.297.700**	**59.490.912**	**8.056.229**

8543 (Other electrical machines and devices with specific functions) EXPORT-USD													
Table23		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
854330000000	Electrolytic plating, electrolysis/electrophoresis machines and devices	**0**	**0**	**0**	**144.217**	**1.405.941**	**291.948**	**213.092**	**6.626.427**	**893.168**	**5.034.486**	2.218.899	330.595

8479 (Other machines and mechanical devices with specific functions) EXPORT-USD													
Table24		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
847930100000	Press machines for manufacturing sheets from wood/fibrous materials	506.410	841.641	906.218	1.122.382	1.865.859	989.109	783.914	1.158.053	1.026.594	751.820	856.640	24.995
847930900000	Other machines and devices for processing wood/cork	547.153	739.862	716.713	356.495	1.436.783	407.344	1.116.236	1.058.552	3.141.889	785.111	698.840	64.557
		1.053.563	**1.581.503**	**1.622.931**	**1.478.877**	**3.302.642**	**1.396.453**	**1.900.150**	**2.216.605**	**4.168.483**	**1.536.931**	**1.555.480**	**89.552**

8466 (Components, parts and accessories suitable for use in machines between 84.56 between 84.65 positions [parts, tool holders etc.]) EXPORT-USD													
Table25		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846610200000	Tool holders: chucks, clamps ve sleeves				162.744	72.605	62.884	61.618	155.859	132.137	204.188	1.326.954	257.441
846610310000	Other tool holders for turning lathes	1.115.427	1.399.024	1.688.823	3.301.321	2.780.140	1.900.837	1.867.496	2.709.669	3.613.336	4.232.848	4.603.296	597.701
846610380000	Other tool holders				1.180.198	1.324.348	921.075	2.012.191	3.344.174	2.914.243	3.554.156	4.804.526	816.401
846610800000	Self-opening die heads				16.927	19.307	37.538	50.530	48.419	116.461	77.039	47.995	2.389
846620200000	Kits and apparatuses for specific applications; sets comprising of standard kit and apparatus parts				1.084.772	1.456.046	884.525	1.439.480		1.428.461	804.117	409.428	179.007
846620910011	Lathe chucks	119.743	104.033	36.188	92.048	167.065	249.581	124.162	176.867	23.430	119.048	113.736	16.723
846620910019	Other tool holders for parts to be processed in lathes	1.846.213	3.432.342	5.548.954	9.538.604	13.537.276	3.594.253	7.957.544	15.659.309	13.563.764	13.500.425	14.232.732	2.043.672
846620980000	Other tool holders for parts to be processed				4.011.348	4.325.341	716.009	1.067.150	1.933.848	1.333.494	1.638.267	1.099.611	206.510
846630000000	Dividing units and other specific units in machines	358.276	858.439	708.399	1.173.723	708.129	1.159.934	1.159.122	1.462.762	2.218.114	2.368.553	1.335.876	112.989
846691200000	Cast iron/cast steel parts of stone, concrete etc. processing machines	11.601	78.987	60.649	23.816	112.260	88.343	38.670	72.076	20.982	201.070	154.332	0
846691950000	Other components, parts of stone, concrete etc. processing machines	434.670	439.934	818.807	941.546	1.288.681	1.351.247		1.097.238	957.633	1.160.654	643.932	109.507
846692200000	Cast iron/cast steel parts of wood, plastic processing machines	55.590	63.252	64.959	77.618	131.029	242.367	143.620	728.756	673.003	472.041	1.404.018	100.188
846692800000	Other components, parts of wood, plastic processing machines	1.243.085	1.356.763	1.329.640	2.594.330	2.702.867	2.996.870	2.490.267	3.159.504	3.824.493	4.192.657	7.007.714	756.637
		5.184.605	**7.732.774**	**10.256.419**	**24.198.995**	**28.625.094**	**14.205.463**	**18.411.850**	**30.548.481**	**30.819.551**	**32.525.063**	**37.184.150**	**5.199.165**

8486 (Machines and devices used in the manufacture of semiconductor discs, ingots, integrated circuits etc.; components-parts-accessories) EXPORT-USD													
Table26		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
848690100000	Tool holders and self-opening die heads; holders for parts to be processed	**0**	**0**	**0**	**9.835**	**15.981**	**78.837**	**86.757**	**277.264**	**223.764**	**106.738**	**102.013**	19.474

8464 (Machines for processing mineral materials such as stone, ceramic, concrete, asbestos cement or for cold working glass) IMPORT-USD													
Table27		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846410000000	Sawing machines for minerals such as stone, ceramic, concrete, cement etc. and cold working glass	**8.175.935**	**9.035.772**	**12.646.710**	14.409.832	6.134.420	7.300.267	9.041.580	15.429.061	16.042.112	25.491.638	22.398.291	2.319.331
846410100000	Sawing machines for cutting semiconductor ingots into slices	300.267	4.183	509.836									
846410900000	Other sawing machines	7.875.668	9.031.589	12.136.874									
846420110000	Grinding/polishing machines for optical glass	4.360.587	3.719.584	5.943.866	5.279.410	5.413.681	2.154.028	4.978.670	6.782.299	4.218.800	4.882.866	5.159.241	610.778
846420190000	Grinding/polishing machines for other glass	13.044.047	17.406.591	19.923.606	14.348.869	25.011.714	8.779.386	13.285.235	23.324.929	13.071.274	25.950.800	10.891.689	1.547.438
846420800000	Other grinding/polishing machines							5.479.608	29.641.276	12.093.124	15.852.706	16.585.321	2.204.301
846490000000	Other machines for cold working stone, ceramic, concrete, asbestos cement or glass	**17.613.719**	**11.511.495**	**16.198.881**	**35.994.007**	**25.274.405**	**11.558.302**	6.349.757	29.000.442	22.783.076	33.233.357	34.434.135	2.091.321
846490100000	Other machines for carving/bevelling semiconductor discs		9.114										
846490200000	Machines for processing ceramic	1.846.009	2.783.173	2.091.925	3.956.081	4.269.035	1.512.057						
846490800000	Other machines for processing stone, concrete, cement, cold glass	15.767.710	8.719.208	14.106.956	32.037.926	21.005.370	10.046.245						
		43.194.288	**41.673.442**	**54.713.063**	**70.032.118**	**61.834.220**	**29.791.983**	**39.134.850**	**104.178.007**	**68.208.386**	**105.411.367**	**89.468.677**	**8.773.169**

8465 (Machines for processing hard materials such as wood, cork, bone, hard rubber, hard plastic [nailing, punching etc.]) IMPORT-USD													
Table28		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846510100000	Machines operating by manual loading and without changing tools	518.045	2.981.619	1.970.765	1.743.094	3.364.817	1.173.380	2.506.206	3.772.102	4.087.069	2.973.204	3.671.495	382.910
846510900000	Machines operating by automatic loading and without changing tools	9.497.291	14.231.967	22.548.505	14.353.731	36.866.431	7.592.836	22.487.503	22.260.889	20.944.180	22.135.320	30.220.495	3.370.441
846591100000	Band saws; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	175.235	567.461	444.509	772.383	627.203	489.865	779.732	853.317	901.074	1.471.730	559.489	290.734
846591200000	Circular saws; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	2.338.371	4.800.611	5.865.734	6.551.617	7.672.985	3.968.738	8.408.502	12.168.818	8.552.991	11.059.326	12.643.970	2.106.750
846591900000	Other sawing machines for processing hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	6.722.218	4.656.292	6.307.851	6.815.120	3.634.624	2.310.151	4.474.791	8.330.326	6.064.575	13.680.557	11.741.340	1.684.072
846592000011	Planing machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	574.451	791.084	1.293.807	1.192.233	2.186.231	415.495	1.234.060	761.078	490.326	1.619.609	496.506	361.017
846592000012	Milling machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	4.328.940	7.009.815	6.554.686	8.522.412	7.736.059	3.968.100	5.094.014	5.329.760	3.487.248	8.215.727	4.279.822	829.570
846592000013	Machines for moulding by cutting; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	2.271.617	3.901.711	6.168.290	2.215.861	5.204.802	1.355.246	1.681.878	7.796.356	1.640.869	1.215.014	2.425.785	209.424
846593000011	Grinding machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	383.868	637.212	359.432	584.249	1.499.869	570.898	301.190	511.357	643.306	430.083	290.179	12.619
846593000012	Sanding machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	2.337.542	8.965.707	4.951.137	10.370.628	10.876.189	5.906.326	2.834.587	13.050.718	8.771.979	10.448.196	9.236.830	270.595
846593000013	Polishing machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	208.458	617.998	558.129	1.441.092	1.852.836	248.862	779.810	843.075	1.629.854	384.831	3.609.007	395.769
846594000000	Bending or joining machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	12.402.784	9.917.406	38.472.914	9.515.493	29.267.777	7.884.478	8.139.858	48.988.479	22.284.391	22.263.519	13.355.806	882.794
846595000000	Drilling or mortising machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic etc.	3.341.667	6.617.223	8.946.579	8.405.256	8.871.997	3.626.154	4.799.981	7.424.390	6.370.078	9.793.649	10.013.871	980.516
846596000000	Splitting, slitting or stripping machines; for hard materials such as wood, cork, bone, hard rubber, hard plastic et	2.110.436	3.164.259	1.455.260	8.744.324	35.517.542	21.517.107	968.068	16.832.546	3.019.098	1.325.818	2.091.417	134.097
		47.210.923	**68.860.365**	**105.897.598**	**81.227.493**	**155.179.362**	**61.027.636**	**64.490.180**	**148.923.211**	**88.887.038**	**107.016.583**	**104.636.012**	**11.911.308**

8543 (Other electrical machines and devices with specific functions) IMPORT-USD													
Table29		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
854330000000	Electrolytic plating, electrolysis/electrophoresis machines and devices				**4.587.030**	**10.539.028**	**11.178.440**	**7.712.411**	**13.718.473**	**18.659.741**	**9.643.525**	**19.974.645**	**867.257**

8479 (Other machines and mechanical devices with specific functions) IMPORT-USD													
Table30		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
847930100000	Press machines for manufacturing sheets from wood/fibrous materials	24.592.880	103.322.945	2.893.063	53.717.851	27.642.005	6.280.286	29.285.478	175.719.132	41.121.365	8.194.053	12.203.019	910.986
847930900000	Other machines and devices for processing wood/cork	56.027.052	9.260.012	2.038.107	26.797.655	73.405.954	14.331.332	9.197.294	23.200.826	10.914.886	60.892.862	25.918.006	48.283.655
		80.619.932	**112.582.957**	**4.931.170**	**80.515.506**	**101.047.959**	**20.611.618**	**38.482.772**	**198.919.958**	**52.036.251**	**69.086.915**	**38.121.025**	**49.194.641**

8466 (Components, parts and accessories suitable for use in machines between 84.56 between 84.65 positions [parts, tool holders etc.]) IMPORT-USD													
Table31		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)
846610200000	Tool holders: chucks, damps ve sleeves				3.907.852	3.769.675	2.107.617	3.330.710	4.890.057	3.675.586	5.325.724	6.904.511	1.035.528
846610310000	Other tool holders for turning lathes	2.445.415	2.561.257	3.464.844	5.079.161	4.305.257	1.234.234	2.872.697	5.631.065	5.726.097	5.983.902	6.198.590	963.637
846610380000	Other tool holders				9.803.522	10.341.947	5.404.929	7.424.625	12.622.684	12.522.758	12.368.500	11.398.995	1.627.102
846610800000	Self-opening die heads				481.099	707.476	181.797	308.753	350.617	171.398	153.272	262.429	14.109
846620200000	Kits and apparatuses for specific applications; sets comprising of standard kit and apparatus parts	1.133.480	1.469.432	2.351.923	2.227.158	4.166.548	3.340.167	3.724.686		5.930.192	7.112.573	5.685.846	631.004
846620910011	Lathe chucks				2.187.866	2.168.823	1.288.932	2.011.876	2.731.627	2.595.338	2.603.076	2.731.074	286.838
846620910019	Other tool holders for parts to be processed in lathes	650.659	1.396.738	1.003.428	1.406.131	1.371.561	934.957	2.349.238	3.419.556	3.870.967	2.722.743	2.546.189	444.001
846620980000	Other tool holders for parts to be processed	2.129.053	1.977.120	1.998.537	1.967.625	2.650.338	1.242.685	2.765.645	5.372.899	6.662.404	7.916.110	7.982.484	878.837
846630000000	Dividing units and other specific units in machines	3.154.475	5.265.508	4.145.270	6.092.658	8.781.165	2.967.839	6.434.609	12.023.207	9.611.957	10.574.502	12.923.644	1.508.358
846691200000	Cast iron/cast steel parts of stone, concrete etc. processing machines	275.340	363.069	347.442	220.132	284.127	407.888	207.907	922.357	885.156	323.012	599.685	6.811
846691950000	Other components, parts of stone, concrete etc. processing machines	3.899.137	5.413.227	4.370.641	6.282.767	6.280.202	4.353.712		4.512.713	4.539.830	5.970.875	4.901.976	693.839
846692200000	Cast iron/cast steel parts of wood, plastic processing machines	322.120	317.429	524.720	527.002	561.874	243.566	237.940	568.417	491.374	699.220	1.356.289	139.405
846692800000	Other components, parts of wood, plastic processing machines	3.968.798	4.596.277	5.785.226	9.343.147	23.394.685	8.116.305	7.780.563	12.481.423	13.005.480	13.155.843	16.304.671	2.076.320
		17.978.477	**23.360.057**	**23.992.031**	**49.526.120**	**68.783.678**	**31.824.628**	**39.449.249**	**65.526.622**	**69.688.537**	**74.909.352**	**79.796.383**	**10.305.789**

8486 (Machines and devices used in the manufacture of semiconductor discs, ingots, integrated circuits etc.; components-parts-accessories) IMPORT-USD													
Table32		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (2 mth)

2841 - Top 5 Countries in Turkey's Metal Working Machines Export and Import

Table33-8456 (Machines and tools for processing materials through abrasion with laser, photon, ultrasonic and other waves etc.) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE EXPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Russian Federation	2.078	4.378	5.166	10.220	8.130
USA	1.250	3.222	4.548	3.809	5.415
Poland	1.003	4.256	6.685	3.651	5.284
Bulgaria	729	805	1.998	2.396	3.619
Saudi Arabia	564	1.036	3.694	3.769	3.389
Other	20.720	27.745	30.729	46.527	62.928

Table34-8457 (Metal working machining centers, single-station machines and multi-station transfer machines) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE EXPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Free Zone	771	896	605	839	1012
France	60	12	99	314	868
Iraq	7	7	87	345	384
Saudi Arabia	256	0	71	15	356
USA	31	83	928	60	293
Other	2.242	3.018	2.245	4.545	3.124

Table35-8458 (Metal working lathes [incl. turning centers]) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE EXPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Free Zone	2154	519	939	1548	1236
Iraq	1118	279	423	801	545
Syrian Arap Republic	100	0	0	1139	470
Germany	51	192	165	266	350
Algeria	34	73	171	158	297
Other	2.320	4.285	1.953	3.577	2.330

Table36-8459 (Machine tools for boring, reaming, milling, threading etc. metals through machining) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE EXPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Azerbaijan	146	570	800	1.263	901
Algeria	70	142	825	449	595
Islamic Republic of Iran	839	993	222	285	584
USA	1.088	1.363	556	399	570
Saudi Arabia	331	15	302	153	529
Other	6.675	8.988	8.023	10.242	6.982

Table37-8460 (Tools for polishing, deburring, sharpening, grinding, honing, lapping etc. metals and cermets) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE EXPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Kazakhstan	87	28	97	36	1651
Germany	1531	883	372	1013	1569
Russian Federation	460	577	738	1325	1010
USA	575	217	341	420	780
Poland	287	397	374	431	610
Other	10.704	7.927	10.018	11.164	8.481

Table38-8461 (Tools for working metals or cermets through machining such as shaping, bevelling, broaching, gear shaping, sawing, slitting) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE EXPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Free Zone	5620	4404	4982	2533	1889
Russian Federation	556	1095	1843	1785	1574
Germany	870	1092	799	3010	1487
Uganda	0	0	0	0	1465
Poland	183	203	257	951	1095
Other	10.907	16.093	14.568	15.876	12.386

Table39-8462 (Machine tools for forging, hammering, die forging, cutting, drafting, engraving forge press, carbide finishing on metals) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE EXPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
USA	10.845	21.534	22.787	16.927	22.264
Russian Federation	12.349	20.411	30.710	33.685	20.184
Germany	13.050	17.128	20.475	22.174	20.155
Poland	11.369	12.357	8.872	10.660	12.472
Saudi Arabia	8.375	9.946	11.075	10.396	11.459
Other	173.523	190.700	203.874	213.102	206.648

Table 40-8463(Other chipless machining metal or cermet working machines) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE EXPORT'S (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Free Zone	2.001	6.712	5.024	3.401	1.921
Russian Federation	1.030	1.036	1.673	1.277	1.814
Algeria	438	729	391	1.312	1.619
Egypt	306	1.213	1.432	1.250	1.377
Saudi Arabia	342	74	543	608	1.217
Other	8.096	9.769	11.254	7.928	12.260

Table41-8456 (Machines and tools for processing materials through abrasion with laser, photon, ultrasonic and other waves etc.) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE IMPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Switzerland	23.887	32.584	26.949	28.806	29.203
Germany	9.942	28.064	16.189	11.795	24.225
Italy	6.928	8.931	10.110	10.323	15.029
China	5.749	7.062	12.608	12.278	13.304
Japan	4.210	9.047	10.386	7.764	9.515
Other	17.273	33.162	27.592	25.400	23.621

Table42-8457 (Metal working machining centers, single-station machines and multi-station transfer machines) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE IMPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Taiwan	60.648	96.136	104.775	91.432	117.858
Germany	15.806	26.490	46.321	51.356	50.733
Japan	30.288	59.162	44.900	39.363	45.826
Italy	12.814	11.911	14.995	14.490	16.095
South Korea	6.304	10.718	10.281	10.375	12.610
Other	12.388	27.240	42.116	47.201	29.758

Table43-8458 (Metal working lathes [incl. turning centers]) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE IMPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Taiwan	53.424	74.238	78.584	63.128	70.206
Japan	15.495	25.242	31.791	40.284	44.742
Germany	14.213	31.628	28.767	50.790	38.484
South Korea	16.626	32.567	33.157	30.005	29.383
China	6.879	11.293	11.586	9.262	13.818
Other	27.413	48.109	44.421	42.197	47.761

Table44-8459 (Machine tools for boring, reaming, milling, threading etc. metals through machining) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE IMPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Germany	15.395	25.193	32.675	18.333	16.979
Taiwan	7.625	15.074	12.631	12.863	13.792
Spain	4.127	5.187	16.330	10.886	11.071
China	5.840	11.690	9.005	8.084	9.672
Italy	5.930	5.625	13.905	4.616	5.155
Other	10.172	13.974	19.856	15.615	16.181

Table45-8460 (Tools for polishing, deburring, sharpening, grinding, honing, lapping etc. metals and cermets) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE IMPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Germany	23.146	30.689	41.103	43.267	30.559
Italy	19.689	12.595	15.943	18.222	16.917
Switzerland	9.304	15.954	21.248	10.226	10.167
China	1.444	2.773	3.635	2.546	6.852
Taiwan	3.381	6.000	5.009	6.201	6.516
Other	10.424	9.577	15.449	19.322	10.583

Table46-8461 (Tools for working metals or cermets through machining such as shaping, bevelling, broaching, gear shaping, sawing, slitting) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE IMPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Germany	12.975	16.220	10.324	15.361	12.155
Italy	3.284	10.708	8.054	5.706	10.747
Spain	81	99	834	727	4.801
Taiwan	1.440	3.583	3.671	3.412	3.969
Switzerland	489	1.912	437	1.032	2.094
Other	10.363	10.113	15.631	7.024	9.850

Table47-8462 (Machine tools for forging, hammering, die forging, cutting, drafting, engraving forge press, carbide finishing on metals) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE IMPORTS (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Italy	49.882	77.469	114.582	75.473	66.252
Germany	33.485	33.661	35.464	35.013	30.220
Taiwan	9.827	10.188	13.914	23.108	19.501
South Korea	10.815	5.977	52.146	18.857	19.068
China	14.339	21.987	14.253	23.673	19.039
Other	36.340	77.916	69.609	75.994	67.753

Table 40-8463(Other chipless machining metal or cermet working machines) TOP 5 COUNTRIES IN TURKEY'S METAL WORKING MACHINE IMPORT'S (Thous. USD)

COUNTRY/YEAR	2010	2011	2012	2013	2014
Germany	17.407	33.069	10.729	19.486	24.453
China	5.306	13.017	8.058	8.762	13.115
Italy	12.279	29.595	15.041	11.989	12.186
Taiwan	6.386	7.902	4.670	10.842	9.091
USA	2.582	474	243	700	3.055
Other	6.838	19.672	18.887	10.202	9.764

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