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**STRATEGIC ANALYSIS OF MACARONI SECTOR IN TURKEY**

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## ABSTRACT

Within this report I will discuss the strategic analysis of macaroni sector throughout its organization. This will mean that there will need to be an understanding of how macaroni sector behaves in the world and Turkey, what approach to take and how the company which states in this sector will have to change with respect to strategic analysis.

Thesis Statement: Macaroni sector Strategy analysis focuses on the long-term objective generating alternative strategies, and selecting strategies to pursue. The firm which related to this sector can be a good indicator while determining strategic alternatives. The firm's present strategies, objectives and mission, couple with the external and internal audit information, provide a basis for generating strategy alternatives for macaroni sector.

In this report quantitative research methods are used with respect to analysis. In first part sector analysis in Turkey is examined. In second part these information with respect to profile of macaroni sector is applied to a firm which states in same sector. Strategic analysis solutions are determined in conclusion part by explaining short and long term separately. While sector analysis examining casual evaluative research method; linear regression model is used. Descriptive research method; EFE matrix, IFE matrix and TOWS matrix are carried out to firm while conducting strategic analysis results.

## **Acknowledgements**

With the support and tolerance of my family, my instructors and my friends, I was still an active researcher while I worked on this project. I would like to thank all those who helped me and I am grateful for their continued friendship and assistance.

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## **INTRODUCTION**

The production and consumption of macaroni products are increasing rapidly all in the world and also in Turkey nowadays. Because those products can be prepared very easily, they can be consumed in many different ways by using many different ingredients, they can be stored easily, they are very useful in daily diet of human beings and they have cheaper price compared to other basic nourishment ingredients.

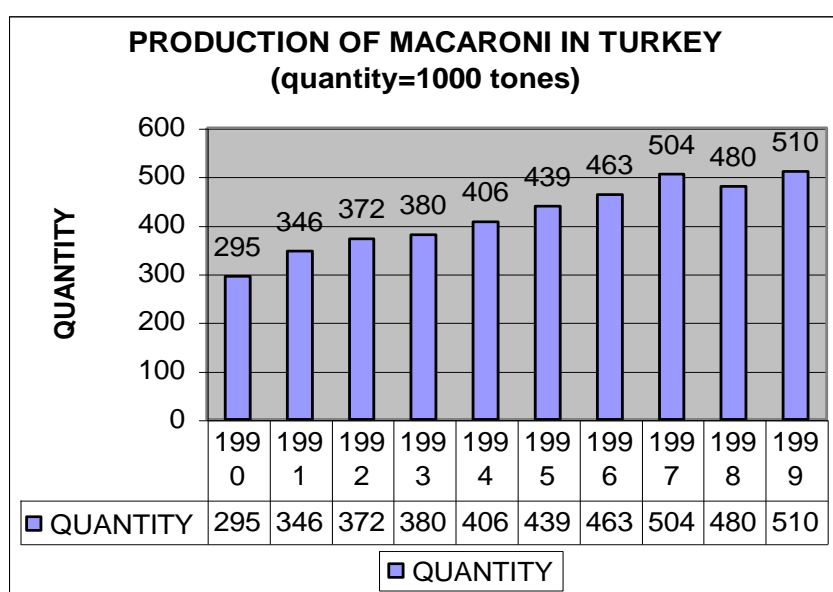
Among the industrial products that are produced from wheat, macaroni has the second place after bread when the quantity of consumption and importance in daily diet of human is considered. Macaroni is a foodstuff that is produced by mixing semolina of durum wheat together with water and other ingredients and then by being dried. Macaroni is supposed to be one of the most ancient good that is produced from wheat. It is assumed that macaroni is first used in China and then Marko Polo has brought it to Italy in 1292.

## CHAPTER I

### Brief Explanation of Macaroni Sector in Turkey & in the World

#### 1.1 Explanation of Macaroni Sector in Turkey

As being one of the first sectors of Turkish Food Industry, macaroni sector has entered into Turkish economy in the first years of Turkish Republic. The first macaroni factory of Turkey has been established in 1922 in Izmir-Bayrakli. There are about 25 producers of macaroni in Turkey today and except Beslen Makarna all the producers are private foundations and they have no public partnership. According to data of the year 1999 the total production capacity of macaroni is 800 thousand tones in Turkey.

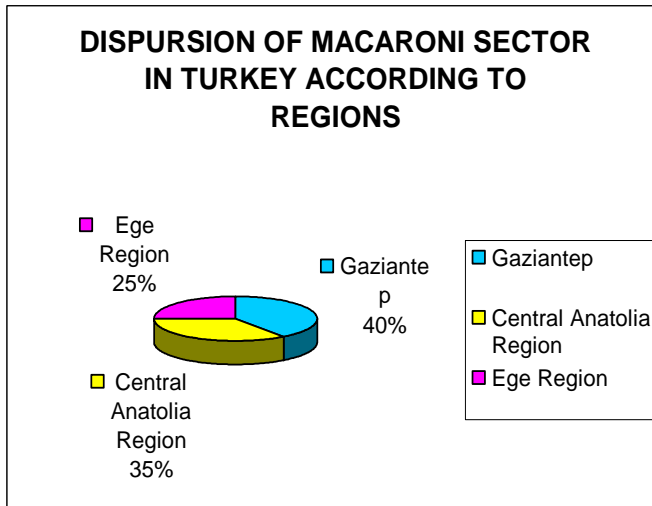


**Figure-1 Production of macaroni in Turkey** Source: SIS

The producers in macaroni sector of Turkey have become dense especially in the geographic areas like Southeast Anatolia, Central Anatolia and West Anatolia where the wheat, which is the main raw material of macaroni, is raised. “There are about 25 producers including both foundations that have market share in foreign markets and local producers. Gaziantep is the most important production area of macaroni in Turkey by covering the 40% of the production capacity. The second important area is the Central Anatolia by covering 35% of production capacity. Ege Region has 25% share in total production.” (Türk Makarna Sanayi Sempozyumu, 1999)

Foreign capital investments exist in macaroni sector and licensed production has become a common production strategy in this sector. Production of macaroni is done in

establishments with high technology equipment in Turkey and our firms are considering about the ISO9000 quality system. Turkish macaroni is highly qualified especially because of the highly qualified durum wheat that is produced in Turkey. Turkish producers put other countries' producers under pressure by their high quality.



**Figure-2 Dispersion of macaroni sector in Turkey according to regions**

Source: Türk Makarna Sanayi Sempozyumu, 1999

### ***1.2 Brief Explanation of Exportation and Importation of Macaroni***

Turkey exported macaroni for the first time in 1970. Between 1970 and 1990 the export of macaroni increased rapidly as a result of establishment of new factories and increasing capacity of existing factories. After 1990, the export of macaroni increased because of the positive effects of “Gümrük Birliği Antlaşması” and because of the new macaroni market in Turkish Republics, which was part of SSRU before. Turkey has increased its share in world macaroni trade by using high technology in production and by producing high quality products. In 1997 Turkey was the third country after Italy and China in exportation of macaroni and in 1998 Turkey became the second country after Italy. But at the end of 1999 the exportation of macaroni of Turkey has decreased to the level of 1988 exportation level. The factors that lead to this result were the negative effects of the embargo applied to Iraq after the Gulf War in 1991, the anti-dumping applied by USA in 1996 and the increase in the customs tax rate that are applied to our macaroni

producers by the EU countries and the negative effects of the South Asia crisis in 1997 and the crisis in Russia in 1998.

Macaroni production in our country covers the aggregate demand and that's why the imported amount of macaroni is very low. In 1999 the importation of macaroni has increased by about 40 % compared to the year before and this amount is about 45 % above the amount in year 1992. The 81 % of our total importation of macaroni is from EU countries and 42.6 % of the importation is from Italy. Some Italian macaroni brands have started to be produced in Turkey also. The little amounts of importation of macaroni have served the aim of product differentiation. (IGEME)

### ***1.3 Production and Consumption of Macaroni in the World***

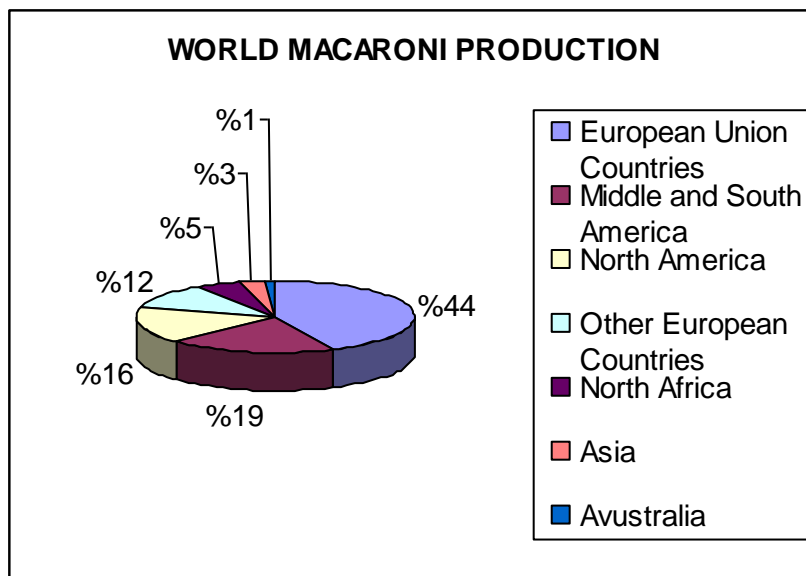
When we look at the world trade of macaroni, we see that Italy is the country that has the highest share in production and exportation of macaroni. USA is also another country that has an important share in macaroni production and it is an important importer. In recent years an increase in consumption of macaroni is observed in EU countries. Indonesia has been applying the strategy of encouragement of macaroni producers to export and it is probable to see Indonesian firms competing in world market of macaroni in a few years.

Since macaroni is a foodstuff that can be prepared very easily and since it is very nutritive, the consumption of macaroni is increasing gradually in the world. The biggest producers of macaroni in the world are Italy and USA. Turkey is in the fifth place in production capacity of macaroni in the world. The first 20 countries in production of macaroni are presented on Table-1. The shares of countries in production of macaroni can be represented on Figure-3.

**Table-1 Macaroni Production in the World**

<b>Order</b>	<b>Country</b>	<b>Production Quantity (tones)</b>
1	Italy	2.900.000
2	USA	1.164.000
3	Brazil	980.000
4	Russia	545.000
5	Turkey	409.000
6	Egypt	409.000
7	Germany	278.800
8	France	270.000
9	Venezuela	240.000
10	Spain	212.000
11	Peru	185.000
12	Mexico	175.000
13	Canada	170.000
14	Chile	168.000
15	Argentina	160.000
16	Poland	150.000
17	Japan	138.000
18	Tunisia	110.000
19	India	100.000
20	Greece	92.000

Source: TMSD



**Figure-3 World macaroni production** Source: TMSD

In Italy consumption of macaroni is 1.600.000 tones and exportation of macaroni is 1.300.000 tones. Exportation in the world trade is 2 million tones in total and Italy has a share of 65%. Italy makes 640.000 tones of exportation to European Union Countries and 660.000 tones to the Third World Countries. Other European Union Countries' total exportation is about 200.000 tones. Briefly, it can be said that European Countries has done the %75 of the total exportation in the world.

Not only production, but also in consumption Italy has the first place in the world. Yearly consumption on individual base is 28.2 kg in Italy. Venezuela has the second place by 12.7 kg and Tunisia has the third place by 11.7 kg. Yearly consumption on individual base in Turkey is 5.2 kg and Turkey is on the seventh place in consumption capacity of macaroni in the world. Consumption is higher in Marmara Region by 6.4 kg yearly consumption on individual base compared to consumption in East Region by 3.6 kg yearly consumption on individual base. Because people in Eastern Anatolia prefer to produce macaroni in their homes and their purchasing capacity is lower.

In 1999, total amount of production of macaroni in Turkey is 325.000 tones. (TRT 2-“Vizyon”, December 2000). European Union Countries also has the highest share in importation of macaroni in the world by 750.000 tones. Share of USA in importation is about 300.000 tones. Japan and African countries are also important importers.

## CHAPTER II

### PROFILE OF MACARONI SECTOR

#### *2.1 Production Capacity in Macaroni Sector*

Macaroni sector in Turkey faces with excess supply because of high capacity and low demand with respect to this high capacity. While in 1995 capacity of the macaroni sector was approximately 593 tones, in 1998 this number increased to 818 tones. That difference was provided by the establishment of 7 new factories and by renewing 12 old factories. "Even though there was a huge increase in capacity, there was not observed any important rise in demand. Furthermore, with Russian Crisis's effect on export, the usage of capacity in sector decreased to 51% from 64 %"( Sekizinci Bes Yıllık Kalkınma Planı, 1996-2000).

Because of a decrease in exportation the competition power of Turkey was decreased to 50%. The factories worked with high capacity that is 50-70% of their total capacity while small ones only worked with 20-30% of their capacity. Table 3 shows the capacity of the macaroni sector from 1995 to 1998 and percentage increases with respect to these years.

**Table-2 Capacity in Macaroni Sector (1000)**

	Years				% increase		
	1995	1996	1997	1998	1996	1997	1998
Capacity	593	640	710	818	7	11	15
Usage of capacity Ratio	69	64	64	51	-7	0	-21

Source: TMSD

#### *2.2 Factors that Effect the Production*

In order to explain the production of pasta sector in Turkey we should determine the factors that may effect the pasta production. With the help of economic regression model we try to explain the macaroni production. In this regression, variable "out" is the production amount, variable "prc" is the price of pasta, variable "fir" is the number of firms related to years and variable "sem" is the semolina amount that is used as input.



Estimation Command:

=====

LS OUT C SEM FIR PRC

Estimation Equation:

=====

OUT = C (1) + C (2)\*SEM + C (3)\*FIR + C (4)\*PRC

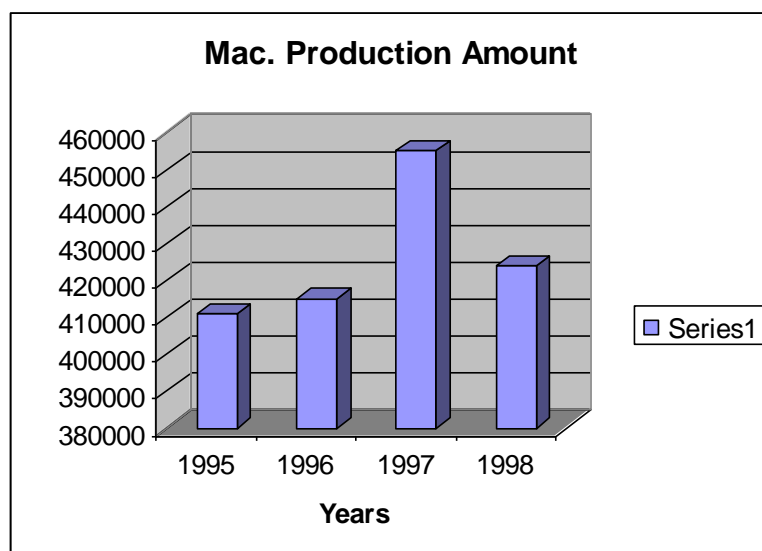
Substituted Coefficients:

=====

OUT = 79261.961 - 0.16669778\*SEM - 1529.1144\*FIR + 0.00017863316\*PRC

If the average real price of pasta increases, the average production per pasta nearly does not change when other variables are taken as constant. Thus we can conclude that output of firms do not alter going price. (Gujarati, D.N, 1995). But when there is a change in the amount of input (semolina), by a ton, the average amount of macaroni production decrease by 0, 16 tons if the other factors are taken as constant. This shows us that there exist excess of input and excess capacity in pasta sector. On the other hand, by entering only one firm into a sector pasta production decrease by 1529 tons when the other variables are held constant. This indicates similar things that pasta sector has excess capacity and low demand that new firms powered the competition in sector and amount of production fall to demand level.

When we describe the production amount and its value in macaroni sector we should mention trade at the same time. The production amount increased with respect to foreign trade until 1998. However production amount was 270.000 tones in 1985, in ten years time it raised to 411.000 tons. Demand for macaroni shaped a parallel increase with respect to these production amounts. The average demand amount of macaroni for one person is; 1, 2 kg in 1962, 3, 9 kg in 1978 and 4, 3 in 1983. Today this amount is nearly 5, 2 kg per person. Turkey had close trading relationships with Russia in second half of 1990's. This trade allowed macaroni sector to increase its exportation amount. So sector production rose to 455.000 tones in 1997, which was the highest production amount in this sector. But in 1998, when Russian Crises was appeared, export amount decreased sharply and sector was affected negatively. Production amount following year was 424.000 tones (Figure 4).



**Figure-4 Macaroni production amount between 1995 and 1998**

Source: Tarimsal Ekonomi Arastirma Enstitusu, 1999-2000

Sector was faced with economic crisis in the end of the 1990's. Main reason of this crisis was the decrease in export amount with respect to high capacity. Although sector has got high capacity, the production amount had fallen year by year. This led to high competition in sector, so rises of macaroni prices always stayed under inflation. (Table 3)

**Table-3 Macaroni production value in current and 1998 prices.**

	Current Prices		1998 Prices	
	Production Value	% Increase	Production Value	% Increase
<b>1995</b>	13193		60828	
<b>1996</b>	23648	79	61420	1
<b>1997</b>	43680	85	6740	10
<b>1998</b>	62752	43	62752	-7

Source: TMSD

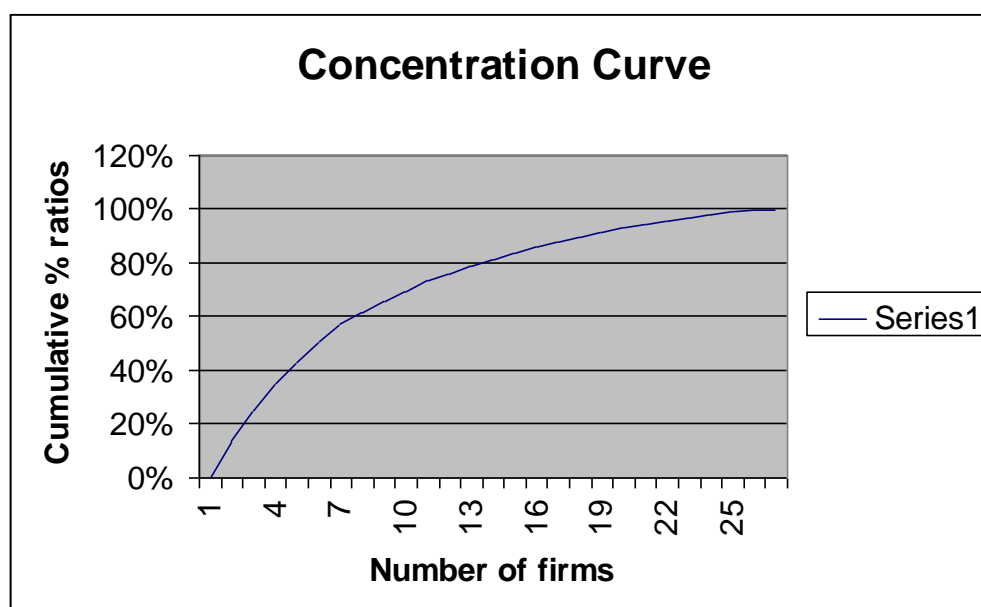
### ***2.3 Vertical Integration in Macaroni Sector***

While describing the macaroni sector profile in Turkey, we can easily say that the early stages in production process; producing semolina and the final stage; in macaroni production merged usually in the same factory. So macaroni sector in Turkey shaped a vertical integration. Both upstream and downstream firms assigned to same industry that

the sector should be explained under these circumstances when calculating the concentration ratios.

#### **2.4 Concentration of Macaroni Sector**

Table 4 represents the sales of 26 firms' sales in 1998 prices and amounts, in macaroni sector.  $CR_4$  and  $CR_8$  are the ratios, which measures concentration of the sector. Following data show that  $CR_4$  in macaroni sector is calculated as 0, 43. It means that four largest firms' market share is 43% of total market share that macaroni sector in Turkey has a medium degree concentration with respect to SIS analysis. In same method  $CR_8$  is calculated as 0, 66 that eight largest firms' share in market is 66% of total market. These ratios calculated in 1997 with 15 firms as 79,22% for  $CR_4$  and 95,88% for  $CR_8$  (SIS, 1997). However all these ratios indicate that market structure in 1997 is likely to monopoly, while in 1998 it turns to be a competition.



**Figure-5 Concentration curve of macaroni sector.** Source: TMSD

One way to measure the distribution of relative size of firms in market is to construct a concentration curve. (Figure 5). Macaroni sector's concentration curve shaped a parabola that the sizes of firms in the industry are close to each other.

Although CR ratios determine both market structure and power; HHI reflect average firm size. HHI is calculated by adding the squares of all firms' shares and it explains the inequality between sizes of these firms. In macaroni sector it is 0,07 in 1998

and 0,17 in 1997. Because of an increase in number of firms; concentration of activity in 26 firms, in 1998 is lower than activity of 15 firms, in 1997. HHI in 1998 determines that none of these firms has appreciable market share.

**Table-4 Firms in macaroni sector and their market share.**

<b>Firm Name</b>	<b>Amount(Tons, 1998)</b>	<b>Sales(1998)</b>	<b>Market Share</b>	<b>M. Share<sup>2</sup></b>
<i>N. Ank. Mak</i>	114,000	93,849,816,000	0.14	0.02
<i>Oba</i>	90,000	74,091,960,000	0.11	0.01
<i>Filiz</i>	85,000	69,975,740,000	0.10	0.01
<i>Pastavilla</i>	62,000	51,041,128,000	0.08	0.01
<i>Maktas</i>	62,000	51,041,128,000	0.08	0.01
<i>Beslen</i>	53,000	43,631,932,000	0.07	0.00
<i>Tat</i>	37,000	30,460,028,000	0.05	0.00
<i>Yildiz</i>	31,000	25,520,564,000	0.04	0.00
<i>Selva</i>	31,000	25,520,564,000	0.04	0.00
<i>Mutlu</i>	31,000	25,520,564,000	0.04	0.00
<i>Mer</i>	22,000	18,111,368,000	0.03	0.00
<i>Barsan</i>	22,000	18,111,368,000	0.03	0.00
<i>Ece</i>	22,000	18,111,368,000	0.03	0.00
<i>Goymen Tarim Urun.</i>	20,000	16,464,880,000	0.02	0.00
<i>Ugur Gida</i>	18,000	14,818,392,000	0.02	0.00
<i>Goymen Mak.</i>	16,000	13,171,904,000	0.02	0.00
<i>Dost Gida</i>	15,000	12,348,660,000	0.02	0.00
<i>G.A.P Tarim Urun</i>	15,000	12,348,660,000	0.02	0.00
<i>Konya</i>	12,000	9,878,928,000	0.01	0.00
<i>Untas</i>	11,000	9,055,684,000	0.01	0.00
<i>Can Gida</i>	9,000	7,409,196,000	0.01	0.00
<i>Yurtbilir Gida</i>	9,000	7,409,196,000	0.01	0.00
<i>Yayla</i>	9,000	7,409,196,000	0.01	0.00
<i>Unallar</i>	9,000	7,409,196,000	0.01	0.00
<i>Alesta</i>	4,500	3,704,598,000	0.01	0.00
<i>Tekinak</i>	4,500	3,704,598,000	0.01	0.00
<i>Total</i>	814,000	670,120,616,000		0.07

**Source: TMSD**

### ***2.5 Barriers to Entry to the Sector***

Although number of firms increased between 1997 and 1998, it is not easy to enter the macaroni sector. Main barrier to new entries to market is high fixed cost. Both the machinery and equipment are expensive and nearly all of them are imported from Swiss and Italy. But the new firms solved this problem in 1990's by taking special credits from government with respect to their exports. Today, to take this kind of credit is a bit difficult because of the decrease in the amount of exports. That's why fixed cost is still one of the main problems while entering a sector. High fixed cost is not the only barrier to enter a sector but sunk cost like advertisement and maintenance can also be accepted as the barriers in some situations. Financing sunk costs is not cheap that firms have difficulties when entering the sector. So some of the new firms choose the cheaper equipment and machines, which are not well qualified that they decrease the quality of the product.

### ***2.6 Effects of Prices to the Macaroni Sector***

When we explain the prices and cost in macaroni sector we should determine the behavior of durum wheat, which was used to product semolina, main input of macaroni. The capacity of the sector is greater than demand for pasta that this excess supply makes macaroni prices to state below wheat price and inflation. Furthermore, with decrease of export amount in 1998, the competition in Turkish market is powered and 1999's prices nearly fell to cost (Table 5).

One way of determining market structure is diversification. Verifying the price elasticity can do the explanation of the relationship between demand and price in sector. With the help of economic regression analysis we find the following results. The variable "out" represents the production amount and the variable "prc" represents the prices.

Estimation Command:

=====

LS LOG(OUT) C LOG(PRC)

Estimation Equation:

=====

LOG(OUT) = C(1) + C(2)\*LOG(PRC)

Substituted Coefficients:

=====

LOG(OUT) = 9.6554952 + 0.087946218\*LOG(PRC)

From these results, we conclude that the price elasticity coefficient is 0,0879, imply that for a 1 percent increase in real price of pasta, the demand for pasta on the average increase by amount 0,08%. Since the price elasticity value in absolute value is smaller than 1 we can say that demand for pasta is price-inelastic. This means that quantity demanded is not very responsive to price. So we can conclude that firms in macaroni market do not affect market price. The pasta market behaves close to perfect competition market.

When we compare the price of pasta with other country prices we determine that in Turkey macaroni is sold 30 to 50 percentages cheaper than other European Countries. One kilogram of pasta is 215.000TL in Italy, 255.000TL in France, 307.500TL in Germany and 332.500 in Holland.

**Table-5 Price of macaroni and wheat in 1998 prices**

<b>Years</b>	<b>Price of Mac.(1 kg)</b>	<b>% Increase in Mac.</b>	<b>Price of Wheat</b>	<b>% Increase in Wheat.</b>
1995	32,100		13,800	
1996	56,980	77	24,950	80.80
1997	96,000	68	42,600	70.70
1998	148,000	54	72,500	70.10

Source: TMSD



## ***2.8 Competition Power of the Macaroni Sector in Turkey***

### **2.8.1 Comparison with other countries**

Macaroni sector in Turkey has become the winner of the contention in the international market in spite of the political and economical inequalities between Turkey and other countries and today Turkey has a good place in macaroni trade. Exportation of Turkey has started in 1970 by 13 tones and after 27 years, in 1997 exportation has reached the amount of 136.000 tones by increasing 10.000 times. But because of the global economic crisis in 1998, exportation has dropped to 94.000 tones in 1998 and 25.000 tones in 1999.

The competition power of Turkey is low against USA, Japan and European Union Countries. On the other when the importation market is considered has higher competition power against Italy in countries like Romania, Ukraine, Russia and Iran. Turkey's competition power is also high against exporter countries like Canada, France, Korea and Germany.

### **2.8.2 Relations with other sectors and with downstream sectors**

Producers usually buy the raw material durum wheat from the Toprak Mahsulleri Ofisi. In the beginning of 90s, the production decreased because of the decreasing planting areas. After 1995, producers were spurred on producing more wheat, by government. Wheat for macaroni was paid %25 more compared to wheat for bread and by this way the efficiency loss of the producer was covered. As a result the planting areas increased to the amount that is enough to cover the demand.

The outputs of macaroni sector like bran and RAZMOL are bought by the industry of dry feed for animals. Bran and RAZMOL are products that cannot be stored for long time, and that's why they are marketed daily. The demand for these products is usually affected by the difficulties that the dry feed industry faces.

## ***2.9 Foreign Trade of Macaroni Sector in Turkey***

### **2.9.1 Macaroni and Raw-material Importation**

Importation of macaroni is very low in Turkey, because of high production capacity, high quality and appropriate prices with respect to demand consideration. Demand for imported macaroni is low in Turkey. There are two factors that lead to this conclusion. One of them is the high price of imported macaroni brands while the other one

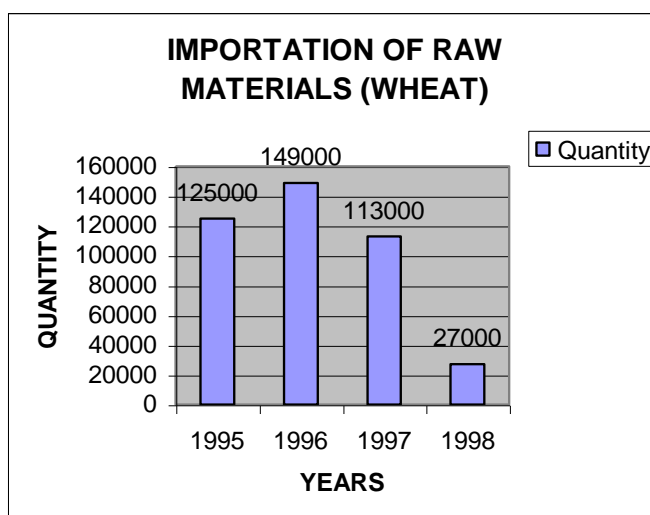


is the low consumption of macaroni in Turkey. The reason for prices of imported macaroni to be three times higher than the local prices is the low importation quantity of Turkey.

The low importation quantity has only served the aim of product differentiation. %87 of the importation is made from Italy.

The importation of semolina, which is an input of macaroni sector, is close to zero in Turkey. According to SIS statistics, the imported amount of semolina was only 252 tones in 1997 and 15 tones in 1998 and it is assumed that all these amounts were sold to the market as semolina but not used in macaroni sector.

The raw materials that are needed for macaroni production are usually bought from Turkey. The importation of raw materials is represented in Figure-6. The customs tax on importation that was % 3 in 1995 was increased to %15 in 1996, %40 in 1997 and 50% in 1998. That's why importation decreased drastically.



**Figure-6 Importation of Raw Materials** Source: TMSD

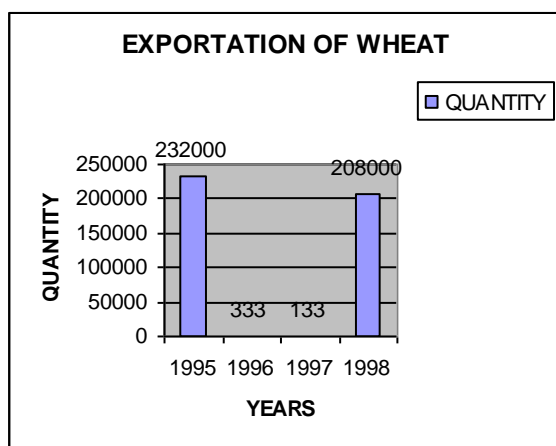
### 2.9.2 Macaroni and Wheat Exportation

The exportation of macaroni has started because of the high supply compared to the demand of macaroni. The exportation of macaroni has increased rapidly after the markets of USA and BDT in 1987. The country that has the highest share in Turkey's exportation market was USA with 29.600 tones in 1994 while it was Russia with 64.000 tones in 1995. Thus, Turkey has got the second place in exportation of macaroni in the world.

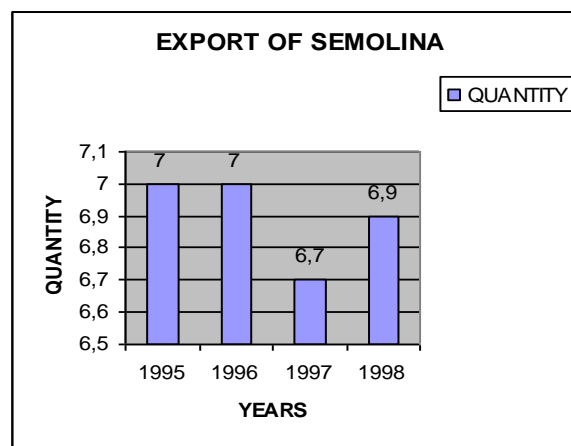
In 1995, USA has opened an investigation for Turkish macaroni producers on anti-dumping subject. Because of the resulting compensation tax, the USA market was lost.

In 1996, macaroni was included in the framework of Customs Union Agreement. In 1997, the tax, which is called agricultural share, was accepted as 106.7 ECU. But according to Customs Union Agreement, quantity, which is equal to 2.5 million ECU in value, was accepted as the yearly quota. Then the exportation to European Union Countries has decreased. In order to increase competition power of Turkish macaroni producers, the tax should be equal to zero and quota should be cancelled.

Nowadays, new markets for macaroni exportation are being inspected. For instance, researches on the consumption behaviors and exportation possibilities to India, Pakistan, Nigeria and South Asia countries are being made (TRT 2-“Vizyon”, December 2000).



**Figure-7** Exportation of Wheat



**Figure- 8** Exportation of Semolina

The exportation of wheat is usually done to the South African countries and Middle East countries and the competitors of Turkey in macaroni production buy some of the wheat. Semolina is a semi-product that is exported.

In order to explain the effects of price elasticity in exportation of macaroni on demand, we use the economic regression model. In our model, variable “exout” refers to amount of exportation demand and variable “exprc” refers to average price of export. Following results are obtained.

Estimation Command:

=====

LS LOG(EXOUT) C LOG(EXPRC)

Estimation Equation:

=====

LOG(EXOUT) = C(1) + C(2)\*LOG(EXPRC)

Substituted Coefficients:

=====

LOG(EXOUT) = 7.7225805 + 0.16190496\*LOG(EXPRC)

Exportation of macaroni price elasticity coefficient is 0,1619. This indicate us that 1 percent increase in price of exports (macaroni) makes the demand for export amount (macaroni) to increase by 0,16 % . This solution shows us sector in the world is a price maker. Since the price elasticity of 0,16 in absolute values less than 1 we can conclude that the demand for export of pasta is price in- elastic. With respect to decrease in degree of price elasticity of demand monopoly power increase in the world market. Opposite to domestic market pasta sector in the world market, behaves close to monopoly .

## **CHAPTER III**

### **STRATEGIC ANALYSIS of FIRM STATE in MACARONI SECTOR**

In this part, I will be investigating the firm, deals with macaroni production, in detail to understand the sector strategic analysis. The name of the firm is Untas Food Industry and Trade Incorporate and the name of the products are Turkmen Macaroni and Pasta Maria.

#### ***3.1 Current Situation***

Firm was established in 1982 as a flour factory, and then in 1990 animal feed factory is constructed. In 1996 first attempt to macaroni factory is established by producing semolina. Year 1998 was the exact date of establishing the first macaroni line. And second line was constructed in 1998. After the Russian and Turkish economic crises occurred, factories of flour and animal feed sold to another trade incorporate. In 2001 Untas Trade incorporate is owner of semolina and Macaroni factories.

Untas construct the firm management with respect to profit maximizing structure. Company is described in macaroni, rice, and couscous and etc. food production sector in Turkey.

Foreign capital investments exist in macaroni sector and licensed production has become a common production strategy in this sector. Production of macaroni is done in establishments with high technology equipment in Untas and firm is considering about the ISO9000 quality system. Untas macaroni is highly qualified especially because of the highly qualified durum wheat that is produced in Turkey, especially in Central Anatolia. Untas put other producers under pressure by its high quality.

Turkmen Macaroni Company does not have official mission and vision statement. Company's stated goal is to increase profit while providing consumer satisfaction. Vision of the firm is defined as "Having part in top five companies of the sector and should sustain its place". According to its stated goal, firm tries to increase its capacity with respect to the technical changes. Managers of the company think that future years are knowledge and perfect service years that they accepted the efficient financing and effective management strategies. The product is at the center of every activity and the customer is to point of reference. Moreover, quality and customer always come first for the family business. Company's mission statement can be expressed as " Providing top quality pasta by offering a wide variety of shapes and adopting innovations by offering a contribution to the health of mankind.

Main objective of the firm is to state in macaroni sector and gain. In detail, Untas should have part in top five companies of the sector and should sustain its place. To make these, firm tries to increase its capacity with respect to the technical changes. Managers of the company think that future years are knowledge and perfect service years that they accepted the efficient financing and effective management strategies.

Macaroni, rice, couscous and etc. food production sector where Untas states behaves perfectly in market for four years. So Untas follow industry very closely to upgrade its products and management system. The features of macaroni sector are main indicator for the firm when taking the strategic decision.

Briefly, macaroni sector of Turkey has an important role in world market although it has some difficulties on both political and economic areas. In recent years because of the encouragement of producers of wheat to pasta sector in foreign countries, Turkish macaroni sector's competition power decreased in international markets. Moreover, the global economic crisis, which was appeared in 1998, has caused a negative effect on competition. Russia who is influenced by global crises mostly is the main importer of pasta production in Turkey. So because of the crisis, export amount in pasta sector decrease to 8500 tones and continue to fall in 1999 by reaching 7500 tones in Untas. By renewing production design strategies with new research and innovation Turkey can increase its competition power in world market. "Türk Makarna Sanayicileri Derneği" plays and important role in research areas. This association not only does research on new production strategies but also deals with the problems of the sector, too

Although the firm decides its price and production level strategically market conditions and crises that occur in both Turkey and world, prevent these plans to happen. "Türk Makarna Sanayicileri Derneği" calculates the amount of production level, amount of exports and imports, average prices and etc. to make the producer of macaroni knowledgeable. In accordance with the data of the association, Accounting and Finance Department of Untas makes financial analysis and forecasting every year. While making this analysis department consider the effects of the market, crisis and inflation in detail.

In accordance with the mission and objectives, with the strategies, internal and external factors Untas determine its policies through following choice variables.

Firm's choice variables are under three categories;

- 1- Untas plan to produce twelve types of sort-cut pasta and five types of long-cut pasta about 11,000 tons in 2002.

- 2- Company plan to produce this amount with the constructed machinery lines with lower labor. Firm does not plan to invest the new machineries. Instead of investing the machineries company plan to invest the labor by decreasing the number but increasing the knowledge and quality of the labor.
- 3- Untas decided to sell its production to the Turkish market. But if there is a confident importer, they will make exportation.

Untas consider the rational choices principle while accepting the above variables. Because of the uncertainty in economy and markets, firm does not plan to invest to new production line.

In accordance with the consistency of mission statement, objectives, strategies and policies we can easily determine that company's international operations are multi domestic.

### ***3.2 Corporate Governance***

The Board of Directors of Untas includes five people; Cafer Ozkan, Yahya Yılık, Ahu Ozkan, Tayfun Guven and Ahmet Ozkan who have own significant share of stock. The sock is privately held and there are not different classes of stock with different voting rights. Boards of directors have family relationship with each other except Yahya Yılık and they served for five years on the board. They are active in decision-making process especially in strategic management. Board of Directors consists of both new and old generation. Old generation contributes to the company in terms of background and experience where new generation contributes in terms of knowledge and skills. Most of the Board of directors constitutes top management so they directly participate and suggest future directions.

Top management is directed by Board of Director Cafer Ozkan for fifteen years He has got not only knowledge in food sector but also has got crucial experiences in this sector. Last crises that appear in Turkey and Russia show that top management's strategic decisions are effective and sufficient to cope with likely future changes. As the Turkmen Macaroni is a family business the interaction between top management and lower level managers are established so close.

### ***3.3 External Environment***

Macaroni sector in Turkey has become the winner of the contention in the international market in spite of the political and economical inequalities between Turkey and other countries and today Turkey has a good place in macaroni trade. Exportation of Turkey has started in 1970 by 13 tones and after 27 years, in 1997 exportation has reached the amount of 136.000 tones by increasing 10.000 times. But because of the global economic crisis in 1998, exportation has dropped to 94.000 tones in 1998 and 25.000 tones in 1999.

The competition power of Turkey is low against USA, Japan and European Union Countries. On the other when the importation market is considered has higher competition power against Italy in countries like Romania, Ukraine, Russia and Iran. Turkey's competition power is also high against exporter countries like Canada, France, Korea and Germany

Macaroni sector in Turkey faces with excess supply because of high capacity and low demand with respect to this high capacity. While in 1995 capacity of the macaroni sector was approximately 593 tones, in 1998 this number increased to 818 tones. That difference was provided by the establishment of 7 new factories and by renewing 12 old factories. "Even though there was a huge increase in capacity, there was not observed any important rise in demand. Furthermore, with Russian Crisis's effect on export, the usage of capacity in sector decreased to 51% from 64 %"( Sekizinci Bes Yıllık Kalkınma Planı, 1996-2000). This excess capacity leads to decrease the prices.

Uncertainty in economy and government bid the strategy planning. Top management does not make plans for more than three years. On the other hand with the new economic program that Turkey accepted, firm aims to increase its export amount. Because with the new program Turkish liras devaluated against foreign currency that macaroni became cheaper in international market. Besides these, trade barriers bid the export amount as a result of globalization that it is not easy for Untas to export.

Rate of output per unit time when all costs are incurred, is known as economies of scale. Untas assigned economies of scale until 1999. Huge rise in its output is related with less increase in its average costs. Because of a decrease in exportation the competition power of Untas was decreased to 50% from 1997 to 1999. The factory worked with high capacity that is 40-60% of its total capacity. This affects all of the management tools of the company. Company should decrease the capacity otherwise it will assign loss rather than profit because of high sunk and fixed costs. As the supply decrease, the big firms make the

set the prices lower. This makes the profit lower and lower. To sum up, after 1999 company's production increase leads to more average cost. Another threat for the company is high sunk costs. Firms in market charge the advertising much to increase their market share. Firms have limited financial sources like Untas affected negatively with these competition in market. Another threats that lead to a decrease in competition power of Untas are shortage of raw-material and disappearance of antitrust legislation. Producers usually buy the raw material durum wheat from the Toprak Mahsulleri Ofisi. Untas Inc. purchase durum wheat mostly from the market. About its 30% of wheat is bought from TMO. In the beginning of 90s, the production decreased because of the decreasing planting areas. After 1995, producers were spurred on producing more wheat, by government. Wheat for macaroni was paid %25 more compared to wheat for bread and by this way the efficiency loss of the producer was covered. As a result the planting areas increased to the amount that is enough to cover the demand.

While describing the macaroni production in Untas, we can easily say that the early stages in production process; producing semolina and the final stage; in macaroni production merged usually in the same factory. So macaroni sector in Untas shaped a vertical integration. Both upstream and downstream factories are under the same company that the firm takes the advantage of cost saving.

Untas has the highest technology and capacity long-cut pasta line in Asia. Top management of the company put importance on technological innovation that macaroni production is standardized and qualified. This opportunity takes an important role to increase competitiveness among rivals.

With the globalization like everything human eating habits change, too. Change in lifestyles increase demand in quick preparation foods and more pressure on more nutritional foods became more popular. Besides these with financial crises people want to consume cheaper foods. As a result demand for macaroni increased.

External factor Evaluation Matrix belongs to Turkmen Macaroni, explain strategies of the firm with respect to economic, social, cultural, demographic, environmental, political, technological, legal and competitive areas. In accordance with the EFE matrix, Turkmen Macaroni's total weighted score is 2,7. It indicates that Turkmen is above average in its efforts to satisfy strategies, which includes external opportunities and threats. In other words firm's strategies take advantage of existing opportunities and minimize the potential adverse effect of external threats.



Although number of firms increased between 1997 and 1998, it is not easy to enter the macaroni sector. Main barrier to new entries to market is high fixed cost. Both the machinery and equipment are expensive and nearly all of them are imported from Swiss and Italy. But the new firms solved this problem in 1990's by taking special credits from government with respect to their exports. Today, to take this kind of credit is a bit difficult because of the decrease in the amount of exports. That's why fixed cost is still one of the main problems while entering a sector. High fixed cost is not the only barrier to enter a sector but sunk cost like advertisement and maintenance can also be accepted as the barriers in some situations. Financing sunk costs is not cheap that firms have difficulties when entering the sector. So some of the new firms choose the cheaper equipment and machines, which are not well qualified that they decrease the quality of the product.

**Table-7 External Factor Evaluation****EXTERNAL FACTOR EVALUATION**

<b>KEY EXTERNAL FACTORS</b>	<b>WEIGHTS</b>	<b>RATING</b>	<b>WEIGHTED SCORE</b>
<b>OPPURTUNITIES</b>			
<i>1- Increase in export demand because of devaluation</i>	0,075	3	0,225
<i>2- Vertical integration in production causes lower low material cost</i>	0,1	4	0,4
<i>3- Technical innovation increase competitiveness</i>	0,075	3	0,225
<i>4- Change in people lifestyles increase the demand in quick preparation foods</i>	0,075	2	0,15
<i>5- Decrease in per capita income causes a rise in demand in cheaper foods</i>	0,075	2	0,15
<i>6- More social pressure to consume nutritional foods increase demand</i>	0,05	1	0,05
			0
			0
<b>THREATS</b>			
<i>1- Trade barriers bid the export amount</i>	0,075	2	0,15
<i>2- High sunk costs increase monopolistic behaviors in market</i>	0,05	3	0,15
<i>3- Excess capacity leads to decrease in prices</i>	0,1	4	0,4
<i>4- Shortage in row-material decrease the competitive advantage of industry</i>	0,1	2	0,2
<i>5- Diseconomies of scale makes the average costs increased</i>	0,075	2	0,15
<i>6- Uncertainty in economy and government bid the strategy planning</i>	0,1	4	0,4
<i>7- Disappearance of Antitrust legislation decrease the competitive behaviors of industry</i>	0,05	1	0,05
<b><u>TOTAL</u></b>	1		2,7

Untas Company is a profit-maximizing firm that main process for the management is how to increase the profit.

Profit sources of the firm are price and the amount of production that the firm produces. Firm should increase its scale to reach the level where its average costs decrease while its production level increases. To reach this level firm should increase its sales higher than minimum efficiency level. But it is not easy for Untas to increase its sales nowadays. Main constraints that prevent sales to rise are excess capacity with low demand. This will cause excess supply in sector that prices decrease rapidly in three years in terms of dollars. Furthermore the affect of decrease in exports amount especially decrease in Russia exports amount, bring extra burden to the market conditions. Crisis that occurs in the world and Turkey make the competition harder for Untas and firm decrease both its amount of production and prices. This leads to decrease in the amount of the profit that at the end of 2001. As a result, Untas has sold its flour and animal feed factories.

On the other hand, the companies, which has got high market share in industry, try to eliminate the other firms by setting minimum prices. Their aim is to make the sector behaved monopolistically. They are not only decreasing the sales prices but also increase input prices that lead to an increase in average costs. This resulted with a decrease in profit of the firm.

### ***3.4 Internal Environment***

Untas flour milling, food industry and trade incorporate are centralized around one group; board of directors. This decision-making authority makes the organization on the basis of functions, projects and geography.

As the nourishment habits are different countries to countries macaroni divided its market into two geographical units where the same macaroni is sold under different names and quantity. Pasta is marketed with 500 grams package as an enriched pasta product domestically on the other side 450 or 325 grams package are marketed through foreign countries. To be a competitor with the foreign producer Turkish macaroni producers should take the advantage of price competitiveness. On the other hand, they should produce the same quality and same package weight of pasta.

Company intends to compete as low-cost provider of pasta to increase the market share in industry. By predatory pricing, firms in market who has the largest market shares try to discourage competition. Turkmen Macaroni aims to prevent this monopolistic behavior by

being a low cost provider of pasta. Firm's low-cost production activities depend on not only the low-row material costs but also the low-management wage costs because of family business. Moreover, firm's vertical integration process enables company to control more of its production activities. Turkmen macaroni strategy on centralizing with respect to consolidate processing will make the economies of scale increased. With the help of economies of scale firm may decrease its average costs. On the other side centralizing provides rapid and frequent production and transportation, which eliminates the customers' dissatisfaction. Besides these, firm's marketing activities distribution through the Turkish Republics requires efficient resource allocation to capital budgeting of the firm. Although the pasta industry has been experiencing excess capacity for five years, Turkmen Macaroni exports to finance its management activities. Firm's strategy of stability in employment area helps to attract and retain high skilled labors. Furthermore, Turkmen Macaroni takes care of its social responsibilities. Strategies related to social responsibilities determined by the firm increase the firm's confidence in public.

Main weakness of the firm is financial disabilities. As the company finances its pasta production line with leasing, with the economic crises it doubled its debt. Untas sold its flour and animal feed factory to solve this financial disability. Currently, most of its debt is paid. Although firm has effective marketing department in both internal and external area, firm has some weaknesses about marketing. First of all Untas do not put importance the researches and developments about marketing. Furthermore, its promotion activities are limited. Main reason to limitations on advertising and research is financial disabilities. Besides these, firm with economical crises has to face with high inventory costs. This will make company unpredictable for future productions.

**Table-8 Internal Factor Evaluation****INTERNAL FACTOR EVALUATION****IFC****WEIGHT RANKING SCORE****Internal Strengths**

<i>1- Strong culture is based on family business</i>	0,05	3	0,15
<i>2- Strong management team</i>	0,05	4	0,2
<i>3- Advantage of low cost raw-material</i>	0,1	3	0,3
<i>4- Efficient vertical integration</i>	0,075	4	0,3
<i>5- Superior technological developments to differentiate its' products</i>	0,05	3	0,15
<i>6- High marketing activity distribution through Turkish Republics</i>	0,075	3	0,225
<i>7- Efficient capital budgeting</i>	0,075	3	0,225
<i>8- Consolidate processing</i>	0,05	3	0,15
<i>9- Stability of employment</i>	0,025	3	0,075
<i>10- No pattern of systematic abuses</i>	0,025	3	0,075

**Internal Weaknesses**

<i>1- Less advertising activities</i>	0,1	1	0,1
<i>2- Predatory pricing injured competition</i>	0,1	1	0,1
<i>3- Limited marketing research</i>	0,075	2	0,15
<i>4- Financial disabilities</i>	0,075	2	0,15
<i>5- Higher inventory costs</i>	0,075	2	0,15

**TOTAL**

1 2,5

According to the internal factor evaluation matrix, total weighted score is 2, 5. This indicates that firm has an average internal position. I identify fifteen factors that affect the firm's internal position. Main strengths of the firm are strong management team and efficient vertical integration. On the other side main internal weaknesses of the firm are advertising activities and predatory pricing that determined by the industry.

### 3.5 Analysis of Strategic Factors

The threats-opportunities-weaknesses-strength (TOWS) Matrix is an important tool to determine strategies. According to external and internal factors that I explain above I construct a TOWS matrix for Untas.

**Table-9 Threats-opportunities-weaknesses-strength (TOWS) Matrix**

Internal Strengths	Internal Weaknesses
<p><b>1- Strong culture is based on family business</b></p> <p>2- Strong management team</p> <p>3- Advantage of low cost raw-material</p> <p>4- Efficient vertical integration</p> <p>5- Superior technological developments to differentiate its' products</p> <p>6- High marketing activity distribution through Turkish Republics</p> <p>7- Efficient capital budgeting</p> <p>8- Consolidate processing</p> <p>9- Stability of employment</p> <p>10- No pattern of systematic abuses</p>	<p>1- Less advertising activities</p> <p>2- Predatory pricing injured competition</p> <p>3- Limited marketing research</p> <p>4- Financial disabilities</p> <p>5- Higher inventory costs</p>
OPPURTUNITIES	
<p>1- Increase in export demand because of devaluation</p> <p>2- Vertical integration in production causes lower low material cost</p> <p>3- Technical innovation increase competitiveness</p>	<p>Improve marketing activity through Turkish republic to increase export</p> <p>Improve technical innovation to increase quality &amp;competition</p> <p>Increase the amount of export to finance advertising and marketing</p> <p>Purchase wheat from close suppliers</p>

4- Change in people lifestyles increase the demand in quick preparation foods

strategies

5- Decrease in per capita income causes a rise in demand in cheaper foods

6- More social pressure to consume nutritional foods increase demand

## THREATS

1- Trade barriers bid the export amount

Apply more centralized consolidate

2- High sunk costs increase monopolistic behaviors in market

processing to increase economies of scale Apply to Rekabet Kurumu to eliminate predatory pricing

3- Excess capacity leads to decrease in prices

Increase the control mechanism on capital budgeting department.

4- Shortage in raw-material decrease the competitive advantage of industry

5- Diseconomies of scale makes the average costs increased

6- Uncertainty in economy and government bid the strategy planning

7- Disappearance of Antitrust legislation decrease the competitive behaviors of industry

Matching the internal and external factors I determine the following general strategies for Untas;

\*Improve marketing activity through Turkish republic to increase export.

\*Purchase wheat from close suppliers.

\*Increase the amount of export to finance advertising and marketing strategies.

\*Apply more centralized consolidate processing to increase economies of scale.

\*Apply to Rekabet Kurumu to eliminate predatory pricing.

\*Increase the control mechanism on capital budgeting department.

All the strategies that I explain above require a rise in market share of the company. Main weaknesses of the firm can eliminate by adopting these effective strategies. On the other side firm's financial disabilities can be solved by effective management process. If the top management of the firm put more importance on capital management and consolidate budgeting, they may easily reach the efficient resource allocation level. With centralizing firm not only decrease the average costs but also decrease transportation costs as locate near customers and suppliers. Untas should use the advantage of layout while purchasing raw-material (wheat). Its centralized processing is available for it.

Both low cost materials and effective management recurs the financial position of the firm. Firm should increase its sales to gain more. It is more profitable for the firm to increase its export amount as the domestic market has excess capacity. So Untas should increase its marketing activities through its best importer Turkish Republic. As the new economic program makes the exchange rate fluctuated, devaluation may increase the purchasing power of these countries. Stability and gains in financial area may help to eliminate other weaknesses of the firm. For example; Turkmen Macaroni may increase its advertisement amounts if it finds suitable resources. Moreover, it may increase researches in marketing area. Although it is very costly to invest in sector by efficient financing in true time, firm will raise its sales.

On the other side; Untas should increase its sales domestically, Firm should applies to legal areas to solve the predatory pricing conflict. Rekabet Kurumu currently makes many judgments about competitiveness.

In conclusion, firm has risky position with respect to its internal and external factors. If Turkmen Macaroni can satisfy sustainable effective management with respect to efficient financial activities, it may increase its sales and sustains its market share as one of the top ten pasta producers. Otherwise, firm will face important financial and production disabilities.



### ***3.6 Strategic Alternatives and Recommended Strategy***

#### **3.6.1 Marketing Strategy**

##### ***3.6.1.1 Price***

When we explain the prices and cost in the company we should determine the behavior of durum wheat, which was used to product semolina, main input of macaroni. The capacity of the firm is greater than demand for pasta that this excess supply makes macaroni prices to state below wheat price and inflation. Furthermore, with decrease of export amount in 1998, the competition in Turkish market is powered and 1999's prices nearly fell to cost. In accordance with this higher capacity, producers competitor highly and they intend to increase their market share. By taking the advantage of being a market share leadership they aim to decrease their costs and increase their profits. If macaroni producer decrease its prices it does not only increase its demand, but also takes the chance of a sustainable increase in its market share. So best price strategy for Untas is setting low price strategy.

According to the behaviors of market that macaroni states, market penetration pricing which aims to set low price in order to increase demand and market share, is suitable strategy. Macaroni sector in Turkey has inelastic demand that change in prices cause a proportionally smaller change in quantity demand. The producer, which has higher market share in industry, use predatory pricing. In another words, high market share firms set lower prices, especially lower than the costs, to make other firms exit macaroni industry. With this pricing strategy they purpose to aim monopolistically and price elasticity of demand for macaroni sector became more inelastic.

Competition in macaroni sector mostly depends on price strategies. Necessary adjustments such as cash discounts should be done as a part of pricing strategy in macaroni production. The financial inabilities that the macaroni sector faces in Turkey makes companies adjust their prices allow for differences in customers, products and locations. Main accepted segmented pricing is product-form pricing. Different version of macaroni are priced differently however their costs are nearly same. Location pricing, which requires different prices to different destination places, is another acceptable pricing strategy for macaroni production.

To sum up, while selecting the final price to macaroni we should not only consider the economical price we should also consider the psychological pricing approach to sustain or

increase our sales. On the other hand with respect to the geographical approach, macaroni price varies with respect to the destination locations. Macaroni is a one of the main exports of Turkey in international area that we should set international pricing strategy efficiently. Moreover, the excess capacity in sector and economic rise that all industry faced leads to decrease in demand for macaroni. So we may use promotional pricing to eliminate the cost affects of inventories.

### ***3.6.1.2 Market Segmentation***

According to above different segmentation evaluations, company which states in macaroni sector can easily determine its target markets selection. Macaroni market consists of buyers and they differ in one way or a few ways with respect to their tastes, buying abilities and preferences. In accordance with the buying attitudes of macaroni market we can easily define that macaroni market segmentation level is segment marketing. As the buyers in macaroni market consume macaroni with respect to their nourishment habits, price, quality and needs, mass marketing is not practiced. So differentiated marketing can be chosen as a market coverage strategy. With the help of this strategy pasta Producer Company can increase its sales.

### **3.6.2 Promotion Activities**

The promotional mix elements advertising, sales promotion and public relations are mass communication tools, which help to promote products.

Macaroni target market depends on demographic and geographic market segmentation if we consider Turkish markets. While setting the strategy for macaroni advertising we should create advertising message, which includes customer benefits and interest and select advertising media. Macaroni has the second place after bread when the quantity of consumption and importance in daily diet of human is considered. So message depends on human eating habits and their health. On the other side while selecting the media percentage of people in macaroni market exposed to campaign, frequency, and media impact should be examined efficiently. Best media vehicles for macaroni are television, radio and magazines. Besides these media timing is important. Macaroni advertising times should be considered with respect to media habits of consumers. As the macaroni consumers are not specified advertising frequency should increased. To sum up, advertising strategy should consist of both communication effects and sales effects.

Advertisement of macaroni relates with persuasive advertising and we should take the budget into consideration. In Turkey, macaroni sector behaves competitively and two big companies use the strategy of predatory pricing to increase monopolistic behaviors. These firms nearly have the %40 of the market. High market share brands need more advertising so it leads more budgets. Moreover, competition and clutter provides more advertising. On the other side, macaroni production is standardized in many companies. So macaroni resembles other brands so to differentiate it we need more advertising. As a result advertising costs of macaroni is so expensive for Untas.

Although sales promotions provides short-term incentives, they costs less than advertising that they can be used in macaroni promotion activities in Turkmen Macaroni. Macaroni consumers highly interested in tastes and price of macaroni. So consumer-promotion tool, sample small amount of product to trial can be efficient strategy because it makes consumer aware of the taste of macaroni. On the other side, cents-off deals and price packs tool provide decrease in selling price. Two for in price of one or bundling macaroni with its sauces may increase the consumer preferences. While selling the production in high amounts trade promotion tools can be used. Discounts and allowances paid by manufactures to retailers are both applicable trade tools in macaroni promotions. To motivate salespeople, company may use business tools as well.

Public relations are the less effective promotional tool in macaroni sector. As the macaroni industry competitive and customer's preferences depend on tastes and price you should increase your sales if only if you promote it with high attraction. Public relations tend to be an afterthought and under utilized so they cannot be so applicable to macaroni promotions. Advertising which is very expressive in promotion of macaroni is not so persuasive and can be very costly. Sales promotion leads to strong incentives to purchase foods and invites quick response. Although attention may be attracted easily, the efforts are not effective in long run. To conclude, if Untas solved its financial abilities and finance advertising, it will be best tool in promotion of macaroni. If company wants short-lived efforts and wants promotion expenses to be less costly, sales promotion will be effective tool.

### ***3.7 Implementation, Evaluation & Control***

Untas has machinery with high technology and as a result of this similarity it has no difference with foreign producers in Italy, which is leader of macaroni production. In addition to this it follows the most recent changes and quickly applies to its production.

In order to process as “macaroni with quality” Untas (Turkmen and Pasta Maria) macaroni has to follow improvements in exporting countries, develop production and look for new markets with technical and qualified workers.

## CONCLUSION

### *4.1 Appraisal of Present Conditions*

Although there were 11 factories in activity in year 1991, by the end of 1995 number of factories reached 16 and established capacity become 593.000 Tones/Year.

The ideas behind the expected increase in the macaroni consumption were; by rapid migration from villages to cities people tend to stop producing macaroni at home and start using the macaroni produced by factories, the expectations about the fabricated macaroni reach up to the villages and get the same results in cities. There was a rapid investment process after the investment encouragements. However the established capacity hit 818.000 Tones/Year the increase was much smaller than the expected.

Because of the slow change in nutrition habits when compared to change in migration phenomenon, the result was an excess of capacity.

The sector was operating by 75 % capacity at sixth plan period, but now it has fallen to 50% capacity.

By entering to the years of 2000 established capacity will be 900.000 Tones/Year and if the present conditions continue usage of capacity would be smaller than 50%.

The average demand amount of macaroni for one person was 4.3 kg in 1991, but today it is 5.2kg. Although there was an increase our country still Turkey has lower demand for one person as compared to its neighbors.

The “Gümrük Birliği Anlaşması” which was between Turkey and European Union and in 1.1.1996, competition power in fabricated agriculture products took in to consideration and put in to the adjustment list.

By the establishment of the system, Turkey starts collection of taxes from European Union and European Free Trade Area countries for macaroni importation as an agriculture share by 106.7 ECU/Tones. Although Union accepted 74.6 ECU/Tones in collection of macaroni importation, after the results of Uruguay Round this amount has increased to 360 ECU/Tones.

The sector goes on improving importation per year from 8-10 thousand tones to 20 thousand tones level until the last decision that the union made. From that moment importation stopped.

Several meetings are made to improve the situation between the sides and the collection of taxes equalized mutually and decided to be taken 106.7Ecu per tones. But a quota for price list was decided to be open for 2.5 million ECU per year.

The members of the union were not affected from the decision but because of the small amount of exports made from the union, the sector was affected from the decision.

Except for the one factory all other factories belong to private sector. This one factory's 45% of share belong to the public, and this share was transferred to T.C Başbakanlık Özelleştirme İdaresi for making analysis.

As it discussed in import part, the most important market for imports is Russia.

The global crisis which was in 1998 and mostly affect Russia, declined our exports to Russia .In 1997 89.7% of total exports,122.000 tones macaroni, were goes to Russia, but by the year 1998 exportation to Russia was 78 thousand tones and total exports has declined paralleled to it.

#### ***4.2 Problems of the Sector***

As mentioned before the present factories and new entrants mostly have the machines and the equipments that are produced with a high technology. That's why these establishments operate without the problem of quality of products.

We cannot see the positive situation that we see in production, in inputs.

As we know the origin of the durum wheat is Anatolia. The analysis about sowing for regions in years start with 1970 shows that there exist 50% in Middle Anatolia, 60% in Trakya and Marmara, 70% in Southeast Anatolia and 25% in Akdeniz sowing fields. But nowadays these ratios turn in to lower than 5% in Trakya, Marmara, Ege and Akdeniz, decrease to 15-20 % levels in Middle and Southeast Anatolia.

Durum wheat was 30% of total wheat production in the past, but today it's about 10%. Also the quality of durum wheat is not well as expected.

The reasons of low quality are not doing the reformation of variety of goods that are highly productive, protective for cold and illnesses, not stop producing goods that has no quality, not giving enough importance for seed of wheat and in addition to it producers habit of not changing seedings periodically.

That's why the sector has to import high-qualified durum wheat in order to provide high quality in macaroni.

On the other hand the rivals of the sector in international markets use the advantages of political and economic organizations. According to the "Gümrük Birliği Anlaşması" which was between Turkey and European Union and in 1.1.1996 for macaroni which is a factorized agricultural good,106.7 ECU per ton has been collecting as a tariff and 2.5millions of ECU as a pricing list quota.

As a result of this our export decrease to 2.333 tones in 1996 although it was 7.800 tones in 1992, 7.978 tones in 1993, 10.762 tones in 1994.

However U.S.A was an important market in the sector, it started an inquiry of Antidumping for Turkish and Italian macaroni and in conclusion it started collection of taxes 48,26%-63, and 29% from antidumping and 9, 38%-15, 82% from compensation. According to the collection of these taxes, exports to U.S.A stopped.

But in 1998 and 1999, two productive firms apply to American Trade Ministry and demand not collecting these taxes and after the research the antidumping tax has become 0%. After that some other firms apply too.

Besides to these positive improvements it will take time to get a place and reach the past levels in American market that we lost quickly.

The improvements in U.S.A and European Union showed that Russia and BDT countries are not stable markets and that's why sector started looking for new markets.

Another problem that the sector faced was it finds the input that it used for macaroni exportation from by importing from abroad. At the same time The Ministers Council make a resolution about the firms that exports flour, macaroni, semolina, boiled and pounded wheat and biscuit. According to the decision (98/11033) that is made in 1998 Toprak Mahsulleri Ofisi was charged to make wheat sale which was planned by them by Tarım ve Köyişleri Bakanlığı.

This improvement, which will increase levels of exports, could become real after several meetings done by the sector.

This policy stopped by the end of June 1999 and at the same time Support of Cereal Grains Agreement was cancelled. By that way sector could not export macaroni from domestic market that has prices above the world price levels.

On the other hand TMO exports the stock at world prices that it owns in order to pay some part of the wheat that it bought from producers. So several firms at appropriate price levels that were exporting macaroni buy the wheat and have advantages upon Turkish Macaroni Sector.

After the negotiations first to doing the exportation and then at the world price level, giving wheat from TMO stocks decided by The Ministers Council Agreement in 30.12.1999.

As it mentioned before the sector has much of the idle capacity. The established capacity which was 593.000 tones in 1995, increased by 38% and reached 818.000 tones. It is expected it will be around 900.000 tones by the beginning of these years.

By given investment encouragements the established capacity grew but as a result of low demand usage of capacity is below 50%. This brought the competition that damages the sector.

#### ***4.3 Expected Improvements in Technology***

Turkish producers have machinery with high technology and as a result of this similarity it has no difference with Italy, which is leader of macaroni production. In addition to this it follows the most recent changes and quickly applies to production.

In order to process as a “macaroni with quality” Turkish macaroni has to follow improvements in exporting countries, develop production and look for new markets with technical and qualified workers.

#### ***4.4 Strategic Decision of Sector, Implementation, Evaluation and Control***

It is planned to reach per one person levels of macaroni consumption in 2005 at 8.5kg and in 2023 15kg with the help of advertisements. So that domestic demand will be around 1.5 million tones in 2023.

At the same time being completely a member of European Union will increase exportation of macaroni to members that has an important place in world macaroni trading.

The plans about making export to South Asia and Asia-Pacific countries that have high population, increase levels of production at an increasing rate year by year and at the end Turkey could be a serious rival of Italy.

In long term it's expected that American market will be one of the competitors of the market.

As it mentioned above it is expected that exports will reach 500-700 thousands of tones and by the year 2023 total production will be more than 2 million tones.

By the beginning of 2000 established capacity is around 900.000 tones and investment encouragements 1.100.000 tones. According to the data it is expected that the established capacity will be 2.000.000 tones. With that capacity the sector can operate and supply the demand without any investment until 2023.

#### ***4.5 The Policy which must be Followed in Long and Short Term***

a-The durum wheat produced in our country is at the medium and below the medium level, so in order to keep the share in macaroni market it has to import durum wheat which has quality.



To prevent the situation that mentioned before and supports the farmers we should give importance to reformation of variety of goods that are highly productive, protective for cold and illnesses, stop producing goods that has no quality.

Usage of seed that has quality affects production of wheat like manure. But in Turkey producers do not change the seeding periodically and do not use certificated seeding. That's why the importance to research foundations to develop production techniques must give and the establishments which produce seeding with quality must supported. Also farmers should be educated and these seedings must be distributed.

A commission, which will take form by the join of TMO, productive establishments, research institutions and sector representations, must decide the delivery and variety of products together.

The Support of Agreement System must be revisited and the must changed and like the examples in west cereal grains stock exchange must operate in a healthy way.

In order to supply the domestic demand of durum wheat, we have to support its production as compared to wheat for bread.

b- In problems of the sector part the 98/11033 Ministers Council Decision was stated. According to this decision to the exporters whom have domestic management license, TMO would give wheat at world prices.

This policy stopped in June 1999 and Support of Cereal Grains Agreement cancelled the present application. After that event the meetings started again and Ministers Council Decision in 30.12.1999 accepted and published in Official Newspaper and as a result applications started again.

It could not be possible to buy wheat and export macaroni because of the high domestic prices in that six months period.

This application should be a continuous government policy .If it is not the markets that gained for a long period of time and great struggle would lose.

It is not possible to appraise the demands because it is not known that how long does the application will be used. As we see the second half of the 1999 was a problem for the sector.

c-The sector is still working and makes negotiations about canceling and making the tariff and the pricing list quota cancelled.

d-Although the two firm's application to American Trade Ministry accepted it is obvious that still the taxes for compensation collecting at 3.87%-15.82% rates. To stop this the government should apply to U.S.A.

e-Turkey should make the aids not as money ,it should make as a food .Also the importation about electricity, natural gas must be done in terms of trading goods.

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