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Large scale industrial enterprises in Turkish industry: their structures, characteristics and spatial distribution

Abstract: Industrialization is a process which is based on precise and quantitative measurements and contains different basic changes in the economic structure of a country or region. The structural characteristics and spatial distribution of the industrial enterprises established during the industrialization process which is one of the most important elements of the socio-economic transformation in Turkey within a historical process has been the object of this study. The aim of the study was to establish the positions and significance of one thousand (1000) large industrial companies in the industry of Turkey by using the framework of criteria based on sales from production which have been maintained by the Istanbul Chamber of Industry on a regular basis. The workplace and number of employees of the companies on a province basis, sector based division, realized exports and sales from product output, corporate entities, structures, spatial distribution and other characteristics were taken into consideration in the study. Although the thousand large scale companies in Turkey based on production output sales comprised only 0.40% of the enterprises active in the industrial sector in 2012, they comprised 12% of the labor force, 59.6% of product output sales and 65.2% of all exports. On a regional basis, 54% of these companies are located in the Marmara region, 13.2% are located in Central Anatolia and 12.4% are located in the Aegean region; on a province basis, 63.4% are located in Istanbul, Izmir, Bursa, Kocaeli and Ankara. A sector based division of the companies shows that 21.4% are involved in food, beverage and tobacco processing, 19.6% are involved in the industry of metal goods, machinery, automotive industry, electrical tools and equipment and 16.1% deal with textiles, ready-to-wear, leather and the manufacturing of shoes. In terms of labor force numbers, the figures vary as 18.9%, 27.4% and 17.9% respectively.

Keywords: industry; industrial enterprises; large scale; spatial distribution; Turkey

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INTRODUCTION

Turkey (Fig. 1), which has a deeply rooted historical agriculture-based tradition on which its economic structure has been based (Özgüç, 1986–87: 35), has incepted on a rapid

industrialization process particularly after WWII. As a result of the projects realized during this process, the industrial sector has bypassed the agricultural sector both in terms of production as well as exports. After the 1950's factors such as population growth, increasing agricultural population density, decrease in the size of land per agricultural population, the extension of mechanization and intensive farming methods, migration from rural areas to urban areas, the necessity to use raw material resources, improved transport, etc. have had an input in the development of industry in Turkey (Özgüç, 1986–87: 40). Efforts were made to apply the “decentralization” policies which were applied in developed countries after the 1950's particularly during the planned development periods in order to eliminate the inter-regional imbalances which had emerged in Turkey during the historical process (Sevgi, 1994: 160).

The development of the industrial sector which was supported with the five year development plans, which were incepted in the beginning of the 1960's in Turkey, caused spatial changes throughout the country. Industrial activities were concentrated in the large provinces of Turkey (İstanbul, Ankara, İzmir, Bursa) and with the applied policies they started to spread to other regions and provinces (Kocaeli, Adana, Gaziantep, Kayseri, Konya, Denizli,... etc.) and new industrial centers started to emerge, particularly in Anatolia (Mutluer, 1995: 1). For this reason, the initially public industrial enterprises established by the state of the Republic of Turkey and large scale manufacturing industrial enterprises which are the subject of our study were established in different regions of the country and efforts were made to expand industrial activities throughout the country.

Fig. 1. Map of Turkey regions and provinces



The aim of this study was to determine the development of one thousand (1000) large scale industrial enterprises active in the industrial sector in Turkey, which have a significance in terms of decentralization, development of workplaces and number of personnel within the historical process, size of the establishments, distribution of the companies on a sector basis, their export volume and production sales, display their spatial distribution on a regional and province basis and assess the status in accordance with the emerging results. The statistics from Istanbul Chamber of Industry, which is the industry chamber with the highest number of members in Turkey, the data from Turkish Statistical Institute, which is an official statistics agency, and export values obtained from Turkish Exporters Assembly were used in the study.

The data maintained by the Istanbul Chamber of Industry, based on sales generated by production which is the basic criterion on which the ranking of the large scale companies in Turkey is based were used in the study. The study was started by the Chamber of Industry in 1968 as the 100 Large Industrial Enterprises and became 500 Large Industrial Enterprises in Turkey as of 1993 and after 1997 the statistics for the 1st and 2nd 500 Large Industrial Enterprises are published regularly every year. This study, executed by the Istanbul Chamber of Industry, has held a reflective mirror to the economy and manufacturing industry of Turkey for almost half a century¹. The listed companies are all manufacturing industry sector companies. Statistical data, such as sales revenues, gross added value, equity, total assets, total pre-tax gains and losses, exports and average number of employees were used in the study. Furthermore various assessments dealing with financial ratios, funding structure, profitability ratios, economic profitability, asset turnover, factor income of net added value (functional) distribution, income from sources other than manufacturing activities, employment and gross added value distribution and labor efficiency were also carried out.

The 1st and 2nd 500 Large Industrial Enterprises in Turkey, in other words: the study about 1000 Large Industrial Enterprises, is a significant indicator of the development and future status of industry in Turkey². According to this study the ten (10) leading companies in Turkey among the 1000 large industrial enterprises in terms of production sales are Turkish Petroleum Refineries, Ford Automotive, Oyak-Renault Automotive, Arçelik, Electricity Generation Company, Tofaş-Türk Automotive, İskenderun Iron-Steel Works, Ereğli Iron-Steel Works, İçdaş Steel and Aygaz (İSO, 2012).

THE STRUCTURE AND DISTRIBUTION OF MANUFACTURING INDUSTRY ENTERPRISES

the development of the industrial sector started in the late 1950's in Turkey and accelerated after the 1960's and as of 2012 there are 252 975 manufacturing industry enterprises (TEPAV, 2012: 18) which employ 6 460 thousand employers in total in these enterprises (TÜİK, 2012). A significant part of the small, medium and large scale industrial enterprises in Turkey is located in the western part of the country. Some areas are particularly dense in

¹ <http://www.iso.org.tr/projeler/arastirmalar/turkiyenin-500-buyuk-sanayi-kurulusu/18.09.2014>

² <http://www.iso.org.tr/projeler/arastirmalar/turkiyenin-500-buyuk-sanayi-kurulusu/18.09.2014>

terms of the industrial sector. In terms of both regions as well as on a province basis the Marmara Region is the center of accumulated industries. The situation is the same for large scale industrial enterprises. In fact, many small and medium scale enterprises provide byproducts for these large scale enterprises.

The 1000 Large Industrial Enterprises based on production sales, which are the subject of the study, comprise only 0.40% of the total number of manufacturing industry enterprises and employ 12% of labor (İSO, 2012). 54% of these industrial enterprises is located in the Marmara Region. Marmara Region is followed by 132 enterprises in Central Anatolia, 124 enterprises in the Aegean Region and 79 enterprises in the Mediterranean region. East Anatolia, Southeast Anatolia and the Black Sea regions are the least dense regions in terms of the number of large scale industrial facilities which is directly proportional to the number of small and medium scale industrial enterprises in these regions. Only 0.6% of large scale industrial enterprises are in East Anatolia, 5.4% in Southeast Anatolia and 6.5% in the Black Sea region (Tab. 1).

The 1000 Large Industrial Enterprises in Turkey employ 783 066 persons in total. The largest number of employees are in the Marmara Region with 397 417 (51%) employees. Marmara region is followed by Central Anatolia with 17.5% of the employees, the Aegean region with 10.7% and the Black Sea region with 8.9%. Other regions with a lesser rate of workplaces also have a lesser rate of employees. East Anatolia Region appears to have the least number of employees with 0.5%. This region is followed by Southeast Anatolia with 5.1% and the Mediterranean region with 6.6% (Tab. 1).

Tab. 1. Regional distribution of large industrial enterprises in Turkey

Regions	Enterprises	Employees	Enterprises %	Employees %
Aegean	124	83767	12.4	10.70
Black Sea	65	69333	6.5	8.85
Central Anatolia	132	137049	13.2	17.50
Eastern Anatolia	6	3611	0.6	0.46
Marmara	540	397417	54.0	50.75
Mediterranean	79	51776	7.9	6.61
Southeastern Anatolia	54	40113	5.4	5.12
Total	1000	783066	100.0	100.0

Source: Istanbul Chamber of Industry, 2012

These companies which are significant in terms of the economy of Turkey are located in 57 provinces in different regions; none of the 1000 large enterprises are located in the remaining 24 provinces. The distribution of workplaces and employees based on provinces shows that Istanbul province is the leader with 38.4%. In terms of the number of workplaces, Istanbul province is followed by İzmir, Bursa, Kocaeli, Ankara, Gaziantep, Kayseri, Adana, Konya and Denizli provinces and the sequence in terms of employees following Istanbul is Ankara, Bursa, Gaziantep, İzmir, Kocaeli, Manisa, Zonguldak, Kayseri and Adana provinces.

These provinces comprise 78.6% of the 1000 large industrial enterprises and 79.8% of the employees (Tab. 2). These provinces have a significant advantage over the other provinces because of factors such as having an industrial infrastructure, geographical position, characteristics, advantages in terms of industrialization, having a central location in their relevant areas, transport facilities, internal and external market opportunities, qualified labor, developed training and health facilities.

Tab. 2. Distribution of large industrial enterprises in Turkey according to provinces

Provinces	Regions	Enterprises	%	Provinces	Regions	Employees	%
İstanbul	Marmara	384	38.4	İstanbul	Marmara	301014	38.4
İzmir	Aegean	72	7.2	Ankara	Central Anatolia	77041	9.8
Bursa	Marmara	65	6.5	Bursa	Marmara	48538	6.2
Kocaeli	Marmara	58	5.8	Gaziantep	Southeastern Anat.	38395	4.9
Ankara	Central Anatolia	55	5.5	İzmir	Aegean	34199	4.4
Gaziantep	Southeastern Anat.	50	5.0	Kocaeli	Marmara	29056	3.7
Kayseri	Central Anatolia	30	3.0	Manisa	Aegean	28414	3.6
Adana	Mediterranean	28	2.8	Zonguldak	Black Sea	27280	3.5
Konya	Central Anatolia	23	2.3	Kayseri	Central Anatolia	24113	3.1
Denizli	Aegean	21	2.1	Adana	Mediterranean	16579	2.1
Total		786	78.6	Total		624629	79.8
Enterprise Total		1000	100.0	Employee Total		783066	100,0

Source: Istanbul Chamber of Industry, 2012

Almost all of the 1000 large industrial enterprises are privately owned (97.3%) and 22% are partnerships established with foreign capital. While only 27 of the enterprises have been established with a corporate state investment of various proportions, the remaining 973 enterprises have been established with private capital. The shares of 16 of the enterprises established with state capital are wholly state property while the state is a major shareholder in 11 of these enterprises. In other words, private investors practically own 984 of the large enterprises. The dominance of the state in terms of ownership of industrial facilities has decreased from the past to the present as a result of the privatization works which accelerated particularly during the 2000's. In terms of production sales Electricity Generation Company, Turkish Coal Enterprises, Turkish Sugar Factories, Turkish Petroleum Inc., Eti Mining Operations, Turkish Tea Enterprises, Mechanical and Chemical Industry Corporation, Meat and Fish Organization and Istanbul Asphalt Corporation are the largest public organization companies. 220 of these industrial organizations have foreign capital and a foreign capital partnership. Over 91% of the 90 companies (all of 63) have been established wholly with foreign capital

investment, 54 companies have been established with a 5090% foreign capital input and 66 companies have a foreign capital investment of 50% and less. Between 1924–1950, 13 companies with foreign capital or foreign capital partnerships were established in Turkey, during 1951–1980 the number of companies was 83, during 1981–2000 the number was 78 and after 2000, 18 enterprises with foreign capital or foreign capital partnerships were established in Turkey. In terms of production sales, OMV Petroleum, Ford Automotive, Oyak-Renault Automotive, Tofaş-Türk Automotive, Mercedes-Benz Automotive, BSH Household appliances, Vestel Electronics, Unilever, Hyundai Assan Automotive and İpragaz are the largest foreign capital investment companies (ISO, 2012).

THE HISTORICAL DEVELOPMENT OF MANUFACTURING INDUSTRY ENTERPRISES AND ENTERPRISE SIZE

from the Ottoman Empire to the beginning of the 20th century, due to both the industrialization policies which had been applied to date as well as the industrial enterprises which had emerged as a result of these policies, the industrial assets were far from fulfilling the requirements of the country. Along with this heritage small scale manufacturing industries dominated Anatolia in particular in Turkey. In 1915 there were 269 enterprises which employed 10 and more laborers in the country. The majority of these enterprises were located in İstanbul, İzmir, Adana and Bursa which were the industrial centers of that era (Ökçün, 1970: 2–19; Kepenek, 1986: 14–18; Eldem, 1970: 111–119; Sevgi, 1994: 28–29). Only 3 of the mentioned enterprises had been established before the founding of the Republic in 1923. Two of them had been established in İstanbul (Yudum Food–1878 and Abdi İbrahim Pharmaceuticals–1919) and 1 in Eskişehir (Locomotive Factory–1894). These 3 enterprises currently employ 3297 persons.

A review of the 1000 large scale enterprises in terms of periods reveals that the industrialization policies applied in Turkey have a significant impact. The first liberal and statist era prevailed in Turkey during 1923–1950, the second liberal era and development plans prevailed during 1951–1980, in 1981 and thereafter development plans and structural transformation industrialization periods resulted in the establishment of 55 enterprises between 1924–1950, 419 enterprises between 1951–1980, 399 enterprises between the years 1981–2000 and 76 large industrial enterprises after 2000³. The number of employees employed by the enterprises established between the years 1924–1950 was 84 719, the number of employees employed by the enterprises established between the years 1951–1980 was 374 714, the number of employees employed by the enterprises established between the years 1981–2000 was 280 406 and the number was 39 930 for the enterprises established after the year 2000. In terms of both the number of workplaces as well as the number of employees the 1951–1980 era is the leader. This era is followed by the 1981–2000 era (Tab. 3, Fig. 2).

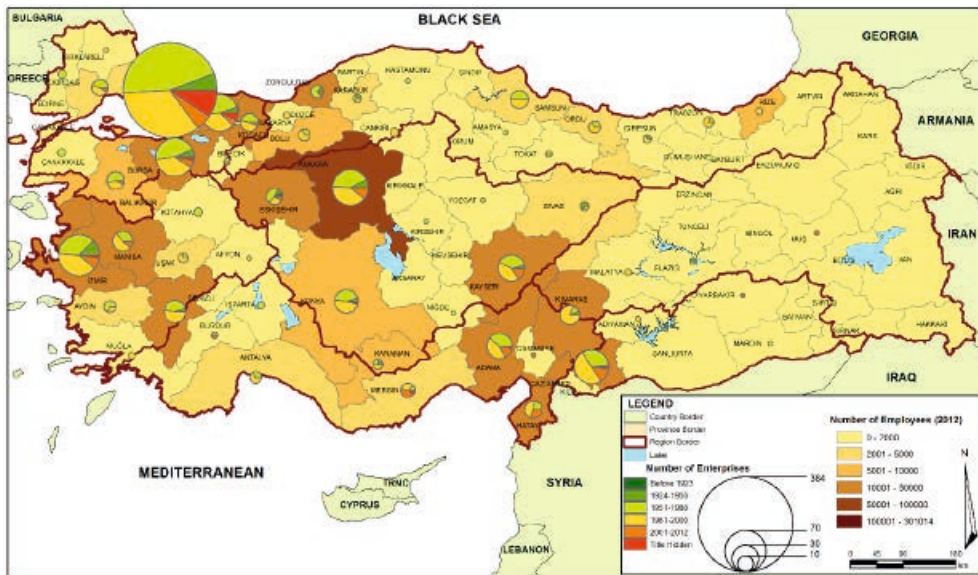
³ 48 manufacturing industry enterprises did not reveal relevant information.

Tab. 3. Historical development of large scale enterprises in Turkey

Regions	Enterprises						Employees				
	1923 and before	1924–1950	1951–1980	1981–2000	2001–2012	Names Hidden	1923 and before	1924–1950	1951–1980	1981–2000	2001–2012
Aegean	0	10	49	55	8	2	0	3832	32942	43790	3203
Black Sea	0	3	27	33	2	0	0	15832	26037	26762	702
Central Anatolia	1	10	54	54	12	1	1474	24988	54917	40694	14976
Eastern Anatolia	0	1	2	2	1	0	0	623	1251	1511	226
Marmara	2	29	248	188	31	42	1823	32554	225880	125008	12152
Mediterranean	0	1	21	41	14	2	0	150	18999	27208	5419
SE Anatolia	0	1	18	26	8	1	0	6740	14688	15433	3252
Total	3	55	419	399	76	48	3297	84719	374714	280406	39930

Source: Istanbul Chamber of Industry, 2012

Fig. 2. Historical development of large scale enterprises in Turkey



The western regions have always been prominent in the industrialization drive in Turkey. In this respect the industry has concentrated in the regions of Marmara, Central Anatolia and the Aegean. These three regions comprise 89% of the enterprises which were established during 1924–1950, 84% established during 1951–1980, 74% established during 1981–2000 and 67% established after 2000. The corresponding numbers of employees are 72%, 84%, 75% and 76% respectively. Marmara Region has always ranked first place in both the number of workplaces as well as the number of employees while East Anatolia region is at the bottom of the list (Tab. 3, Fig. 2).

A review of the sizes of the 1000 large scale enterprises shows that 20 of the companies employed 5001 and more laborers, 182 companies employed between 1001–5000 laborers, 221 companies employed a staff of 501–1000, 266 companies employed between 251–500 laborers and 263 companies employed 250 and less laborers. In terms of employees, although the percentage of enterprises employing 5001 and more laborers was only 2%, the percentage of employees employed by these companies was 21%, the percentage of companies employing 1001–5000 laborers was 18.2% while the percentage of employees was 41.4%, the percentage of companies employing 501–1000 laborers was 22.1% while the percentage of employees was 20%, the percentage of companies employing 251–500 laborers was 26.6 % and the percentage of employees was 12.6 and the percentage of companies employing 250 and less employees was 26.3% while the percentage of employees was 5% (Tab. 4). This shows that although the number of large industrial enterprises in Turkey is not high the number of employees is relatively much higher than those employed by small scale enterprises.

Tab. 4. Regional distribution of large industrial enterprises in Turkey according to enterprise size

Regions	250<		251–500		501–1000		1001–5000		5001->		Names Hidden Enterprises
	X*	Y**	X	Y	X	Y	X	Y	X	Y	
Aegean	36	5744	37	13839	34	24670	14	25814	1	13700	2
Black Sea	26	4269	19	6821	6	3615	10	21508	4	33120	0
Central Anatolia	29	4837	34	12476	30	20888	35	71226	3	27622	1
Eastern Anatolia	2	375	0	0	3	2134	1	1102	0	0	0
Marmara	136	20869	137	51350	113	80534	102	168718	10	75946	42
Mediterranean	24	3378	21	7839	18	13286	13	21500	1	5773	2
SE Anatolia	10	1660	18	6131	17	12382	7	13200	1	6740	1
Total	263	41132	266	98456	221	157509	182	323068	20	162901	48

Source: *Istanbul Chamber of Industry*, 2012, * X: Enterprises, ** Y: Employeesw

A review of the companies in terms of the number of employees per term and the number of employees employed shows that Marmara Region maintains its position of leadership. 10 companies employing 5001 and more employees are located in the Marmara Region, 4 are located in the Black Sea region and 3 companies are located in Central Anatolia. 102 companies employing 1001–5000 staff are located in the Marmara Region, 35 are located in Central Anatolia and 14 companies are located in the Aegean region. 113 companies employing 501–1000 employees are located in the Marmara Region, 34 are located in the Aegean region and 30 companies are located in Central Anatolia. 137 companies employing 251–500 employees are located in the Marmara Region, 37 companies are in the Aegean region and 34 companies are located in Central Anatolia. 136 companies employing 250 and less personnel are located in the Marmara region, 36 companies are located in the Aegean region and 29 companies are in Central Anatolia (Tab. 4). These regions are also prominent in terms of the

number of laborers employed by the manufacturing industry enterprises. In terms of the number of large scale enterprises according to regions, Istanbul, Kocaeli and Bursa provinces in the Marmara region, Izmir, Manisa and Denizli provinces in the Aegean region and Ankara, Konya and Kayseri in Central Anatolia have the highest number of enterprises. Istanbul province has 9 enterprises employing 5001 and more employees, Ankara and Zonguldak have 3 enterprises each, while Manisa, Bursa, Gaziantep, Hatay and Rize provinces have 1 large scale enterprise each.

SECTORAL DIVISION AND DISTRIBUTION OF MANUFACTURING INDUSTRY ENTERPRISES

The largest industrial sector with 208 enterprises within the 1000 large scale industrial enterprises which are the subject of the study is the food, beverage and tobacco processing industry sector. This sector is followed by 182 organizations involved in metal products, machinery, automotive, electrical appliances and devices industry, 153 organizations involved in textiles, clothing, leather and footwear industries and 121 organizations dealing with basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastics industry respectively. On a sectoral basis, 18 enterprises are involved in mining and quarrying industries, 24 organizations operate in the area of wood processing, cork and furniture products and 26 enterprises are involved in other manufacturing industries comprising the least number of enterprises (Tab. 5). The primary industry in terms of the sectoral distribution of employees with 27.4% (213 745 persons) are the metal products, machinery, automotive, electrical appliances and devices industries. This sector is followed by the food, beverage and tobacco processing industry with 19%, the textiles, clothing, leather and footwear industry with 17.4% and basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastics industry with 9.5%. The sectors with the least number of employees are the paper, paper products and printing industry with 16 279 employees, other manufacturing industries with 16 623 employees and wood processing, cork and furniture products industry with 22 208 employees (Tab. 6).

With the exception of the mining and quarry sector and the wood processing, cork and furniture products sector, the Marmara Region is the leader in the number of enterprises in all the other sectors in Turkey. Marmara Region is followed by the Aegean, Central Anatolia and the Black Sea regions in the food, beverage and tobacco processing sector; the Southeast and Mediterranean in the textiles, clothing, leather and footwear industry; the Aegean and Central Anatolia in the paper, paper products and printing industry sector; the Aegean and the Mediterranean in basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector; Aegean and Central Anatolia in the industrial sector based on rocks and soil; the Mediterranean and the Black Sea regions in basic iron-steel metal industry sector; Central Anatolia and the Aegean regions with metal products, machinery, automotive industry, electrical appliances and devices industry sector and the Aegean and Central Anatolia in the other manufacturing industries rank in second and third place. Central Anatolia and the Black Sea

regions rank before Marmara Region in terms of the mining and quarry sector and Central Anatolia and the Marmara Region have the same number of enterprises involved in the wood, wood products and furniture products sector (Tab. 5).

Tab. 5⁴. Regional distribution of large scale industry enterprises in Turkey on a sectoral* basis

Regions	A	B	C	D	E	F	G	H	J	K	N**	Total
Aegean	3	32	16	1	8	15	11	8	25	3	2	124
Black Sea	4	32	0	2	0	3	3	12	8	1	0	65
Central Anatolia	7	32	10	9	3	9	11	11	37	2	1	132
Eastern Anatolia	1	0	2	0	0	0	3	0	0	0	0	6
Marmara	3	84	73	9	25	82	34	61	108	19	42	540
Mediterranean	0	14	20	2	1	9	7	19	4	1	2	79
Southeastern Anatol.	0	14	32	1	0	3	3	0	0	0	1	54
Total	18	208	153	24	37	121	72	111	182	26	48	1000

*A: Mining and quarry industry, B: The food, beverage and tobacco processing industry, C: The textiles, clothing, leather and footwear industry, D: The wood processing, cork and furniture products industry, E: The paper, paper products and printing industry, F: basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry, G: Based on rocks and soil industry, H: Basic iron-steel metal industry, J: Metal products, machinery, automotive industry, electrical appliances and devices industry, K: Other manufacturing industries.

** Names Hidden Enterprises

Source: *Istanbul Chamber of Industry*, 2012., N

Marmara region, which is host to most of the large scale enterprises in Turkey, is also the leader in terms of personnel employed in these enterprises. The region ranks second in terms of wood, cork and furniture products sectors and other manufacturing industry sectors and fourth in the mining and quarrying industry sector. Marmara region is followed by Central Anatolia, the Black Sea and Aegean regions in the food, beverage and tobacco processing sectors, the Southeast, the Mediterranean and Aegean regions in the textiles, clothing, leather and footwear sectors; Central Anatolia, the Aegean and Mediterranean regions in paper, paper products and printing industry sector; the Aegean, Central Anatolia and the Mediterranean regions in basic chemistry, chemicals, petroleum, coal derivatives, the rubber and plastic industry sectors; Central Anatolia, the Aegean and the Mediterranean regions in the industries based on rock and soil; the Mediterranean, the Black sea and Aegean regions in the iron-steel basic metal industry sector; Central Anatolia, the Aegean and the Black sea regions in metal products, machinery, automotive, electrical appliances and devices industries sector. In the mining and quarrying sectors the Black sea, Central Anatolia and Aegean regions and in the wood, cork and furniture products sector and other manufacturing industries sector Central Anatolia region employ more staff than Marmara Region (Tab. 6).

⁴ The abbreviations in tables (5, 6, 7, 8, 10, 11, 12, 13) and figures (3, 4, 5, 6) represent the same industrial sectors.

Tab. 6. Regional distribution of employees in the large scale industry enterprises in Turkey on a sectoral* basis

Regions	A	B	C	D	E	F	G	H	J	K	Total
Aegean	5480	16506	14156	710	3528	7246	4215	5684	25195	1047	83767
Black Sea	21454	21096	0	865	0	1064	711	13478	10066	599	69333
Central Anatolia	11870	35954	8707	11905	1004	4586	5053	5208	42800	10772	137859
Eastern Anatolia	623	0	1511	0	0	0	1477	0	0	0	3611
Marmara	1785	63934	64919	7391	11371	53151	25640	31875	133179	4172	397417
Mediterranean	0	5449	16947	990	376	4128	4026	13510	2505	33	47964
SE Anatolia	0	4867	29361	347	0	3552	1986	0	0	0	40113
Total	41212	147806	135601	22208	16279	73727	43108	69755	213745	16623	780064

Source: *Istanbul Chamber of Industry*, 2012

Tab. 7. Distribution of large scale industry enterprises on a sectoral* basis according to provinces in Turkey

Provinces	A	B	C	D	E	F	G	H	J	K
İstanbul	3	52	64	4	32	62	30	45	80	12
İzmir	0	21	8	1	6	14	6	5	9	2
Bursa	0	14	13	2	1	3	3	3	23	3
Kocaeli	0	5	0	2	2	17	3	13	14	2
Ankara	5	7	2	1	2	4	5	5	22	2
Gaziantep	0	13	32	1	0	3	1	0	0	0
Kayseri	1	4	6	7	0	1	0	5	6	0
Adana	0	6	7	0	1	8	1	2	3	0
Konya	0	11	0	1	1	3	2	1	4	0
Denizli	0	2	6	0	1	0	3	3	6	0
Total	9	135	138	19	46	115	54	82	167	21
%	50.0	63.1	85.7	79.2	87.2	94.8	71.1	73.2	85.2	80.8
Total Enterprise**	18	214	161	24	39	134	76	112	196	26

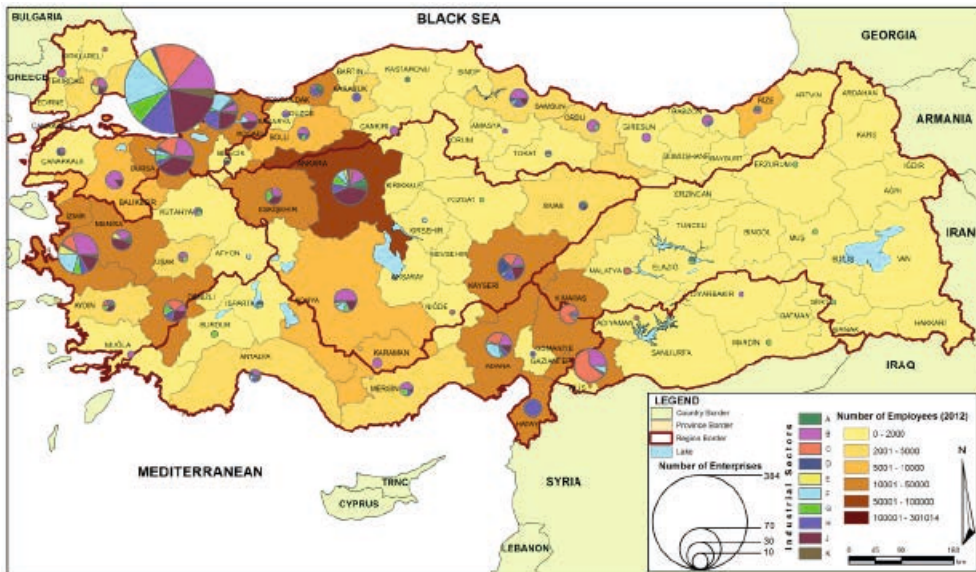
**Including the names hidden companies

Source: *Istanbul Chamber of Industry*, 2012

A sectoral review of the locations where the large scale industrial enterprises in Turkey are located distinguishes 10 provinces. İstanbul, İzmir, Bursa, Kocaeli, Ankara, Gaziantep, Kayseri, Adana, Konya and Denizli provinces host 78.6% of the 1000 large scale industrial enterprises (786 companies). 94.8% of the reviewed companies, which are involved in basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sectors are in these provinces, 87.2% of the companies involved in paper products and the printing industry sector are also in these provinces, 85.7% of the companies involved in textiles, clothing, leather and footwear sector and 85.2% of the companies involved in metal products,

machinery, automotive sector, electric appliances and devices industry are in these provinces as well as 80.8% of the companies involved in other manufacturing industry sectors and 79.2% of the companies involved in wood processing, cork and furniture industry sector, 73.3% of the companies involved in iron-steel metal basic industry sector, 71.1% of the companies involved in rock and soil based industry sector, 63.1% of the companies involved in food, beverage and tobacco processing sector and 50% of the companies involved in mining and quarry industry sector are located in these provinces. With the exception of mining and rock quarry industry sector and wood processing, cork and furniture products industry sector, Istanbul province is the leader in terms of the number of workplaces for the whole industrial sector. Istanbul province is followed by Izmir, Bursa and Gaziantep in terms of food, beverages and the tobacco processing sector; by Gaziantep, Bursa and Adana in textiles, clothing, leather and footwear sector; by Izmir, Kocaeli and Ankara in paper, paper products and printing industry sector; Kocaeli, Izmir and Adana in basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector; Izmir and Ankara in rock and soil based industry sector; Kocaeli, Izmir and Kayseri in iron-steel metal basic industry sector; Bursa, Ankara and Izmir in metal products, machinery, automotive sector, electric appliances and devices industry sector; Bursa, Izmir, Kocaeli and Ankara in other manufacturing industry sectors. In terms of mining and rock quarrying sector and wood processing, cork and furniture products sector, Ankara and Kayseri provinces are prominent respectively (Tab. 7, Fig. 3).

Fig. 3. Distribution of large scale industry enterprises on a sectoral* basis according to provinces in Turkey



A sectoral review of the provinces in terms of the number of employees in large scale industrial enterprises in Turkey distinguishes 10 provinces. 79.8% (624 729 persons) of the employees of the 1000 large scale industrial enterprises are employed in the provinces of

Istanbul, Ankara, Bursa, Gaziantep, Izmir, Kocaeli, Manisa, Zonguldak, Kayseri and Adana. 95.5% of the employees working in the reviewed companies work in other manufacturing industries sector in these provinces, 92.6% of the employees work in basic chemistry, chemicals, petroleum, coal derivatives, the rubber and plastic industry sector, 89.3% work in companies involved in metal products, machinery, automotive sector, electric appliances and devices industry sector, 88.7% work in mining and rock quarry industry sector, 83.3% work in wood processing, cork and furniture industry sector, 82.1% work in textiles, clothing, leather and footwear sector, 70.1% work in rock and soil based industry sector, 69.3% work in iron-steel metal basic industry sector while 61.4% of the employees work in companies involved in food, beverage and tobacco processing sector.

Tab. 8. Distribution of employees in large scale industrial enterprises according to provinces in Turkey on a sectoral* basis

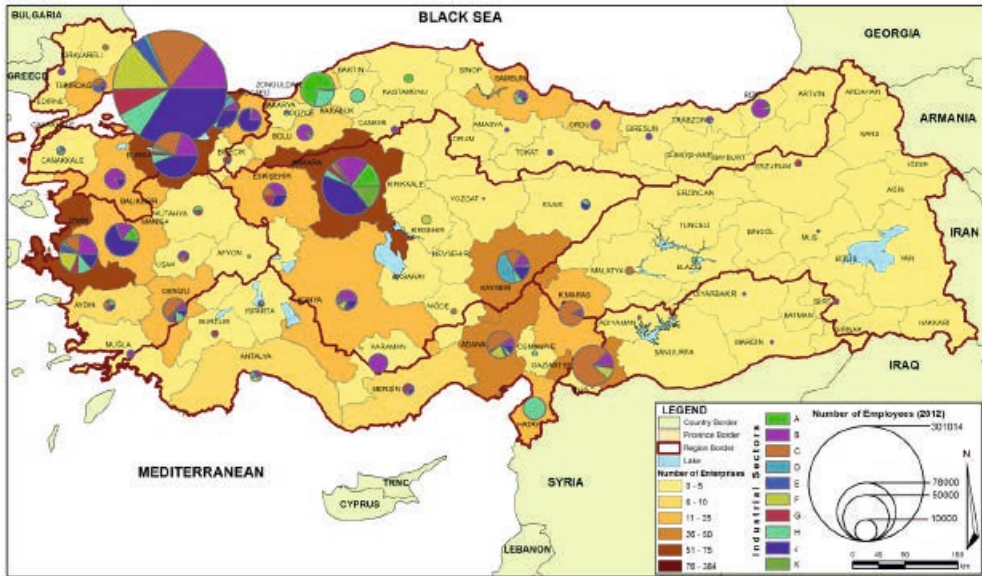
Provinces	A	B	C	D	E	F	G	H	J	K
İstanbul	1785	42039	51586	3161	10186	42279	22409	23606	101077	2886
Ankara	11137	14612	1467	397	593	1100	2299	2905	31759	10772
Bursa	0	9625	11012	1123	0	1043	999	3108	21316	312
Gaziantep	0	4667	28976	347	0	3552	853	0	0	0
İzmir	0	8013	5518	710	2170	6928	2060	3866	4737	197
Kocaeli	0	2136	0	2412	160	9829	1132	5161	7975	251
Manisa	3912	4749	0	0	526	0	0	0	18377	850
Zonguldak	19266	250	0	0	0	0	0	7165	0	599
Kayseri	460	3146	4393	10356	0	207	0	1733	3818	0
Adana	0	1468	8398	0	376	3358	462	769	1848	0
Total	36560	90705	111350	18506	14011	68296	30214	48313	190907	15867
%	88.7	61.4	82.1	83.3	86.1	92.6	70.1	69.3	89.3	95.5
Total Employees	41212	147806	135601	22208	16279	73727	43108	69755	213745	16623

Source: Istanbul Chamber of Industry, 2012

With the exception of mining and rock quarry industry sector, wood processing, cork and furniture products industry sector and other manufacturing industries sector, Istanbul province is the leader in terms of the number of employees working in all the industrial sectors. Istanbul province is followed by Ankara, Bursa and Izmir in terms of food, beverages and tobacco processing sector; by Gaziantep, Bursa and Izmir in textiles, clothing, leather and footwear sector; by Izmir, Ankara and Manisa in paper, paper products and printing industry sector; Kocaeli, Izmir and Gaziantep in basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector; Ankara, Izmir and Kocaeli in rock and soil

based industry sector. In terms of mining and rock quarry sector, Zonguldak is prominent while Kayseri province is prominent in wood processing, cork and furniture products sector and Ankara is prominent for its employees in other manufacturing industry sectors (Tab. 8, Fig. 4).

Fig. 4. Distribution of employees in large scale industrial enterprises according to provinces in Turkey on a sectoral* basis



THE VOLUME AND DISTRIBUTION OF THE EXPORTS OF MANUFACTURING INDUSTRY ENTERPRISES

the export volume of Turkey has increased progressively over the years. The export volume, which was USD 36.1 billion in 2002 has increased to USD 152.6 billion as of 2012. Although exports, which are the locomotive of economic growth, declined in 2009 after the global economic crisis in 2008 due to the recession in the European Union countries, to which a significant portion of goods are exported, the volume of exports has increased steadily in subsequent years. According to the data for 2012, 48.2% of the exports of Turkey go to European countries, 34.8% go to Asian countries, 8.8% go to African countries, 6.3% to American countries and 1.9% of the goods are exported to other countries. The first three leading countries in terms of exports are Germany with USD 13 billion, Iraq with USD 10.7 billion and the U.K. with exports worth USD 8 billion (TIM, 2012; SETA, 2012; Table 9). Therefore, in terms of location, exports are more prominent to neighboring countries and nearby countries, and Turkey uses its geopolitical position to its advantage by being able to respond more rapidly in terms of both transport as well as demands for smaller volumes compared to other countries. Furthermore, in addition to European countries, the initiatives

made particularly to African and Middle Eastern countries during the recent years have enabled Turkey to develop commercial relations with other countries, free trade agreements have been realized and the economy has gained momentum in terms of foreign trade with visa exemptions. As of 2012, Turkey is a country which exports to 243 countries and customs zones (SETA, 2012).

Tab. 9. Export volume of Turkey according to countries (billion USD)

Countries	2002	2002 %	2012	2012 %
EU Country	19.0	52.6	59.2	38.8
Other Europe Country	8.1	22.4	14.4	9.4
Asia Country	5.5	15.2	53.1	34.8
Africa Country	1.7	4.7	13.4	8.8
America Country	0.2	0.6	9.6	6.3
Other Country	1.6	4.5	2.9	1.9
Total	36.1	100.0	152.6	100.0

Sources: TIM, 2012

Tab. 10. Regional distribution of exports of large scale industrial enterprises on a sectoral* basis (million USD)

Regions	A	B	C	D	E	F	G	H	J	K	Total
Aegean	120.8	1212.8	1007.8	10.8	150.5	1419.5	228.8	1777.8	1639.9	24.3	7592.9
Black Sea	313.1	1129.9	0.0	26.0	0.0	0.1	24.6	974.5	78.6	0.0	2546.8
Central Anatolia	1042.6	596.4	349.2	183.3	34.2	331.8	221.1	424.7	2918.1	0.0	6101.3
Eastern Anatolia	778.2	0.0	17.8	0.0	0.0	0.0	47.9	0.0	0.0	0.0	806.9
Marmara	96.9	2022.6	2732.5	321.7	445.3	10565.4	1138.2	8941.6	22655.2	1871.5	50790.8
Mediterranean	0.0	396.1	550.1	85.1	30.6	360.7	262.9	1848.2	252.6	0.0	3786.2
SE Anatolia	0.0	1416.1	1154.0	11.3	0.0	228.0	150.5	0.0	0.0	0.0	2959.8
Total Export	2351.6	6773.9	5811.3	638.2	660.6	12905.5	2073.8	13966.8	27544.4	1895.8	74584.7

Source: *Istanbul Chamber of Industry*, 2012

USD 4.2 billion of total exports in 2012 was earned by the mining sector, USD 19.1 billion was earned from the agricultural sector, USD 114.4 billion was earned by the industry sector and USD 14.9 billion by the other sectors. The share of industry and mining sector in terms of total exports was 77.7%. The exports of the 1000 large scale enterprises which are the subject of the study was approximately USD 74.6 billion in 2012. These enterprises realized 65.2% of the exports in the manufacturing industry in Turkey and the total exports of the manufacturing industry and mining sector was 62.9% of all exports. Thus, the enterprises which are the subject of the study realize almost 2/3 of the exports in Turkey. In terms of regions on a company basis, Marmara region with USD 50.8 billion in exports realized 68% of the exports of Turkey. The region is followed by the Aegean region with USD 7.6 billion worth of exports, Central Anatolia with USD 6.1 billion in exports and the Mediterranean

region with USD 3.8 billion worth of exports. With USD 807 million worth of exports, East Anatolia region exports the least in Turkey (Tab. 10).

In the sectoral division of exports, metal products, machinery, automotive sector, electrical appliances and devices sector with a volume of USD 27.55 billion (36.9%) in exports is the leader. This sector is followed by iron-steel industry sector with 18.7%, basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector with 17.3% and food, beverage and tobacco processing industry sector with 9%. On a regional basis, Marmara region is the leader in exports with the exception of mining and rock quarrying sector. Central Anatolia is the prominent region in mining and rock quarrying sector (Tab. 10). In exports, Turkey has been prominent in terms of consumer goods (for example food, clothing and textile industries) in the 1950's as well as in the 1970's and 1980's (Özgüç, 1986–1987: 46–47; Işık, 2000: 111–129) whereas in later years a rapid development incurred in terms of industrial branches dealing with investment goods. As a result of these developments, metal products, machinery, automotive sector, electrical appliances and devices industry sector, iron-steel industry sector, basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sectors became prominent sectors in the industry of Turkey.

According to the data for 2012, 17 out of 81 provinces in Turkey exported over USD one (1) billion worth of exports. Among these provinces, Istanbul takes the lead in all main sectors with USD 61 billion. 11 provinces exported over USD one (1) billion worth of exports in the industrial sector framework of the 1000 large scale industrial organizations which were studied. These provinces are: Istanbul, Kocaeli, Izmir, Ankara, Bursa, Gaziantep, Hatay, Denizli, Sakarya, Çanakkale and Kayseri respectively. The listed provinces realized 88% of the exports. In terms of exports from other manufacturing industries in these provinces in Turkey, the share of the studied companies was 100% while the percentage for basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector was 95%, metal products, machinery, automotive sector, electrical appliances and devices industry sector was 94.2%, the iron-steel metal main industry sector was 91.6%, textiles, clothing, leather and footwear sector was 87.1%, wood, cork and furniture industry sector was 82.6%, paper, paper products and printing industry sector was 79.8%, rock and soil based industry sector was 66.9%, food, beverage and tobacco processing sector was 62.8% and mining and rock quarrying industry sector had a share of 42.1%. Istanbul remained the leader in exports made by these organizations, which were worth USD 36 billion. In other words, 49% of the exports made by organizations are made in the Istanbul province. Istanbul province is the leader in exports in the textiles, clothing, leather and footwear manufacturing sector, paper, paper products and printing industry sector, rock and soil based industry sector, iron-steel industry sector and metal products, machinery, automotive sector, electrical appliances and devices industry sector. Ankara takes the lead in exports in the mining and rock quarrying industry sector, Gaziantep leads in the wood, cork and furniture products industry sector, Kayseri province in basic chemistry, chemicals, petroleum, coal derivatives, the rubber and

⁵ The automotive industry with 19.1 billion dollars is also prominent within this sector. Ford, Oyak-Renault, Tofaş-Türk, Mercedes-Benz, Hyundai-Assan, Otokar, Man Türkiye, Karsan...etc.

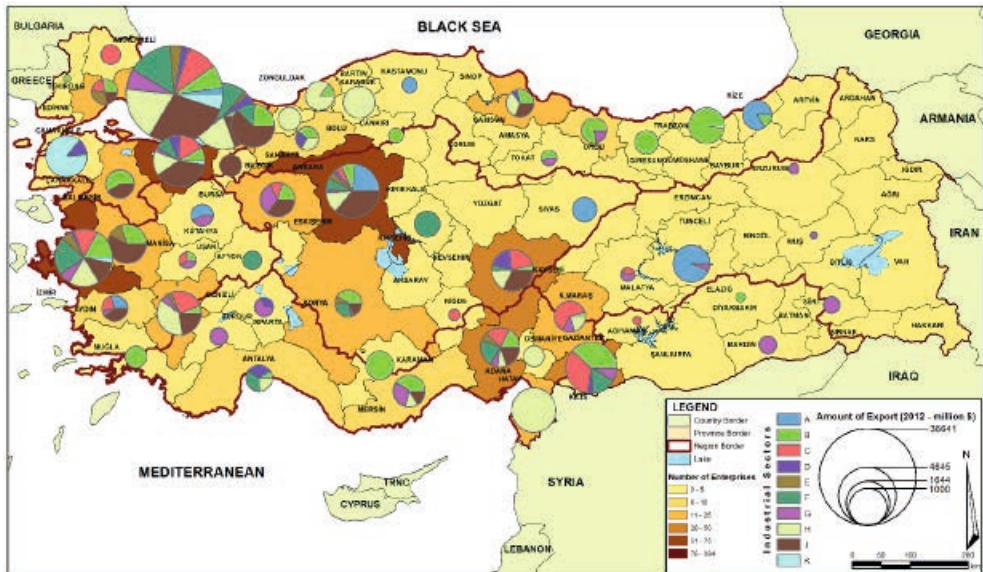
plastic industry sector, while Kocaeli province is the leading exporter in other manufacturing industries sectors (Tab. 11, Fig. 5).

Tab. 11. Distribution of exports of large scale industrial enterprises according to provinces on a sectoral* basis (million USD)

Provinces	A	B	C	D	E	F	G	H	J	K	Total
İstanbul	96.9	1391.8	2291.9	143.0	368.1	5111.0	1076.6	7348.8	18180.5	633.0	36641.5
Kocaeli	0.0	142.7	0.0	75.7	14.1	5273.2	51.3	1256.2	1105.3	0.0	7918.5
İzmir	0.0	916.6	580.7	10.8	109.2	1366.5	149.5	933.3	555.1	24.3	4645.8
Ankara	892.2	99.5	28.2	8.0	28.0	86.5	5.5	260.4	2091.5	0.0	3499.9
Bursa	0.0	95.8	340.1	77.8	0.0	117.4	10.3	336.6	1923.6	9.9	2911.4
Gaziantep	0.0	1412.0	1151.6	11.3	0.0	228.0	72.6	0.0	0.0	0.0	2875.4
Hatay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1644.5	0.0	0.0	1644.5
Denizli	0.0	15.6	382.2	0.0	7.5	0.0	21.9	844.5	302.6	0.0	1574.2
Sakarya	0.0	170.4	0.0	0.0	0.0	63.8	0.0	0.0	1224.6	0.0	1458.8
Çanakkale	0.0	0.6	0.0	25.3	0.0	0.0	0.0	0.0	0.0	1228.6	1254.4
Kayseri	0.0	10.7	284.3	175.3	0.0	10.9	0.0	164.4	561.8	0.0	1207.3
Total	989.1	4255.6	5058.9	527.1	526.9	12257.3	1387.6	12788.5	25945.0	1895.8	65631.9
%	42.1	62.8	87.1	82.6	79.8	95.0	66.9	91.6	94.2	100.0	88.0
Total Export	2351.6	6773.9	5811.3	638.2	660.6	12905.5	2073.8	13966.8	27544.4	1895.8	74584.7

Source: Istanbul Chamber of Industry, 2012

Fig. 5. Distribution of exports of large scale industrial enterprises according to provinces on a sectoral* basis



THE PRODUCTION SALES VOLUME AND DISTRIBUTION
OF MANUFACTURING INDUSTRY ENTERPRISES

The sequence of the organizations made by the Istanbul Chamber of Industry is based on the production sales of these organizations. This criterion is an indicator of the size of these companies in terms of economy and also comprises the production sales figures of the organizations. According to the business statistics of the Turkish Statistical Institute, the manufacturing industry, mining-rock quarrying and construction sector had a total production sale of approximately USD 540 billion in total in Turkey and USD 436 billion of these production sales was realized by the manufacturing sector⁶ (TÜİK, 2013). According to the data for 2012, the total production sales of the 1000 large scale companies which were studied was USD 260 billion⁷ (Tab. 12). Based on these three sectors the share of the studied organizations in the economy of Turkey is 48%, while the share for the manufacturing industry is 59.6%. In terms of the 1000 large scale organizations with USD 170 billion in production sales, the Marmara Region is responsible for 65.3% of the total production sales. Marmara Region is followed by Central Anatolia with 11%, the Aegean region with 8.2% and the Mediterranean region with 6.2%. The lowest production sales are in the East Anatolian Region (USD 646 million) (Tab. 12).

Tab. 12. Regional distribution of the production sales of large scale industry enterprises on a sectoral* basis (USD million)

Regions	A	B	C	D	E	F	G	H	J	K	Total
Aegean	449.1	5677.9	1501.0	55.7	806.6	4241.3	990.7	3994.2	2871.5	756.4	21344.4
Black Sea	2595.2	4742.0	0.0	157.9	0.0	68.2	344.9	6560.8	161.4	860.0	15490.4
Central Anatolia	3793.0	6370.0	1094.4	1433.9	234.8	1268.1	1220.7	1416.6	7750.1	4062.0	28643.7
Eastern Anatolia	110.7	0.0	137.1	0.0	0.0	0.0	397.9	0.0	0.0	0.0	645.8
Marmara	447.3	20711.7	7105.4	2689.2	2906.8	56542.7	6302.7	22329.1	46380.0	4915.5	170330.4
Mediterranean	0.0	1310.0	2281.8	211.3	85.3	1498.9	1198.9	8729.8	858.6	47.4	16222.1
SE Anatolia	0.0	2843.7	3826.0	62.2	0.0	861.0	625.1	0.0	0.0	0.0	8218.0
Total	7395.3	41655.2	15945.7	4610.3	4033.5	64480.3	11081.0	43030.6	58021.7	10641.3	260894.8

Source: Istanbul Chamber of Industry, 2012

A sector based review of the production sales of the 1000 large scale organizations reveals that the leading sector is basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector with 24.7% (USD 64.5 billion). This sector is followed by metal products, machinery, automotive sector, electrical appliances and devices industry

⁶ Data for 2011; USD: 1680 TL.

⁷ Data for 2012; USD: 1800 TL.

Tab. 13. Distribution of the production sales of large scale industry enterprises according to provinces on a sectoral* basis (USD million)

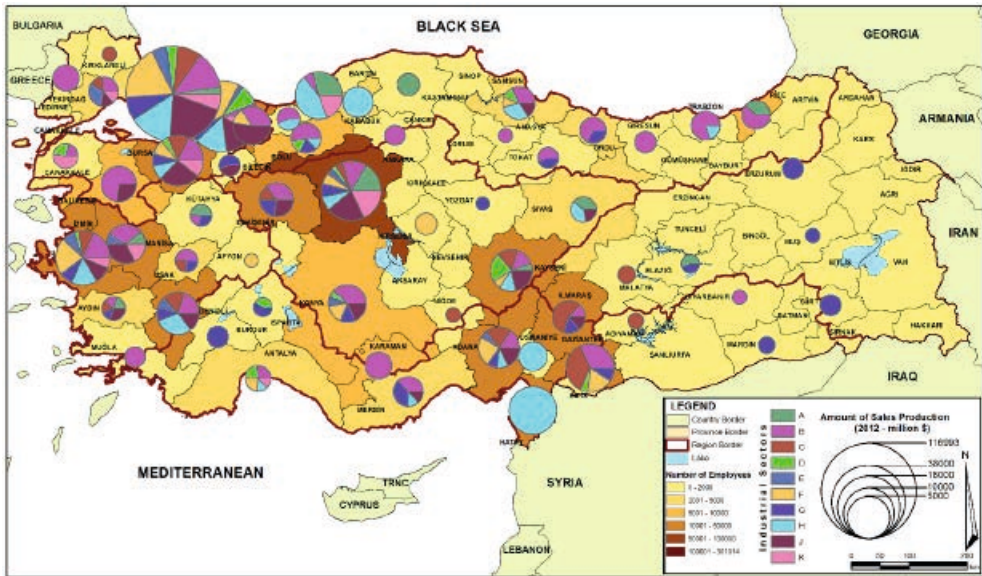
Provinces	A	B	C	D	E	F	G	H	J	K	Total
İstanbul	447.3	14397.4	5793.1	1168.4	2346.4	30243.9	5325.5	18281.5	36377.9	2611.5	116992.9
Kocaeli	0.0	626.7	0.0	1281.3	83.0	25666.4	438.7	3532.4	3560.0	1153.9	36342.5
Ankara	3441.5	2287.0	201.8	70.9	165.0	471.4	623.7	731.0	5614.3	4062.0	17668.5
İzmir	0.0	2894.2	780.4	55.7	523.4	4190.0	564.9	2029.1	896.7	343.1	12277.4
Bursa	0.0	1838.1	1149.3	132.2	0.0	501.6	360.4	515.2	4054.5	670.8	9222.0
Gaziantep	0.0	2780.1	3737.5	62.2	0.0	861.0	233.1	0.0	0.0	0.0	7674.0
Hatay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7422.2	0.0	0.0	7422.2
Zonguldak	1937.8	99.5	0.0	0.0	0.0	0.0	0.0	4407.4	0.0	860.0	7304.7
Denizli	0.0	935.9	601.5	0.0	166.3	0.0	240.4	1965.1	489.2	0.0	4398.4
Kayseri	84.0	514.8	668.9	1321.0	0.0	103.3	0.0	437.5	1200.3	0.0	4329.7
Adana	0.0	543.2	961.0	0.0	85.3	1315.5	159.5	177.9	719.6	0.0	3962.0
Manisa	156.5	1210.3	0.0	0.0	116.9	0.0	0.0	0.0	1311.8	413.3	3208.8
Total	6067.0	28127.0	13893.4	4091.7	3486.2	63353.1	7946.1	39499.3	54224.4	10114.6	230803.0
%	82.0	67.5	87.1	88.8	86.4	98.3	71.7	91.8	93.5	95.1	88.5
Selling from production	7395.3	41655.2	15945.7	4610.3	4033.5	64480.3	11081.0	43030.6	58021.7	10641.3	260894.8

Source: *Istanbul Chamber of Industry*, 2012

sector with USD 58 billion in production sales, iron-steel industry sector with USD 43 billion production sales and food, beverage and tobacco processing industry sector with USD 41 billion in production sales. With the exception of mining and rock quarrying sector, Marmara Region takes the lead in terms of production sales in all sectors. The Central Anatolian Region is prominent in the mining and rock quarrying sector (Tab. 12).

A study of the organizations reveals that as of 2012 the production sales of 24 provinces in Turkey was more than USD one (1) billion and in fact 12 provinces had managed to earn over USD 3 billion in production sales. Istanbul is the leader among these provinces with USD 117 billion in production sales. Other provinces with over USD 3 billion in production sales earnings are Kocaeli, Ankara, Izmir, Bursa, Gaziantep, Hatay, Zonguldak, Denizli, Kayseri, Adana and Manisa. These provinces constitute 88.5% of production sales.

Fig. 6. Distribution of the production sales of large scale industry enterprises according to provinces on a sectoral* basis



A sectoral study of the generated total production sales shows that the shares of these provinces for basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector is 98.3%, 95.1% for other manufacturing sectors, 93.5% for metal products, machinery, automotive sector, electrical appliances and devices industry sector, 91.8% for the iron-steel metal basic industry, 88.8% for wood, cork and furniture industry sector, 87.1% for textiles, clothing, leather and footwear sector, 86.4% for paper, paper products and the printing industry sector, 82% for the mining and rock quarrying industry sector, 71.7% for rock and soil based industry sector and 67.5% for food, beverage and tobacco processing sector. The Istanbul province is the leader with 45% in production sales made by these organizations. Furthermore, in terms of production sales, the Istanbul province is the leader

in food, beverages and tobacco processing sector, the textile, clothing, leather and footwear manufacturing sector, the paper, paper products and printing industry sector, the basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector, the rock and soil based industry sector, the iron-steel industry sector and the metal products, machinery, automotive sector, electrical appliances and devices industry sector. In terms of production sales Ankara is the leader in the mining and rock quarrying industry sector, Kayseri is the leader in wood, cork and furniture products industry sector and Ankara is the leader in the other manufacturing industry sector (Tab. 13, Fig. 6).

CONCLUSION

The industrialization efforts of Turkey, which were incepted with the declaration of the republic, gained momentum particularly after the World War II, continued with a rapid industrialization process. The number of industrial centers increased throughout the country due to the significant support incurred by the five year development plans which were put into practice in the beginning of the 1960's. A significant part of the industrial enterprises in Turkey is located in the western part of the country and the industrial sector is particularly concentrated in certain regions and provinces. The public industrial enterprises established by the state of the Republic of Turkey and the large manufacturing industry organizations have had a major impact on the establishment of industrial centers other than specific provinces in Turkey.

Although the 1000 large scale industry organizations on a production sales basis in Turkey comprised only 0.40% of the manufacturing industry enterprises and employed 12% of the labor force according to data for 2012, they realized 65.2% of the exports and 59.2% of the production sales. In countries in which the industry is mainly based on small and medium sized enterprises, these values underline the importance of the role and significance of large scale manufacturing industry enterprises in terms of the economy of Turkey. In Turkey, the manufacturing industry is lead by Marmara Region on a regional basis, whereas Istanbul is the leader on a province basis. 54% of the studied industry enterprises are located in the Marmara Region while 38.4% are in the Istanbul province. Almost all of the 1000 large scale industry enterprises have been established with private (97.3%) and 22% have been established with foreign capital partnerships. The distribution of the enterprises on a sectoral basis comprises 208 enterprises in food, beverage and tobacco processing industry sector and the sectoral distribution of labor comprises 27.4% in metal products, machinery, automotive sector, electrical appliances and devices industry sector in first place. On a province basis, the province of Istanbul is the leader in all industry sector enterprises and staff numbers with the exception of mining and rock quarrying industry sector and the wood, cork and furniture products industry sector.

As of 2012, 2/3 of the exports of the manufacturing industry sector in Turkey, which was USD 114.4 billion was generated by the 1000 large scale enterprises that were studied. On a company basis, in terms of regions 68% of the exports are exported by the Marmara Region and on a sectoral basis, 36.9% of the exports consists of metal products, machinery,

automotive sector, electrical appliances and devices industry; on a province basis, Istanbul is the leader with 49% of the exports. The product sales of the studied 1000 large scale enterprises total USD 260 billion (59.6%). On a company basis, in terms of regions with USD 170 billion worth of production sales, Marmara Region is in first place and on a sectoral basis, with USD 64.5 billion the basic chemistry, chemicals, petroleum, coat derivatives, rubber and plastic industry sector and on a province basis, with USD 117 billion the Istanbul province is the leader.

As was the case in the 1950's in Turkey, industry branches dealing with consumer goods such as food, textiles and clothing were also prominent in the 1970's and 1980's, whereas in subsequent years rapid development was observed in industry branches dealing with investment goods. As a result of these developments, the metal products, machinery, automotive sector, electrical appliances and devices industry sector, iron-steel industry sector, and basic chemistry, chemicals, petroleum, coal derivatives, rubber and plastic industry sector became leading sectors in Turkish industry.

Compared to developed countries, Turkey is in the process of industrialization. The regional distribution of industrial enterprises in Turkey is unbalanced. Since the Ottoman era the policies to establish industrial centers in provinces other than Istanbul, Izmir, Ankara and Bursa and particularly in Anatolia have not fully materialized. Initially, the industry has concentrated in the Marmara Region, which is in the western part of the country and the Aegean, Central Anatolia and the Mediterranean regions. In order to eliminate the regional disparity, policies such as the decisions taken in the Izmir Economy Congress in 1923, followed by the 'Priority Localities in Development' and 'Priority Provinces in Development' policies applied during the planned development periods and the Decisions of 24th of January 1980 have been incepted. However, due to factors such as having an industrial infrastructure in the western regions of the country and particularly the Marmara and Aegean regions, the major advantages presented by the geographical conditions in terms of industrialization, external output, transport facilities, internal and external market opportunities, qualified labor, developed training and health facilities, it has not been possible to fully eliminate regional disparities.

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