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**AN ANALYSIS OF THE WORLD MARKET FOR TOBACCO
PRODUCTION AND INTERNATIONAL TRADE AND ITS
IMPORTANCE FOR TURKEY****Abstract:**

This research will focus on the analysis of the world market for tobacco and its importance for Turkey covering the years 1990-2004 before the privatization of TEKEL. The reason for choosing specifically tobacco market is the importance of it for the specified years in Turkey. In these periods, as we will see in the analysis, Turkey was achieved to be the fifth largest tobacco producer and sixth largest tobacco exporter in the world. In addition, she was the world's leader in oriental tobacco production and exports. Although Turkey was a significant producer and exporter of oriental tobacco, the monetary value of tobacco imports and exports fluctuated over since 1960s and the composition of them had changed over the years. On the other hand, while oriental tobacco demand was decreasing in World and Turkey, other tobacco and cigarette imports had been growing considerably in Turkey. Turkey strategically placed between Europe and Asia was understandably seen as a key market by tobacco companies with increasing liberalization. However, various global issues such as serious economic problems in key markets in Asia and the former Soviet Union, decreases in support policies of the governments for the tobacco production with increasing liberalization in the World, decreasing demand of cigarettes especially in developed countries, and changes in politics of the countries on tobacco due to its negative effects on health have led to a serious drop in tobacco-cigarette production and consumption in the World, and therefore in Turkey. To sum up, these factors have negatively affected Turkey's tobacco production and policies for the later years as foregone conclusion.

Keywords:

Tobacco Production, Tobacco Export, Tobacco International Trade, Turkey

JEL Classification: L66, Q17, F10

1. Introduction

This paper will focus on the analysis of tobacco market in World and Turkey between 1990 and 2004 period before the privatization of TEKEL by Turkish government in 2004. The reason for choosing specifically tobacco market was the importance of it as an industrial crop for the specified years in Turkey. In this period, TEKEL was the state monopoly agency and dominated the tobacco industry, and it had also been played a very strategic role in the tobacco agriculture. In 2004, as we will see in the analysis, Turkey was achieved to be the 5th largest tobacco producer and 6th largest tobacco exporter in the world. Moreover, she was the world's leader in oriental tobacco production and exports in 2004. Although Turkey was a significant producer and exporter of oriental tobacco, the monetary value of tobacco imports and exports fluctuated since 1960s, and the composition of them had changed over the years. On the other hand, while oriental tobacco demand was decreasing in World and Turkey, other tobacco and cigarette imports had been growing considerably in Turkey. Turkey strategically placed between Europe and Asia was understandably seen as a key market by tobacco companies with increasing liberalization policies of Turkish government. However, various global issues such as serious economic problems in key markets in Asia and the former Soviet Union, decreases in support policies of the governments for the tobacco production with increasing liberalization in the World, decreasing demand of cigarettes especially in developed countries, and changes in politics of the countries on tobacco due to its negative effects on health have led to a serious drop in tobacco-cigarette production and consumption in the World, and therefore in Turkey. To sum up, these factors have negatively affected Turkey's tobacco production and policies for the later years as foregone conclusion.

This paper is constructed as four main parts. Firstly, tobacco production in world and the shares of the major tobacco producer countries in this production are examined. Then, the outlook of the world tobacco export market is analyzed. Thirdly, the importance of tobacco in Turkish economy is presented in terms of tobacco production, harvested areas, yields, and reel purchase price of tobacco. Lastly, foreign trade outlook of tobacco in terms of the role of public (TEKEL)¹ and private sectors for Turkey is analyzed in detail by comparing to world. The statistical data are obtained from two main international institutions (The Food and Agriculture Organization of the United Nations (FAO) and The United States Department of Agriculture (USDA)) and one from a national institution of Turkey (Turkish tobacco and alcoholic beverages company, TEKEL).

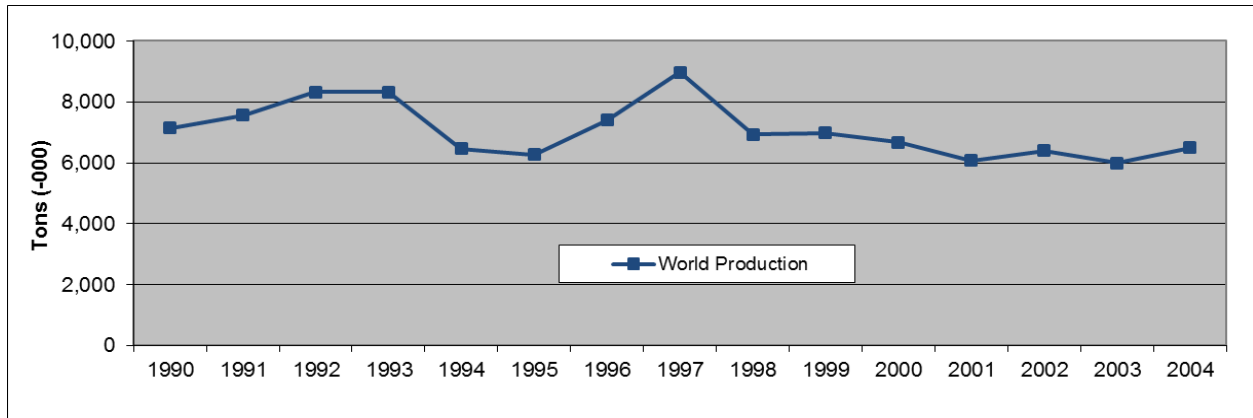
2. World Tobacco Production Outlook, 1990-2004

Figure 1 below displays the total world tobacco production between 1990 and 2004 years. According to this figure, the average total tobacco production for 2000s was lower than 1990s, and it was about 6 million tons. Total tobacco production increased continuously from 1990 to 1993, but after that it decreased to 6 million tons in 1995, this correspondence to approximately 25% fall in world tobacco production, and then it peaked in 1997 at over 9 million tons with 45% increase. This amount of production was a high record for the world tobacco production. After this period, it began to decrease towards nowadays. Figure 2 presents the world tobacco production only for

¹ Tekel was the state owned tobacco monopoly before 2004, and it was the sole manufacturer and distributor of all alcohol and tobacco products in Turkey, although it is no longer a monopoly today.

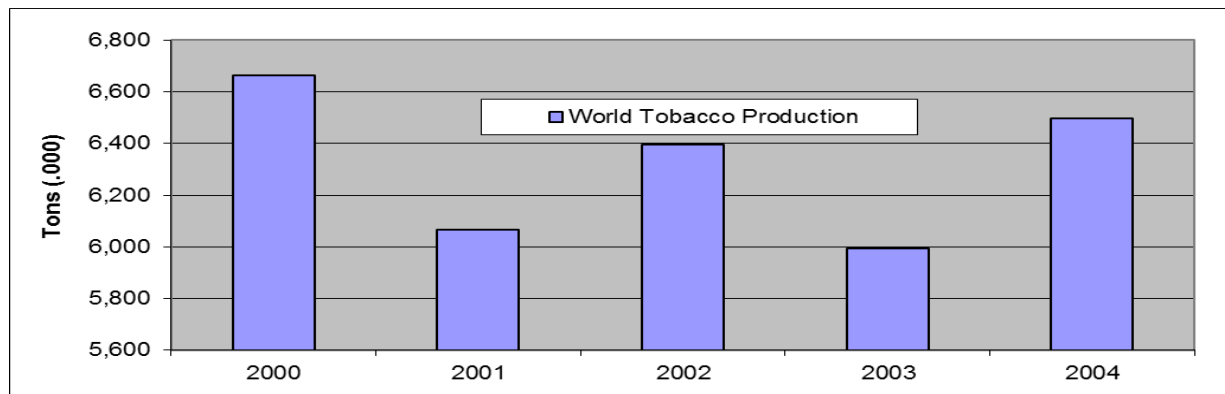
the last 5 years period from 2000. As can be seen from the figure, world tobacco production followed a fluctuating way.

Figure 1: World Tobacco Production (tons), 1990 – 2004



Source: Author's calculations based on FAO statistics

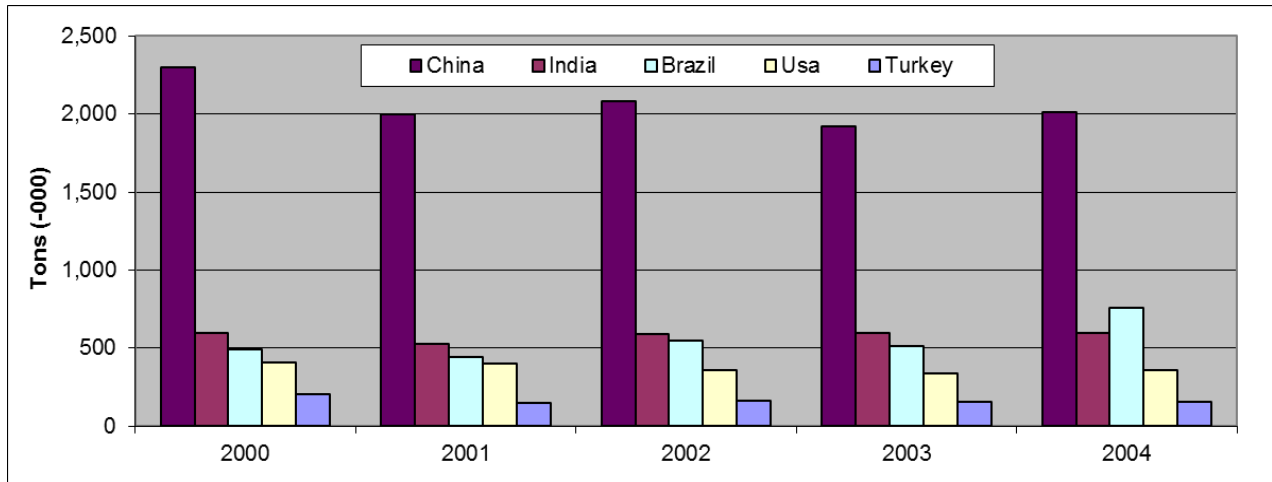
Figure 2: World Tobacco Production (tons), 2000-2004



Source: Author's calculations based on FAO statistics

Figure 3 below shows the tobacco production of the five major tobacco producer countries between 2000 and 2004. From the figure, we see that China was the leader and biggest tobacco producer country for all the years and dominated the world. When we look at the 2004, the tobacco production of China was realized as 2 million tons, and then Brazil which was the second biggest producer in 2004 with 700.000 tons followed China, and its production was only 1/3 of China. India, USA and Turkey were the other three major countries, respectively, and they produced nearly 1/2 of China. Turkey was achieved to be the fifth largest tobacco producer with 200.000 tons in the world in 2004.

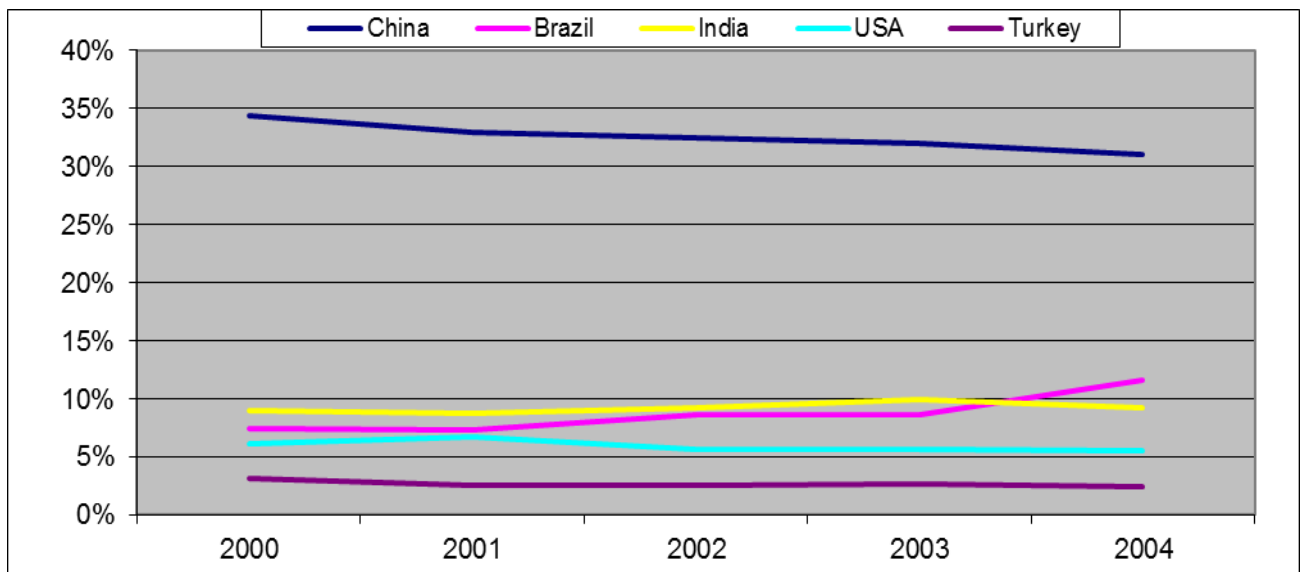
Figure 3: Tobacco Production of the Five Major Tobacco Producer Countries (tons), 2000-2004



Source: Author's calculations based on USDA statistics

Moreover, the shares of the five leader tobacco producer countries in the world tobacco production are displayed in figure 4. In 2004, China had the biggest share with the rate of 31% in the world. Second place was located by Brazil with 12%, third India with 9%, fourth USA with 5.5%, and fifth Turkey with 2.5%. While the shares of China, USA and Turkey decreased in 2004 compared to 2000, only Brazil increased her share in global production, and India achieved to protect her share of 9% in 2000. These five countries accounted for about 60% of world-wide production.

Figure 4: The Shares of the Five Major Tobacco Producer Countries in the World Tobacco Production, 2000-2004

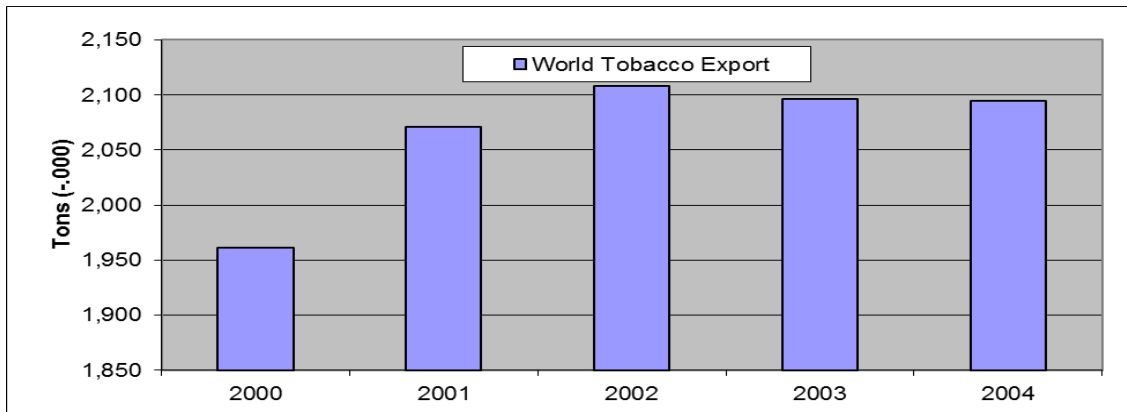


Source: Author's calculations based on USDA statistics

3. World Tobacco Exports Outlook, 2000-2004

As we can see clearly from the following figure 5, there was a significant increase in world tobacco exports after the year of 2000. Total tobacco exports of world reached to 2.1 million tons in 2004 with 6.6% increase according to 2004.

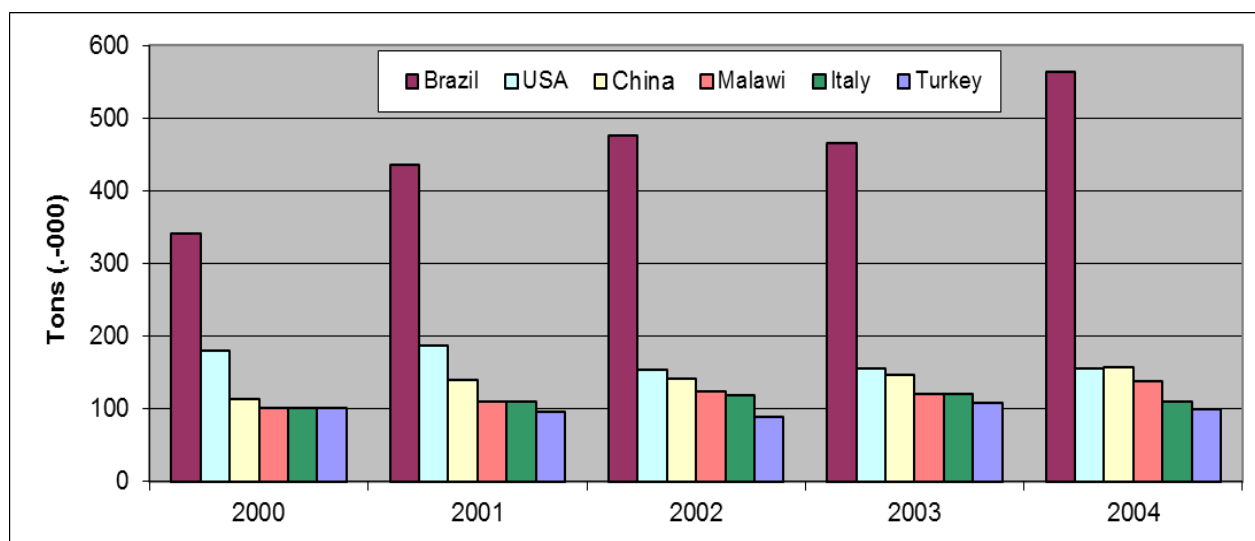
Figure 5: The World Tobacco Exports Quantities, 2000-2004



Source: Author's calculations based on USDA statistics

On the other hand, figure 6 below shows the tobacco export quantities of the six major tobacco exporter countries. As can be seen clearly, Brazil had the biggest share within the countries of tobacco exporters. In 2004, total tobacco exports of Brazil occurred as 564.000 tons. This means that total tobacco exports of Brazil increased 66% according to 2000. China, USA, Malawi, Italy, and Turkey came respectively after Brazil in 2004. While China and Malawi increased their tobacco export quantities in 2004 with respect to 2000, USA decreased her share. If we want to mention about Italy and Turkey, it can be said that they protected their tobacco exports quantities at nearly 100.000 tons level. In 2004, Turkey was achieved to be the sixth leader country in terms of tobacco exports in world.

Figure 6: Tobacco Exports of the Major Tobacco Exports Countries, 2000-2004

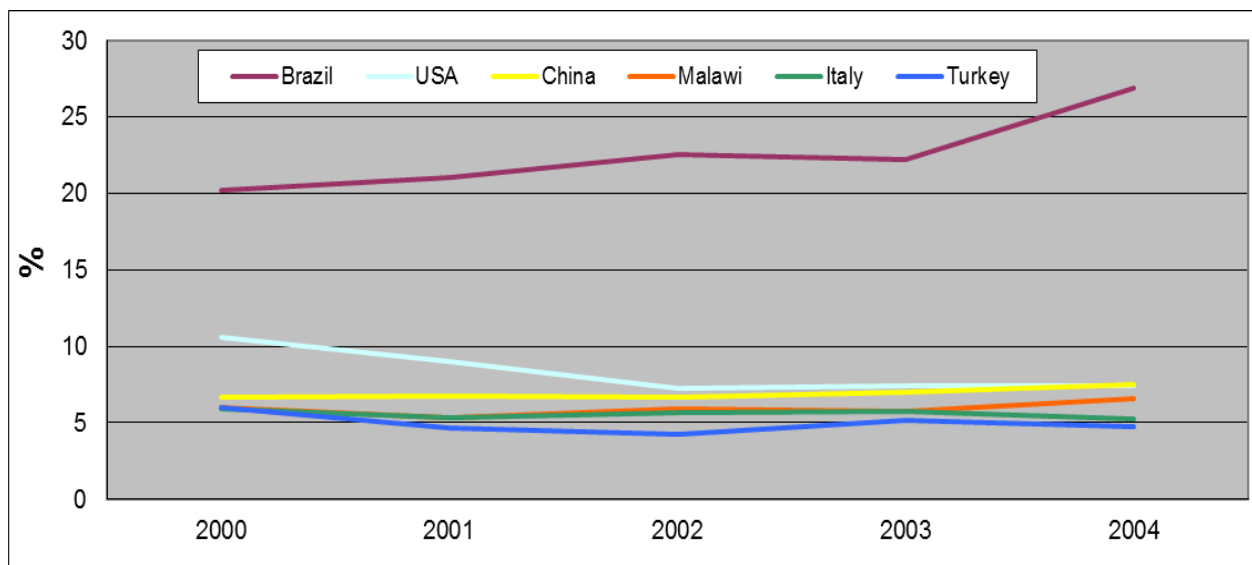


Source: Author's calculations based on USDA statistics

Note: Brazil, the United States, China, Malawi, and Italy mainly export Virginia and some Burley tobacco (USDA, FAS).

Figure 7 below indicates the shares of major tobacco export countries in world tobacco exports. First of all, we see that three countries Brazil, China and Malawi increased their shares from 2000 to 2004. According to this, Brazil raised her export share from 20% in 2000 to 27% level in 2004. In the same way, China increased her share from 6.7% to 7.5 % level, Malawi from 6% to 6.5% level as well. Contrary to these countries, the shares of USA and Turkey decreased in 2004. While in the former the share decreased from 10.6% to 7.4% between 2000 and 2004, in the latter it decreased from 6% to 4.7%. Only Italy achieved to protect its share at nearly 5% levels.

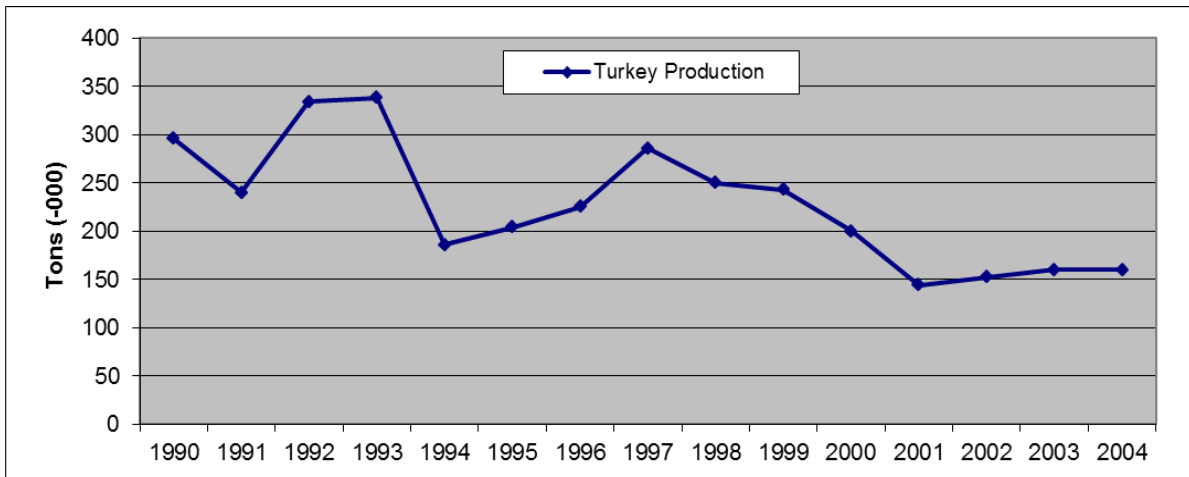
**Figure 7: The Shares of the Major Tobacco Export Countries
in World Tobacco Exports, 2000-2004**



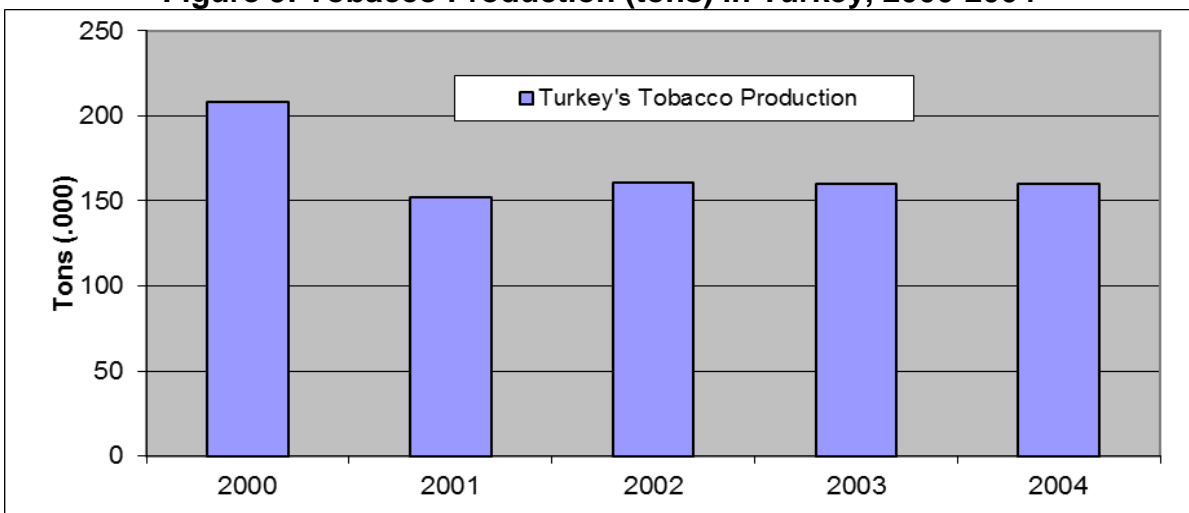
Source: Author's calculations based on USDA statistics

4. Importance of Tobacco in Turkish Economy, 1990-2004

In 2000s, tobacco was one of the most important industrial crops of Turkey; it constitutes 1.66% of the total agricultural output and 20% of the total production of industrial crops in agricultural sector. Figure 8 below displays that tobacco production of Turkey was around 160.000 tons (2.4% of world total) in 2004. There was 88% production decline with respect to 1990 and 20% production decline with respect to 2000 against a 2.5% fall at world level over the 2000-2004 periods. We can see from the figure 2 above that world tobacco production declined nearly 2.5% in 2004 with respect to 2000. In 2004, Turkish tobacco production accounted for 52% ton as compared to 333.000 tons for EU-25. On the other hand, tobacco production of Turkey constituted 2.46% of world tobacco production with 6,496 million tons in 2004. Figure 9 below shows that tobacco production of Turkey also declined after 2000. However, tobacco production did not change so much after 2000 occurred about 160.000 tons levels between 2001 and 2004.

Figure 8: Tobacco Production (tons) in Turkey, 1990-2004

Source: Author's calculations based on FAO statistics

Figure 9: Tobacco Production (tons) in Turkey, 2000-2004

Source: Author's calculations based on FAO statistics

When we analyze tobacco production type of Turkey, we see that oriental type was the main kind of tobacco produced by Turkey. Although Turkey ranked fifth in total tobacco production in world, it was also the world's leading producer and exporter of oriental tobacco in 2004. This type of tobacco was used as an important component of Turkish cigarettes and it was also used by manufacturers in creating blended cigarettes, such as Camel Turkish blend cigarettes. Oriental tobacco accounted for less than 10% of global tobacco production, and Turkey produced large amount of it. The Aegean region of Turkey produced much more than 50% of this type of tobacco. Other countries producing oriental tobacco included Greece, Bulgaria, Bosnia, and former Soviet satellites. However, overall export demand for oriental tobacco had been declining (Brockley; 2004). While Turkey exported oriental tobacco, it imported Flue-Cured and burley type of tobacco for domestic use. Table 1 presents that Turkey produced nearly 160,000 tons raw tobacco, and exported 100,000 tons of it in 2005. This corresponds to 62.5% of total tobacco production. Oriental tobacco production was 152,000 tons accounting for 96% of the total. The remaining 4% were flue-cured and burley tobacco.

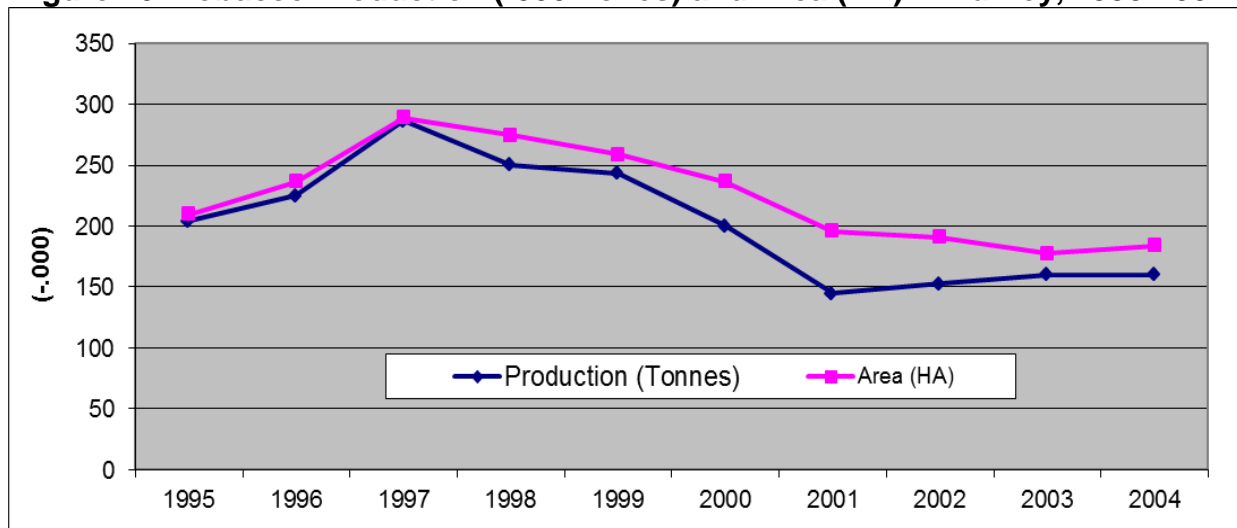
Table 1: Tobacco Production Type of Turkey, 2003-2005

Product	Area (HA)			Production (tons)		
	2003	2004	2005	2003	2004	2005
Flue-Cured	1700	1500	1800	3890	3570	4500
Burley	700	600	650	1930	1200	1500
Oriental	196200	181240	193780	155453	107340	152000
Total	198600	183340	196230	161273	112110	158000

Source: USDA 2005, GAIN Report

Tobacco Production and Area in Turkey

The total area cultivated with tobacco fluctuated from 1970 to 2000. It declined until the mid-1980s, and then tobacco increased as a proportion of the total cultivated land area. The yield per hectare (HA) increased from a very low level in the early 1970s, to 915.45 kg tobacco per hectare in 1999 (Önder; 2002: 15). In 2004, 190.000 hectares (approximately 0.7% of total arable land) were used for growing tobacco, up from 281.700 in 1991 (1.1% of arable land). As can be seen in the figure 10, production and yield of tobacco reached peak in 1997 then declined until 2004. Tobacco production of Turkey in 2004 amounted to 160.000 tons from 183.000 ha. This corresponds to 44% decrease in production and 36.5% decline in harvested area according to 1997. This situation resulted from the application of area quotas policies by government in 1994.

Figure 10: Tobacco Production (-000 Tonnes) and Area (HA) in Turkey, 1995-2004

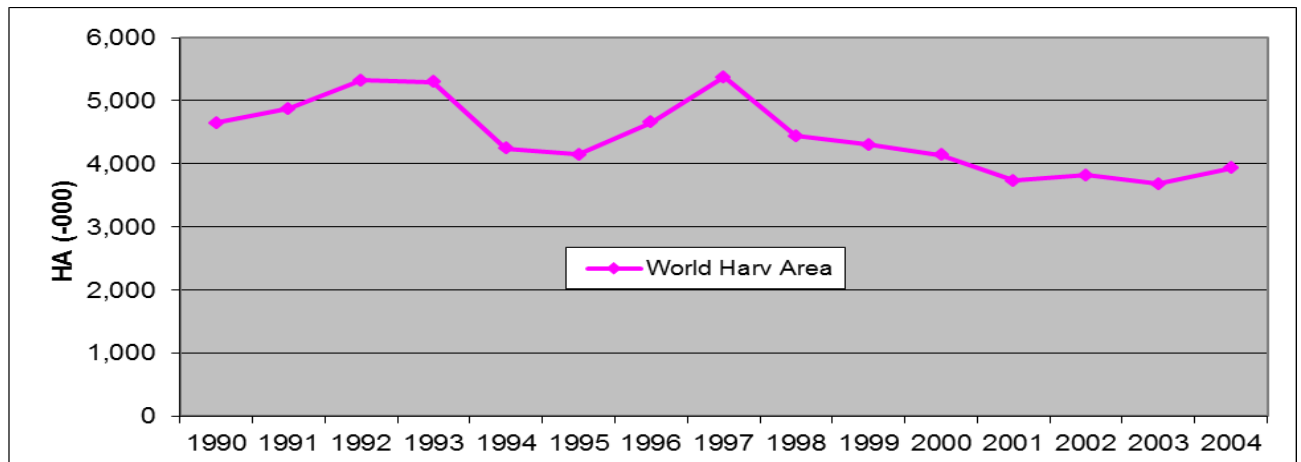
Source: Author's calculations based on TEKEL statistics

Harvested Area in World and Turkey

If we compare the tobacco harvested areas of world and Turkey between 1990 and 2004 in figures 11 and 12, we see that they had same patterns. Harvested areas

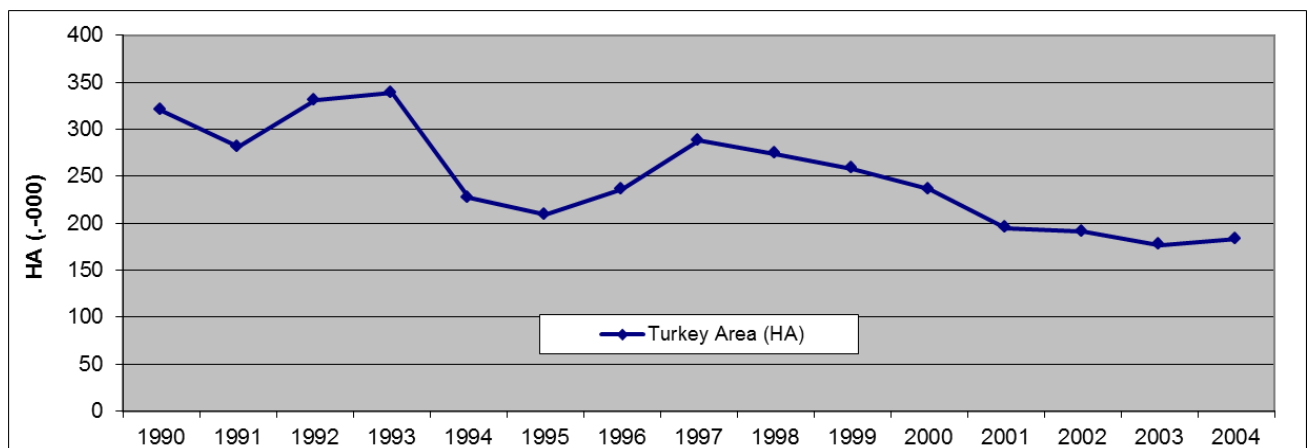
declined between 1993 and 1995, and then raised and reached the peak in 1997. World and Turkey's tobacco areas began to decline continuously in 1997.

Figure 11: Tobacco Harvested Area (HA) in World, 1990–2004



Source: Author's calculations based on FAO statistics

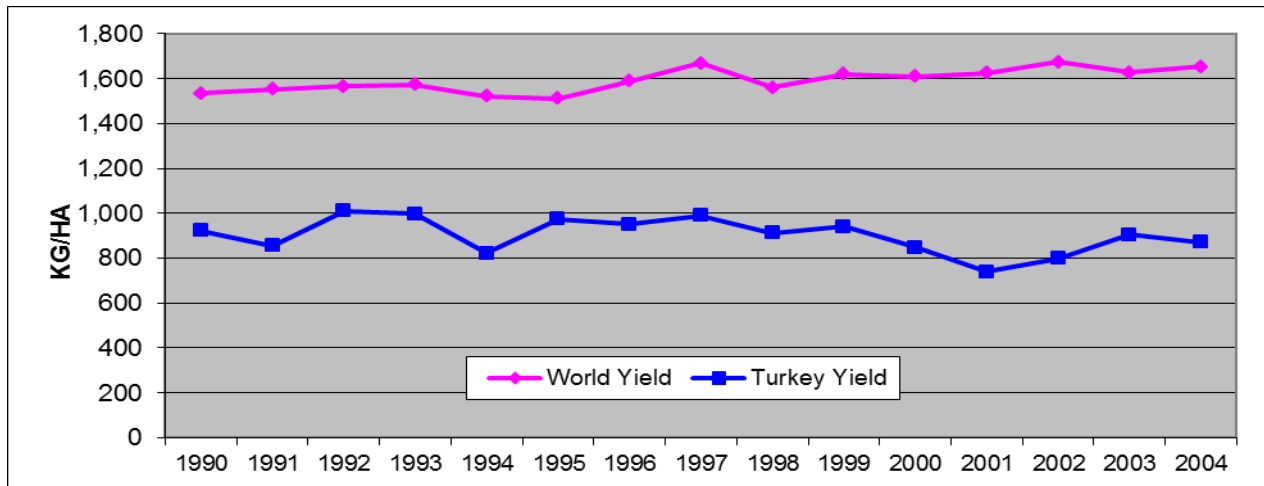
Figure 12: Tobacco Harvested Area (HA) in Turkey, 1990–2004



Source: Author's calculations based on FAO statistics

Tobacco Yield in World and Turkey

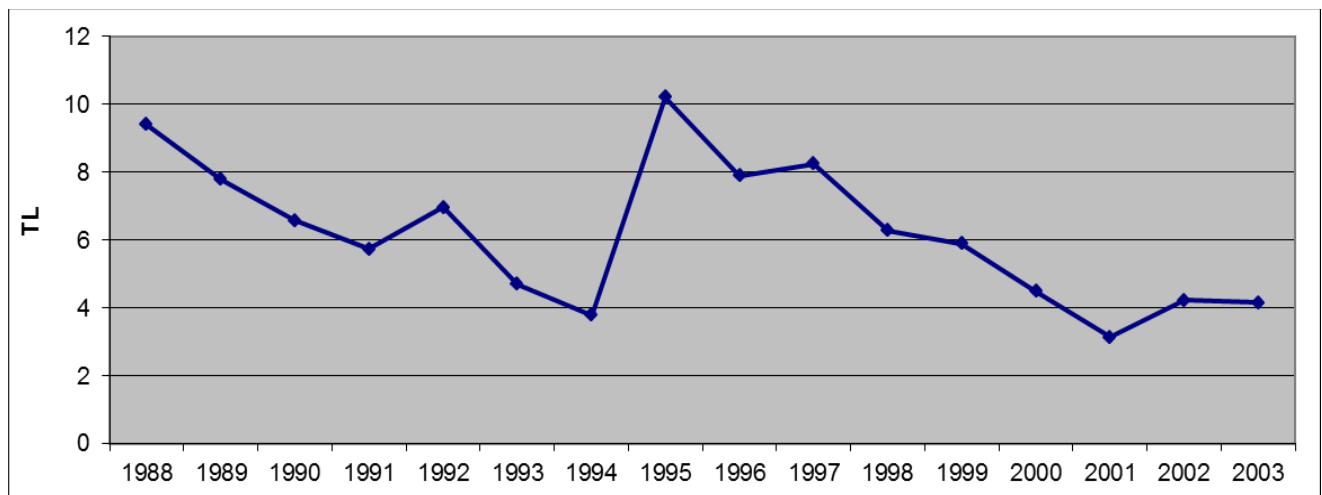
According to FAO statistics, tobacco yields of Turkey ranged around 1000 kg/ha between 1990 and 2004. In same years, yields of world ranged around 1600 kg/ha, and this amount nearly 60% larger than Turkey's yield. We see from following figure 13 that Turkey's yield decreased in her economic crises occurred in 1994 and 2001. However, world's yield followed a stable path between 1990 and 2004.

Figure 13: Tobacco Yield (Kg/Ha) in World and Turkey, 1990-2004

Source: Author's calculations based on FAO statistics

Reel Purchase Price of Tobacco per Kg in Turkey, 1988–2003²

In Turkey, the tobacco prices were adjusted by the government, and main buyer of tobacco was government agencies (mainly TEKEL). We can see from figure 14 that reel purchasing price of tobacco per kg was nearly TL9.5 in 1988 and TL4 in 2003. This shows about 60% decrease in tobacco reel price in 2003 when compared to 1988 price. 1994 and 2001 were economic crises years in Turkey, and we can see from the figure that purchasing price of tobacco per kg reached bottom levels in these years (TL4 in 1994, and TL3 in 2001). However, prices increased sharply after these crises years, the interesting point about that parliamentary elections of Turkey were conducted in 1995 and 2002.

Figure 14: Reel Purchase Price of Tobacco per kg (TL/kg), 1988-2003

Source: Author's calculations based on TurkStat (Turkish Statistical Institute) statistics

Note: Base year is 2003

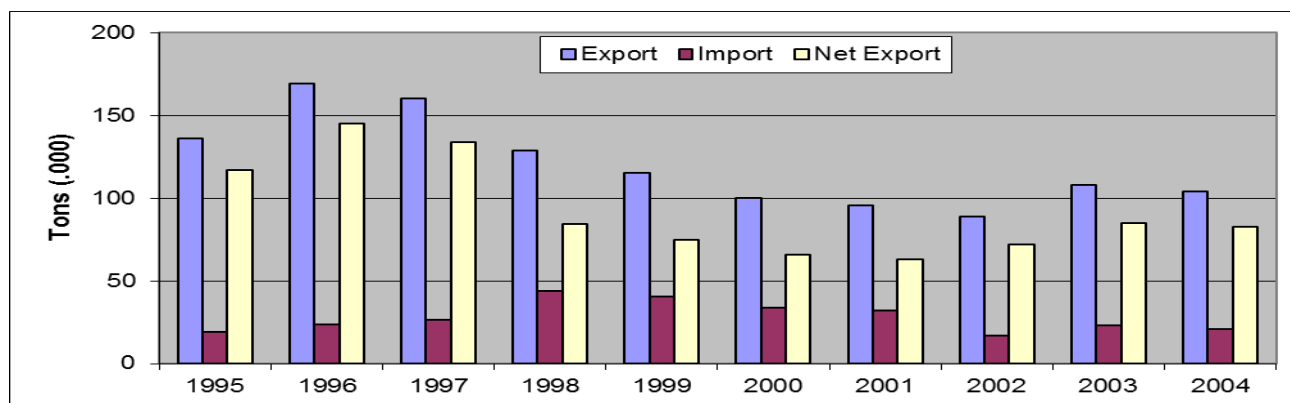
² See Appendix A for calculation

5. International Trade Outlook for Turkey, 1990-2004

Tobacco Exports, Imports and Net Exports of Turkey

The trend of the international trade of tobacco (imports and exports) for Turkey had changed over the specified years. Turkey was only exporting unprocessed tobacco in the 1970s, after that the share of processed tobacco in exports had increased over time, although unprocessed tobacco was the main part of tobacco exports in 90s and 2000s. On the other hand, after ban on tobacco imports was removed in 1991 the quantity imported increased rapidly. As expected, the monetary value of tobacco foreign trade also fluctuated over the years with quantity (Önder; 2002: 8, 14).

Figure 15: Tobacco Export, Import and Net Export for Turkey (tons), 1995-2004



Source: Author's calculations based on TEKEL statistics

Figure 15 above displays the trends in tobacco foreign trade (imports and exports) between 1995 and 2004. As can be seen tobacco exports and imports of Turkey fluctuated over the years, but the quantity exported fluctuated a lot compared to the quantity imports. During the same period Turkey's tobacco export decreased by 23.5% from 136.000 tons in 1995 to 104.000 tons in 2004 and tobacco import increased by 10.5% from 19.000 tons in 1995 to 21.000 tons in 2004. Although Turkey was a net tobacco exporter country, her net tobacco export quantity decreased by 29% from 117.000 tons in 1995 to 83.000 tons in 2004 because of decreasing in exports and increasing in imports.

Tobacco Exports of TEKEL and Private Sectors to World

Figure 16 below presents tobacco exports of Turkey in terms of public (TEKEL) and private sector to world. The combined exports of all private tobacco companies amount to 68% of total tobacco exports in 2004. In later years, TEKEL had accounted for approximately 32% of all tobacco exports. In 2004, there was a 5% increase in export quantity with respect to the year 2000 but shares of TEKEL and private companies did not change very much.

Figure 16: Total Tobacco Export of TEKEL and Private Sector to World (tons), 2000-2004

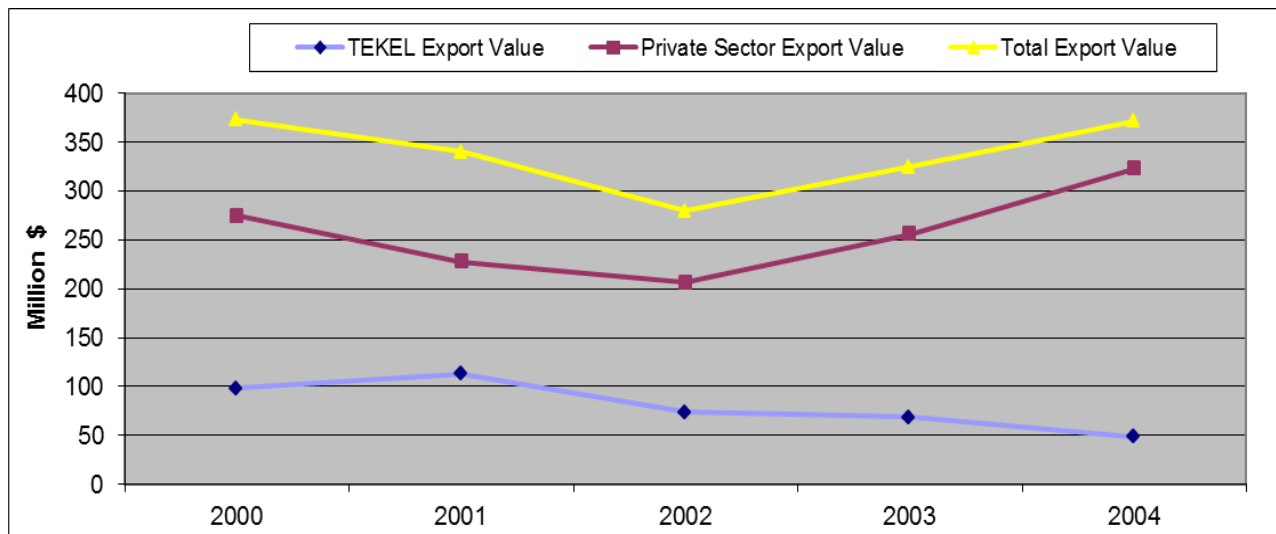


Source: Author's calculations based on TEKEL statistics

Total Tobacco Exports Value of TEKEL and Private Sector to World

In 2004, tobacco leaves export earnings accounted for 1% of total merchandise exports in Turkey. However, earnings from oriental tobacco had declined since 1998 due to bad economic conditions in the former Soviet Union countries and anti-smoking campaigns in the USA. Net surplus from raw tobacco trade was \$290M in 2004.

Figure 17: Total Tobacco Export Value of TEKEL and Private Sector to World, 2000-2004



Source: Author's calculations based on TEKEL statistics

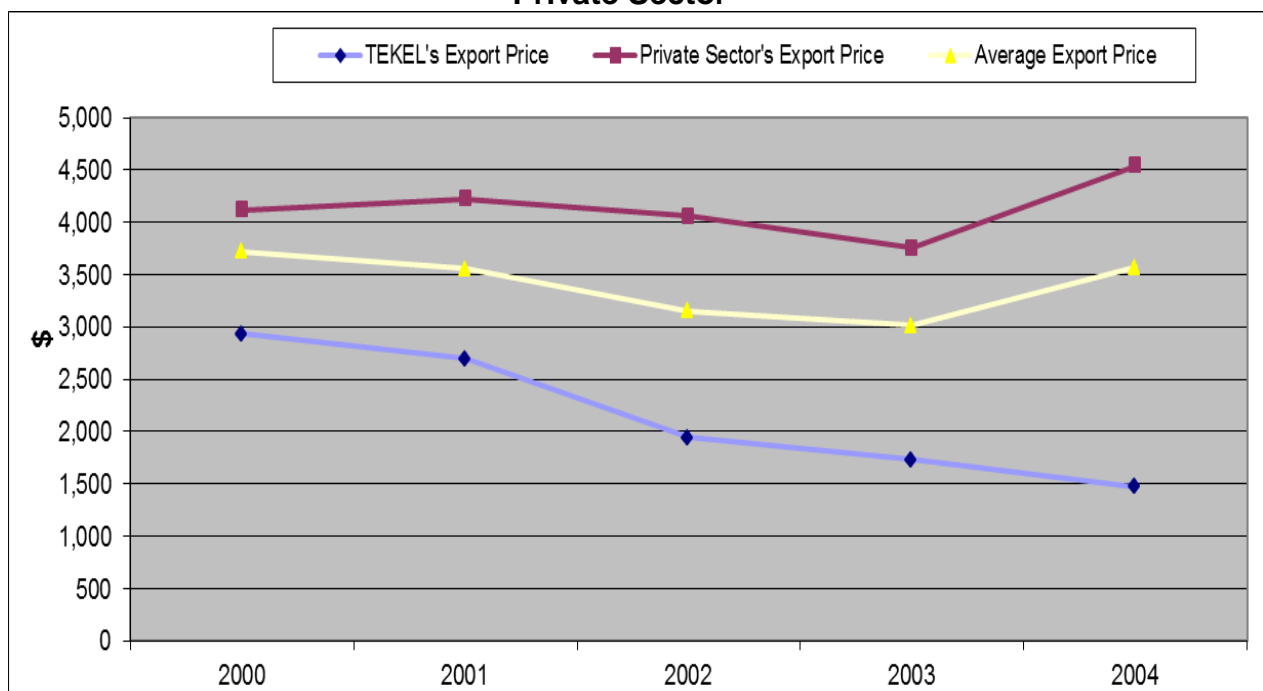
Figure 17 shows the total tobacco export value of Turkey and how much of it exported by TEKEL and the private sector. As can be seen from the figure, total tobacco export value was around the \$380M but the only \$50M of it provided by TEKEL in 2004. Generally total export value decreased between 2000 and 2002, but after that oppositely it began to rise. The reasons of it were both the fluctuations in world price and changes in Turkey's export quantities. We can see from the figure that export value of the private sector to world occurred over than TEKEL in all years. Moreover, TEKEL's export value began to decrease after 2001. Consequently, while total export

value of Turkey seemed to decrease in 2002, it protected the level of \$380M in 2004 by increasing share of the private sector. The figure shows that private sector dominated the tobacco exports.

Average World Export Price of Tobacco per Ton for TEKEL and Private Sector

Figure 18 displays the export price of tobacco per ton for TEKEL and private sector between 2000 and 2004. In the calculation of the export price, annual tobacco exports value of both TEKEL and private sector to world was divided by their total annual tobacco export quantities to world, by this way average world export price of tobacco per ton was obtained for TEKEL and private sector. In the figure, we see that the export price of private sector was around the \$4000 between 2000 and 2003 but after 2003 it began to increase rapidly. TEKEL's export price decreased 50% from \$3000 in the 2000 to \$1500 in the 2004. The most interesting point is that average export price of private sector (\$4500) was three times higher than that of the TEKEL (\$1500) in 2004. The average export price was around \$3000 (2003) and \$3800 (2000), and it decreased continuously from 2000 to 2003. The average export price began to increase after 2003 despite a huge decrease in the average export price of TEKEL because of the big increase in the export price of private sector. As can be seen from figure 16, the export quantity of the private sector was nearly same in all years; it was around 65,000 and 75,000 tons, so this increase resulted mainly from the increase in the average export price of private sector.

Figure 18: Average World Export Price of Tobacco per ton for TEKEL and Private Sector



Source: Author's calculations based on TEKEL statistics

Finally, it can be said that private sector had an important place in Turkey's tobacco exports to world. It had a dominant position over TEKEL about tobacco exports because of both the quantities of export and the export price per ton.

Tobacco Export of TEKEL and Private Sector to USA and EU Countries

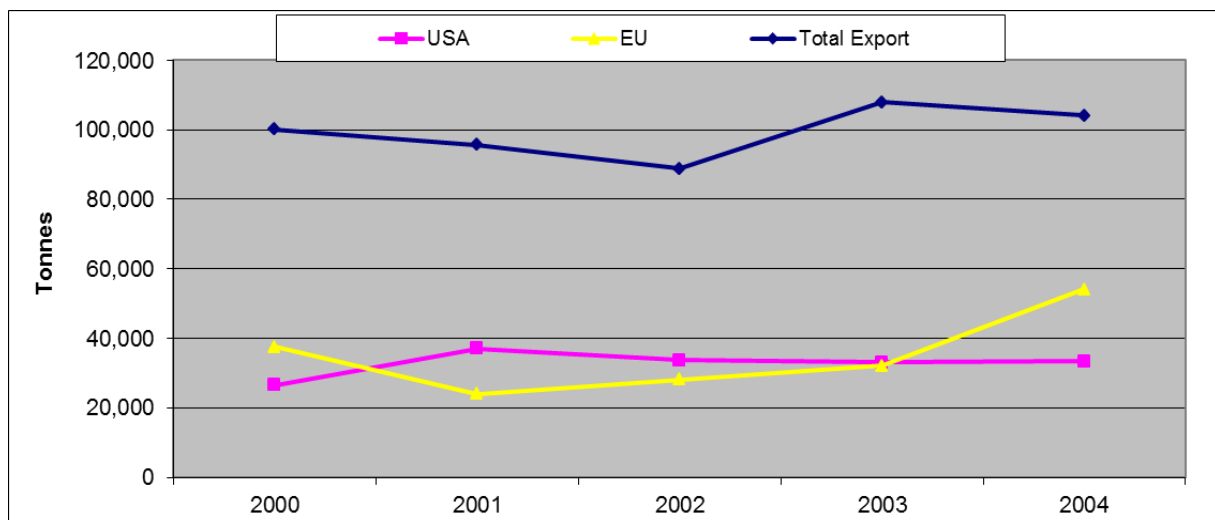
Major tobacco trading partners of Turkey were EU and USA. Turkey exported more than 80% of her tobacco exports to USA and EU in 2004. The rest, nearly 20%, exported to other countries. In 2004, the proportion of tobacco exports to EU, within the total tobacco exports, was more than 50% while the USA's proportion was more than 30%, whereas these proportions were lower in 2000 (37% for EU and 26% for USA). As can be seen from table 2 and figure 19, there had been an enormous increase (from 37% to 51%) of Turkey's tobacco exports to EU in 2004 as to 2000, and it increased rapidly compared to the exports conducted to the USA. Compared to 2000, Turkey's total tobacco exports rate increased 21% for USA, while 38% for EU in 2004.

Table 2: Share of USA and EU in Total Tobacco Exports of Turkey

	USA	EU
2000	0.265	0.37
2001	0.387	0.25
2002	0.38	0.315
2003	0.30	0.29
2004	0.32	0.51

Source: Author's calculations based on TEKEL statistics

Figure 19: Tobacco Export of Turkey to USA and EU Countries (tons), 2000-2004



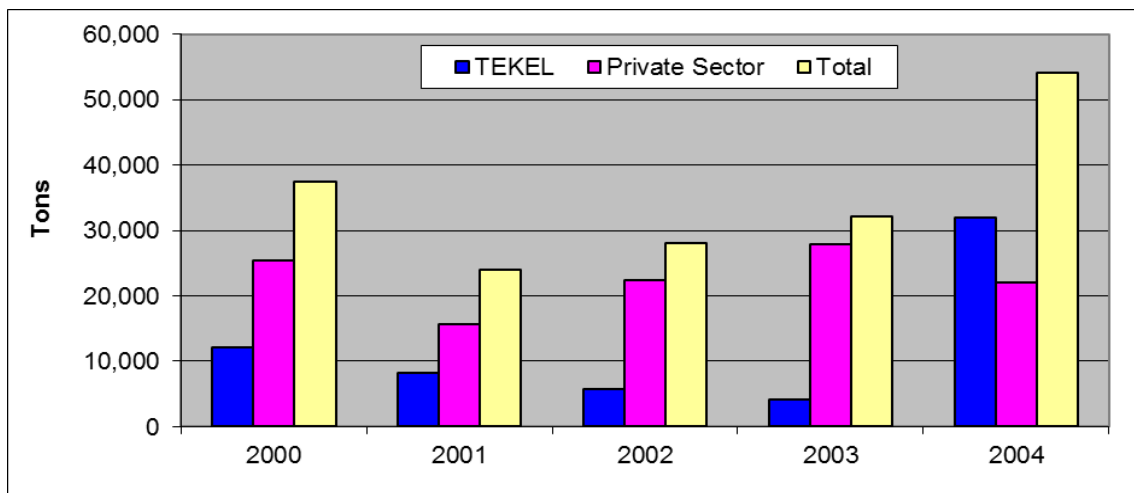
Source: Author's calculations based on TEKEL statistics

Tobacco Exports of TEKEL and Private Sector to EU Countries (tons)

Figure 20 below displays the total tobacco exports of Turkey to EU countries by TEKEL and private sector between 2000 and 2004. According to this figure the export share of private sector was significantly higher than that of TEKEL until 2003. However, total tobacco exports to EU countries in 2004 increased 69% compared to

2000, and the share of TEKEL was 60% in this export while that of private sector 40%. As an interesting point is that although the share of TEKEL for tobacco exports decreased continuously between 2000 and 2003, it increased nearly 700% in the 2004 according to a year before. The reason for this situation is probably the privatization of TEKEL in 2004.

Figure 20: Tobacco Export of TEKEL and Private Sector to EU Countries (tons), 2000-2004

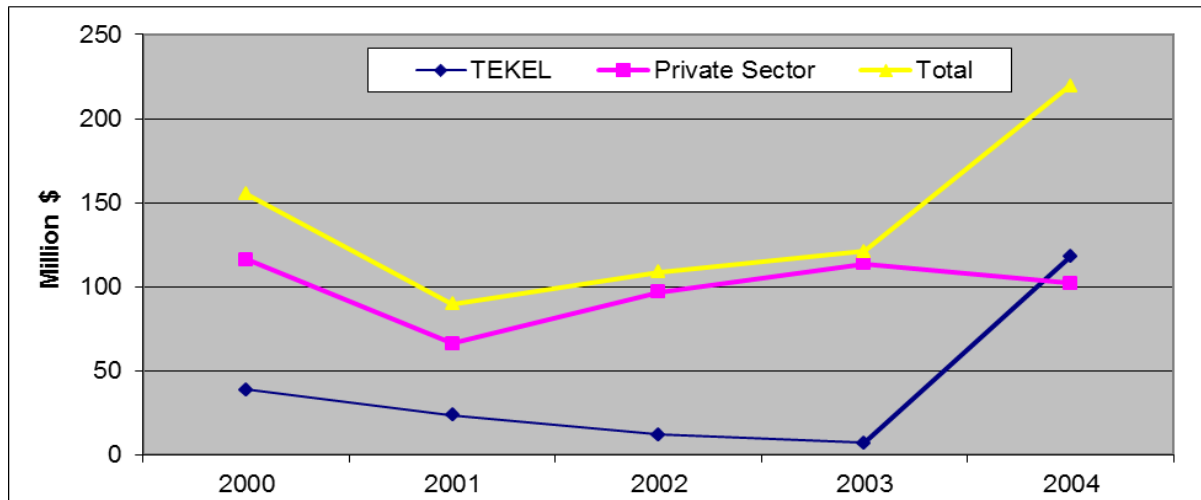


Source: Author's calculations based on TEKEL statistics

Tobacco Export Value (\$) of TEKEL and Private Sector to EU Countries

Figure 21 below presents the value of tobacco exports to EU countries conducted by TEKEL and the private sector. According to this figure, the value of Turkey's tobacco exports was \$220M in 2004. This means 42% increase according to 2000 and 83% according to one year before. TEKEL's total tobacco exports value occurred under the \$50M in 2000 and maintained to decrease until 2003, and it reached \$7M in this year. After the 2003 this value increased 15 times and reached \$117M, and it surpassed the value of private sector. From the figure 20 above, if we take the production increase amount -700%- of TEKEL into consideration, we can say that the more important part of this increase in value sourced by the export price increase of TEKEL. If we look at the private sector export value, we can see that it decreased from \$116M to \$65M (44% decreased) between 2000 and 2001, then began to rise and reached to \$100M in 2004. This correspondence 13% fall according to 2000.

**Figure 21: Tobacco Export Value of TEKEL and Private Sector to EU Countries
(Million \$), 2000-2004**

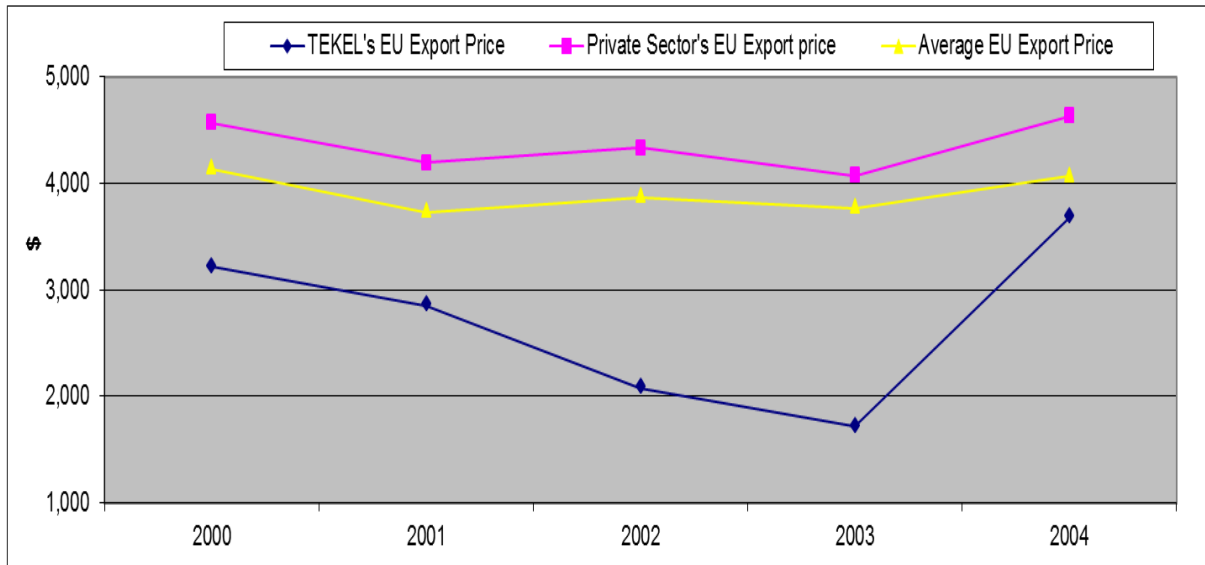


Source: Author's calculations based on TEKEL statistics

Average Export Price of Tobacco per ton to EU Countries for TEKEL and Private Sector

When we divide total tobacco exports value of TEKEL and private sector to EU countries by their total tobacco exports quantities to EU, we could find average tobacco export price to EU countries per ton for each one. As we can see from the following figure 22, the average tobacco export price was stable structure around \$4000 level. On the other hand, the export price of private sector occurred over the level of \$4000 and did not change significantly between 2000 and 2004 period, whereas the export price of TEKEL decreased from \$3200 level in 2000 to \$1800 in 2003 (56% decreased), which is the year that privatization of TEKEL was started. However, the average export price of TEKEL increased 110% in 2004 compared to 2003. If this situation is evaluated with the increase in tobacco export quantity to EU countries by TEKEL in 2004 it explains the increase of TEKEL's tobacco export values.

Figure 22: Average Export Price of Tobacco per ton to EU Countries, 2000-2004



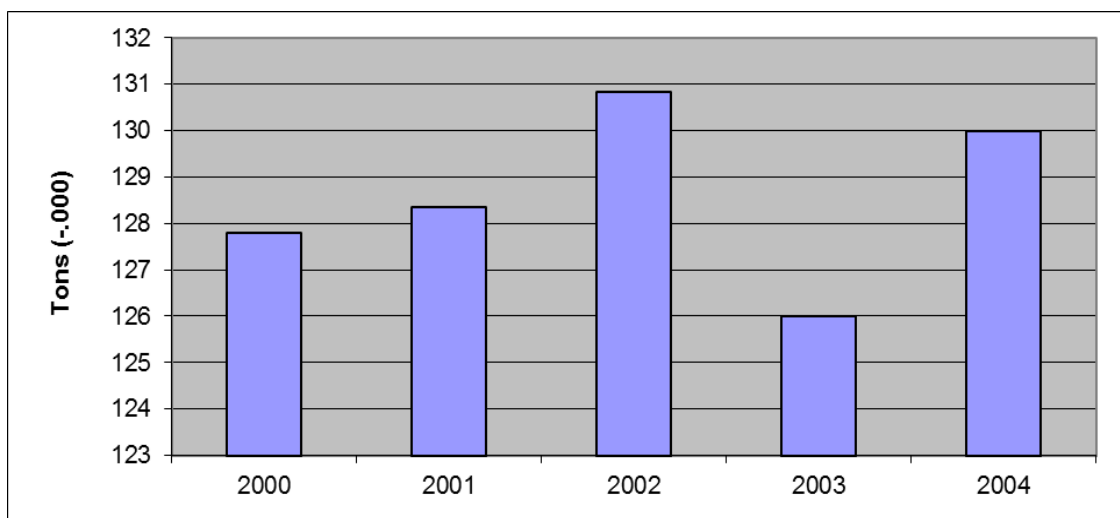
Source: Author's calculations based on TEKEL statistics

Turkey exported more than 50% of her tobacco exports to EU countries in 2004. Until this year, private sector was dominant exporter to EU countries but then TEKEL made a big attack in 2004 with privatization process, and it increased both its tobacco export quantities and tobacco export prices. Therefore TEKEL passed the private sector in terms of both tobacco export quantity and tobacco export value to EU countries. However, the export price of TEKEL was lower than that of the private sector in 2004.

Cigarette Production in Turkey, 2000-2004

Figure 23 shows cigarette production of Turkey. Around 126.000 (2003) and 131.000 (2002) tons of cigarette were produced in Turkey. During the 2000-2004 period Turkey's cigarette production increased by 1.7% from around 127.800 tons (2000) to 130.000 tons (2004).

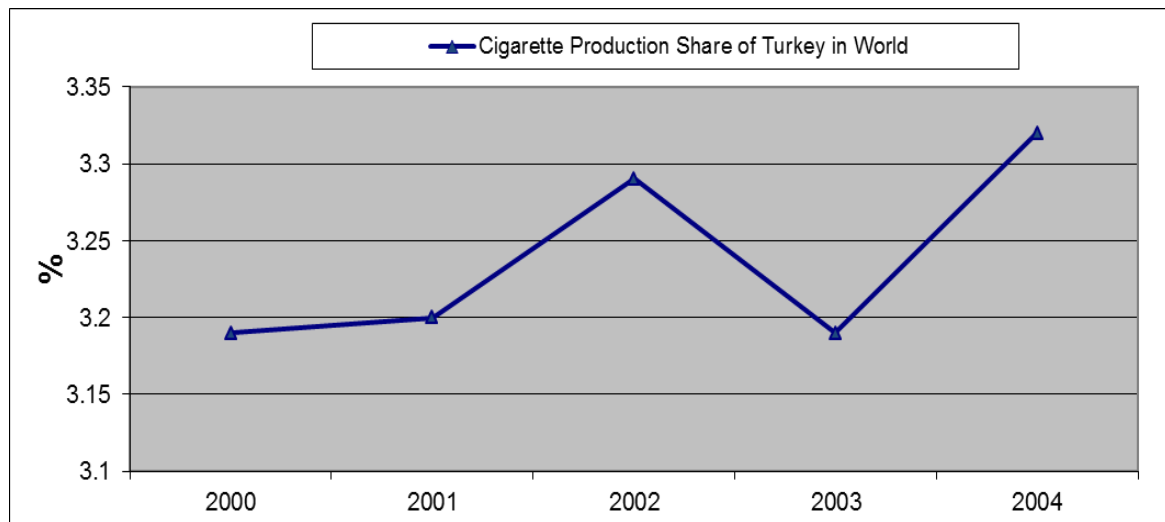
Figure 23: Cigarette Production of Turkey (2000-2004)



Source: Author's calculations based on USDA statistics

Figure 24 show the share of Turkey in world cigarette production between 2000 and 2004. The share of Turkey was between 3.2% and 3.3% because of fluctuations in her production.

Figure 24: The Share of Turkey in World Cigarette Production, 2000-2004



Source: Author's calculations based on USDA statistics

6. Summary

The main findings and implications drawn from the analyses of tobacco market in world and Turkey between 1990 and 2004 period can be summarized as follows:

- The global market in tobacco and cigarettes was under threat because the global supply and demand of tobacco fell. World tobacco demand fell because of successful tobacco control efforts of the governments.
- The United States was the largest exporter of cigarettes in world; however the share of USA in world production and exports of cigarettes declined.
- Tobacco production has shifted from the developed to the developing countries
- World tobacco, cigarette production and consumption declined slowly in developed countries. The developing countries with a positive tobacco trade balance (net exporters) were affected more negatively from a drop in global demand. Developing countries or areas, whose economies are highly tobacco dependent, and specific vulnerable groups that are heavily dependent on tobacco for their livelihoods needed help in coping with adjustments in the future.
- International trade of tobacco and its products increased in 2000s, and greater competition had occurred in domestic markets.

- High income countries have provided price supports and other subsidies to tobacco farmers. However, tobacco support levels are expected to decline in developed countries because the price support policies for tobacco are under pressure of international community.
- China was by far the largest producer and consumer of cigarettes in the world.
- The major three producer of tobacco were China, Brazil and India in 2004
- The major three exporter of tobacco were Brazil, China and USA in 2004. However, the shares of USA and China were nearly 8%, whereas the share of Brazil was 28%.
- Tobacco agriculture has conducted by family agriculture production in Turkey.
- Turkey exported tobacco mainly to EU and USA markets.
- Turkey was the world's largest producer and exporter of oriental tobacco in 2000s. Oriental tobacco accounted for less than 10% of global tobacco production, and Turkey produced large amount of it. Turkey's oriental tobacco output represented about 96% of the country's total tobacco leaf production. The mainland of the tobacco production was the Aegean region of Turkey produced much more than 50% of this type of tobacco. However, the market share of oriental brands was declining in the World and Turkey. Also, blended cigarettes generally a mix of oriental and Virginia tobacco became popular in Turkey.
- Turkey's tobacco production and harvested area, tobacco net exports, and tobacco export value trend declined between 1990 and 2004. Also, tobacco export value of Turkey fluctuated according to conjuncture. Moreover, support policies and interventions of Turkish government to tobacco market had declined during same period.

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Appendix A: Calculation of the Reel Price Tobacco per kg

Years	T Time	Production Kg ^a	Nominal Price ^b	CPI ^c	Base Year 1988 CPI	Base Year 2003 CPI	Reel Price Base Year 1988	Reel Price Base Year 2003
1988	1	219063000	4695	73,7	100	0,05	4695	9405296
1989	2	269888000	6358	63,3	163,3	0,08	3893,44	7799580
1990	3	296007000	8609	60,3	261,77	0,13	3288,76	6588247
1991	4	240881000	12287	63,8	428,78	0,21	2865,57	5740492
1992	5	162636000	25663	72,3	738,79	0,37	3473,66	6958657
1993	6	338796000	28827	66,1	1227,12	0,61	2349,15	4705956
1994	7	186954000	47918	106,3	2531,56	1,26	1892,82	3791821
1995	8	204440000	250000	93,6	4901,09	2,45	5100,90	10218421
1996	9	225216000	348351	80,4	8841,57	4,41	3939,92	7892677
1997	10	286414000	675800	85,7	16418,80	8,20	4116,01	8245434
1998	11	250556000	951698	84,6	30309,11	15,13	3139,97	6290176
1999	12	243468000	1470334	64,9	49979,73	24,95	2941,86	5893306
2000	13	200280000	1734024	54,9	77418,60	38,65	2239,80	4486903
2001	14	144786000	2038807	68,5	130450,34	65,12	1562,89	3130890
2002	15	152856000	3574999	29,7	169194,09	84,46	2112,95	4232799
2003	16	112158000	4159127	18,4	200325,80	100	2076,18	4159127

Note: a, b, c: Production, nominal price and CPI statistics are obtained from TurkStat (Turkish Statistical Institute)