### STRUCTURAL ANALYSIS OF THE TURKISH AUTOMOBILE INDUSTRY

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### ÖZET

Türk otomobil endüstrisi 1980'li yıllardan itibaren ekonomideki liberalizasyon çabalarına parelel olarak artan rekabeti yakalayabilme yolunda büyük bir yapılanma sürecine girmiştir. Çalışma, Porter'in Five Forces modelinden yararlanarak Türk otomobil sektörünün rekabet yapısını ve sektörün mevcut potansiyelini analiz etmektedir. Endüstri içi rekabet ve potansiyel yeni firma girişleri Türk otomobil sektörünün rekabet düzeyini belirlemede en önemli faktörlerini oluşturmaktadır. Bunun yanında ölçek ekonomileri, marka bağlılığı, dağıtım kanallarına ulaşabilme ve büyük çapta sermaye ihtiyacı, Türk otomobil piyasasına girişte en önemli engelleri teşkil etmektedir. Endüstrinin sahip olduğu yüksek büyüme hızı, duyurulması pazar potansiyeli,çevre ülke pazarlarına giriş imkanlari ve Türk hükümetinin otomobil firmalarına sağlamış olduğu teşvikler özellikle yabancı otomobil üreticilerini Türk pazarına girme yolunda cesaretlendiren unsurlar olmaktadır.

#### 1. Introduction

The profitability of a firm is the outcome of two faktors: the profitability of the industry in which is located, and the firm's ability to establish a competitive advantage over its rivals. The choice of the industry or industries in which the firm competes (which business should be in?) is the concern of corporate stragety. The establishment of advantage within particular industry (how should we compete?) is the concern of business stragety (Grant, 1992). In both of these areas of stragety formulation, the analysis of the firm's industry environment plays a central role.

Corparate stragety is concerned with deciding which industries the firm should be engaged in, and the allocation of corporate resources between them. To make such decisions, it is vital that the firm can evaluate the attractiveness of different industries in terms of their likely future profitability.

The primary objective of this study is to analyse the determinants of industry profitability. Once the determinants of industry profitability are understood, it will then be possible to forecast the future profitability of an industry, which is in our case the automobile industry in Turkey. In other words, our analysis concentrates upon the role of industry structure in determining competition within the industry, which in turn determines the level of profitability.

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Understanding the links between industry structure, competitive behaviour, and profitability is critical to the formulation of business strategy. First, understanding the determinants of industry profitability can inticate how strategy can be used to change industry structure in order to improve the balance of competitive forces and improve the industry's profit prospects. Secondly, by understanding the determinants of competition in an industry and the characteristics of customers' demand, we can identify the basis upon which competitive advantage can be established in an industry.

Our analysis of competitive advantage will be limited here to the discussion of key success factors- the prerequisites for survival and success within an industry.

## 2. From Environmental Analysis to Industry Analysis.

The feature of this paper is that it confines consideration of the firm's environment to its industry environment, since the firm comprises all the external influences which impinge upon the firm's behavior and performance.

The prereguisite for effective environmental analysis, however, is to distinguish the vital from the merely important. From the point of view of the firm, core of its environment is its network of business relationships. These relationships comprise transactions with suppliers and customers, and competitive interactions with rival producers. Hence, the core of the firm's environment is formed by competitors, suppliers, and customers. This arena is the firm's industry environment. However, it doesn't mean that macro level factors such as general economic trends, political and legal factors, changes in demographic character of the country and so forth, are unimportant to stragety analysis. These factors may be critical determinants of the threats and opportunities a company will face in the future. They affect the firm through their impact upon the demand for the firm's products, upon its costs, and upon its competitive position relative to it rivals (Wright, Pringle and kroll, 1992). By focusing on the industry environment we can determine which of the general environmental influences are important for the firm and which are not.

# 3. The Analysis of competition in an Industry

Although detailed competitive conduct or behaviour depends upon the motivations and decisions of individual firms, the general pattern of behaviour will be strongly influenced by the environments in which firms operate. It is usually appropriate for analysis to concentrate on the environment for a group of firms which can be classified to a single industry. Business behavior is then related to the structure of the relevant industry (Shaw and Sutton, 1976)

The basic premise of industry analysis is that the level of industry profitability is determined by the characteristics of industry structure. However, in identifying this structure textbook models do not sufficiently provide a comprehensive mechanism to analyse the industry environment. The economic models of perfect competition, monopoly and oligopoly are rigorously defined models of market structure, whose fundamental purpose is to provide a basis for making predictions about the behaviour and performance of firms. Each model is based upon a series of assumptions about industry structure (Davies, 1993), which include:

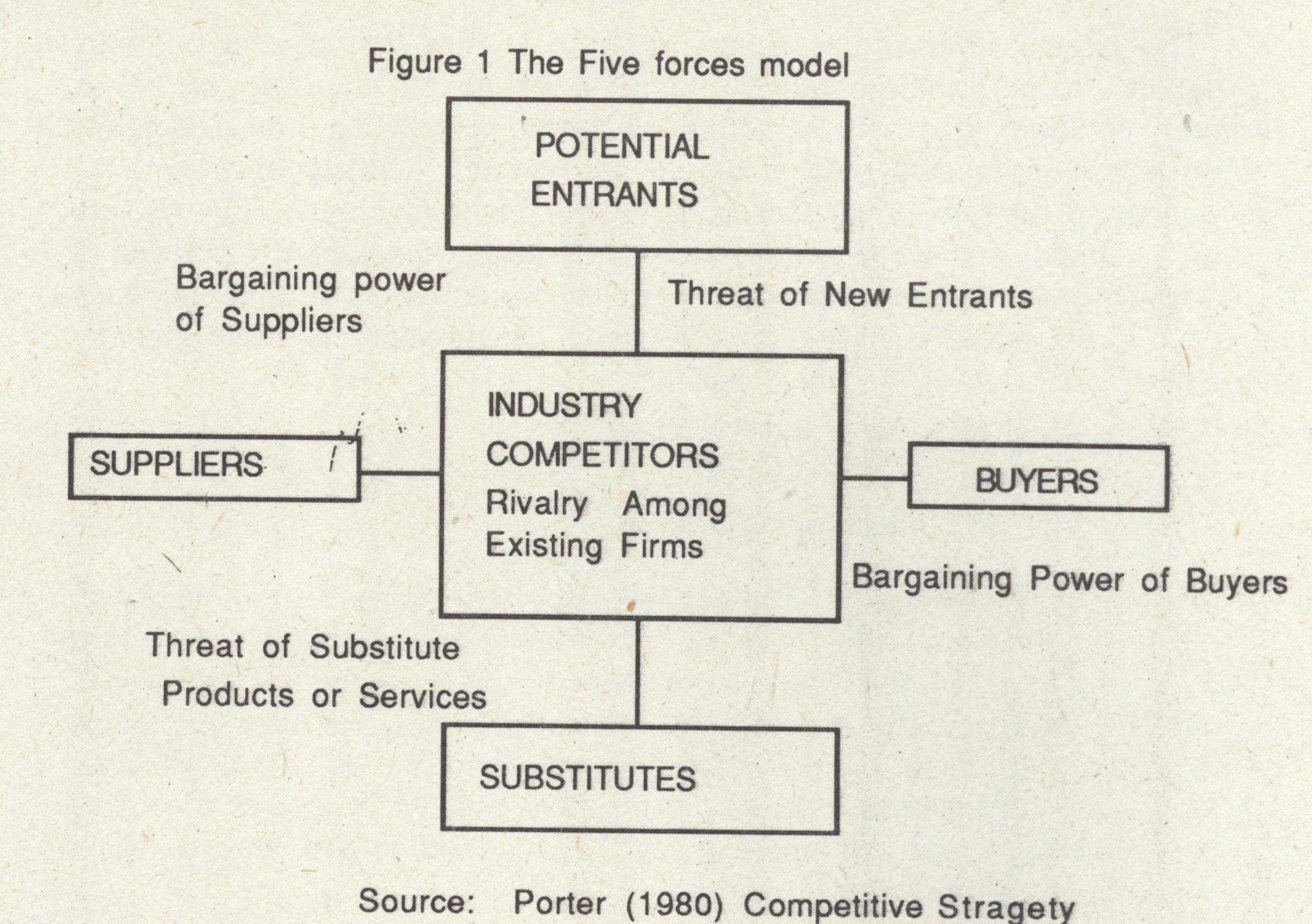
- -the number of firms in the industry
- -the condition of entry
- -the extent of product differentiation.

However, there are a number of important gaps in the textbook analysis. For instance, they pay no attention to the possibility of market power on the part of the firm's customers or their suppliers, which are important features in many industry. Moreover, they pay no attention to the factors which determine the key dimensions of market structure (Davies, 1993) Rivalry, for instance, exists in oligopoly but not in any of the other market structures, and the models pay no attention to the factors which determine the intensity of that rivalry.

In order to fill tese gaps left by the textbook analyses of market structure, corporate strategists have developed more through approaches to the characterisation of market structures, which recognise many more types of structure than the four considered in many industrial or microeconomics textbook.

#### 4. The Five Forces Model

A particularly useful framework for diagnosing competition in an industry is that developed by Michael E. Porter of Harvard Universty. Porter (1980) contends that an industry's profit potential (i.e., the long-run return on invested capital) depends on five basic competitive forces within the industry. These five forces approach can be depicted in Figure 1 as:



These five forces can be summarised as:

- 1. The threat of new competitors entering the industry,
- 2. The intensty of rivalry among existing competitors
- 3. The threat of substitute products or services,
- 4. The bargaining power of buyers,
- 5. The bargaining power of suppliers.

Each of the five forces' is in turn determined by a number of different factors, which need to be considered to analyse the overall intensity of competition within an individual industry.

Porter's 'five forces' analysis, illustrated in the diagram, differs from the economic approach which was mentioned earlier in a number of ways.

In the first place, the objective of the analysis is guite different. Instead of aiming to make predictions on the basis of highly simplified 'ideal types' of market structure, the five- forces analysis aims to provide one

with a means of systematically describing the nature of competition in the complex situations faced by real firms.

Havig examined the factors determining the five forces they can each be summarised in a qualitative fashion in order to characterise the major features of competition in the industry in question. No attempt is made to identify the equilibrium position towards which an industry will tend and and result of the analysis is not a detailed description of its performance but a much more general categorisation of its structure as either 'attractive' or 'unattractive' to its incumbents.

Although Porter's framework is much more complete than the other economic models, it is also much less rigorous because it does not provide absolutely precise predictions with regard to the outgome of those structures. But despite its lack of rigor, the model provides predictions for every type of industry and gives managers or those interested ones a complete checklist which they can use to identify the most salient features of competition in their industry

In order to illustrate the application of the model to the automobile industry in Turkey, it would be more appropriate first to describe the variables building up the each competitive force, since the same structure will be more or less pursued in the structural analysis of the industry.

## 4.1 Threat of Entry

As new competitors enter an industry, the industry's productive capacity expands. Unless the market is growing rapidly, a new entry insentifies the fight for market share, thereby bidding prices down and lowering industry profitability. The principal sources of barriers to entry are briefly outlined below:

#### Economies of Scale:

Economies of scale refer to the decline in unit costs of a product or service that occurs as the absolute volume of production per period of time increases. Substantial economies of scale deter new entrants by forcing them either to come in at large scale, thereby risking a strong reaction from existing firms, or to come in at a small scale, with its accompanying cost disadvantages.

#### Product Differentiation

Established firms may enjoy strong brand identification and customer loyalties that are based on actual or perceived product differences, customer service, or advertising. New entrants must spend agreat deal of money and

time to overcome this barrier.

#### Capital Reguirements

The need to invest large financial resources to compete creates a third type of entry barrier. Large amounts of capital may be necessary for production facility construction, research and development, advertising and inventories.

## Switching , Costs

Switching costs refer to the one- time costs that buyers of the industry's outputs incur if they switch from one company's products to another. Changing from an established supplier to a new supplier may require the buyer to retrain employees, purchase new ancillary equimpment, and/or hire technical help. Most customers are reluctant to switch unless the new supplier offers a major improvement in cost or performance.

### Access to Distribution Channels

To enter the distribution channels already being used by established firms, a new firm must often entice distibutors through price breaks, cooperative advertising allowances, or sales promotions. Each of these, of course, reduces profits. Existing competitors often have distribution channel ties based on long- standing, or even exclusive, relationships, meaning that the new entrant must create a new channel of distribution.

#### Cost Disadvantages independent of Scale

Established firms may possess cost advantages that cannot be reblicated by new entrants regardless of their size or economies of their size or economies of scale. These advantages include proprietary. Product technology, favourable access to raw materials, favourable locations, and the learning or experience curve.

### Government Policy

Governments can control entry to certain industries with licensing reguirements or other regulations.

#### Expected Retaliation

Entry may well be deterred if the potential entering firm expects existing competitors to respond forcefully. These expectations are reasonable if the industry has a history of vigorous retaliation to new entrants or if the industry is growing slowly. Retaliation may also be expected if the

established firms are committed to the industry and have specialised fixed assets that are not transferable to other industries, or if the firms have sufficient cash and productive capacity to meet customer needs in the future.

## 4.2 The Intensity of Rivalry Among Existing Competitors

Competition intensifies when one or more of the firm in an industry sees the opportunity to improve its position or feels competitive pressure from others. It manifests itself in the form of price cutting, advertising, battles, new-product introductions or modifications, and increased customer service or warranties. The intensity of competition, as identified by Porter (1980) depends on a number of interacting factors.

## Numerous or Egually Balanced Competitors

One factor is how many companies are in the industry and how egually balanced they are in terms of size and power. Industries that are dominated by one or a few firms are less competitive, because the dominant firm often acts as the price leader. But industries that contain only a few firms that are roughly eguivalent in size and power are more likely to be highly competitive, since each firm will fight for dominance. Competition is also likely to be intense in industries with large number of firms, since some of those companies believe that they can make competitive moves without being noticed.

### Slow Industry Growth

Firms in industries that grow slowly are more likely to be highly competitive than companies in fast-growing industries. In slow-growth industries, one firm's increase in market share must come at the expense of other firms' shares.

### High Fixed or Storage Costs

Companies with high fixed costs are under pressure to operate at near-capacity levels to spread their overhead expenses over more units of production. This pressure often leads to price cutting, thereby intensifying competition.

# Lack of Differentiation or Switching Costs

When products are differentiadet, competition is less intense because buyers have preferences and loyalties to particular sellers. Switching costs have the same effect. But when products or services are less differentiated, purchase decisions are based on price and service considerations, resulting in greater competition.

## Diverse competitors

Companiers that are diverse in their origins, cultures, and strategies will often have differing goals and differing ways of competing. These differences mean that competitors will have a difficult time agreeing on a set of rules for the game. Industries with foreign competitors and industries with entrepreneurial owner- operators may, therefore, be particularly competitive.

# High Strategic Stakes

Rivalry will be guite volatile if firms have high stakes in achieving success in a particular industry.

### High Exit Barriers

Exit barriers can be economic, strategic, or emotional factors that keep companies from leaving an industry even though they are earning a low-or possibly negative- return on their investment. Examples of exit barrierss are fixed assets that have no alternative uses, labour agreements, strategic interrelationships between that business unit and other business units within the same company, management's unwillingness to leave an industry because of pride, and governmental pressure to continue operations to avoid adverse economic effects in a geographic region.

# 4.3 Threat of Substitute Product

Firms in one industry may be competing with firms in other industries that produce substitute products, which are alternative products that satisfy similar consumer needs but differ in specific characteristics. Substitutes place a ceiling on the prices that firms can charge.

# 4.4 Bargaining Power of Buyers

The buyers of an industry's outputs can lower that industry's profitability by bargaining for higher guality or more services and playing one firm against another. Buyers are powerful under the following circumstances.

- Buyers are concentrated or purchase large volumes relative to total industry sales. If a few buyers purchase a substantial proportion of an industry's sales, then they will wield considerable power over prices.
- The products that the buyers purchase represent a significant percentage of the buyers' costs. If the products account for a large portion of the buyers' costs, then price is an important issue for the buyers.

- The products that the buyers purchase are standart or undifferentiated. In such cases, buyers are prone to play one seller against another.
- The buyers face few switching costs. Switching costs, of course, lock buyers to particular sellers.
- The buyers earn low profits. Low profits create pressure for the buyers to reduce their purchasing costs.
- Buyers can engage in backward integration (i.e., become their own suppliers)
- The industry's product is relatively unimportant to the guality of the buyers' products or services. When the guality of the buyers' products is greatly affected by what they purchase from the industry, the buyers are less likely to have significant power over the suppliers.
- The buyer has full information. The more information the buyer has regarding demand, actual market prices, and supplier costs, the greater the bargaining power of the buyer is.

### 4.5 Bargaining Power of Suppliers

Supliers can squeeze the profitability of an industry that is unable to recover cost increases in its own prices. The contitions that make suppliers powerful basically mirror those that make buyers powerful. Hence, suppliers are powerful under the following circumstances:

- -The supplying industry is dominated by a few companies and is more concentrated than the industry to which it sells
  - There are no substitute products.
  - The buying industry is not an important customer of the suppliers.
  - The suppliers' product is an important input of the buyers' business
- The suppliers' products are differentiated or they've built- in switching costs.
- The suppliers pose a credible threat of forward integration (i.e., can become their own customers.)
  - 5. The Application of the Model to Turkish Automobile Industry

# 5.1 The Industry Compertitors

In Turkey, cars are produced by a concentrated oligopoly in which over 78.77 per cent of domestic production in 1993 was accounted for by

four firms (OSD, 1993). These firms are, namely Tofas, Oyak-Renault, General Motors Turkiye, and Otosan. Before explaining the details of the determinants of the rivalry among existing competitors, we had better give some information about each auto manufacturer and also brief explanation can be seen in table1.

#### Tofas

The leading passenger car manufacturer is Tofas Turk Otomobil Fabrikalari AS, which began to assemble Fiat models in 1971. The company, in which Fiat has a 41.5 per cent stake (the major Turkish Koç group is majority shareholder) produces the Sahin, Kartal, Dogan, Serce and tempra model ranges at its Bursa plant. Total production capacity in 1992 was 120,000 units per annum.

## Oyak - Renault

Second passenger car producer is Oyak-Renault Otomobil Fabrikaları AS, in which the French company has a 44 per cent shareholding. Production commenced in 1971 at the company's Bursa plant, which manufactures the R9, 11 and 21 model groups. Annual production capacity in early 1992 was 100,000 units, which could conceivably be increased in the near future.

## General Motors Turkiye

Third manufacturer is General Motors Turkiye Ltd Sti, which began to produce passenger cars in 1990 at its Torbali/ Izmir plant. The company is so far unique in the Turkish automobile sector in that it is wholly owned by a foreign multinational. The plant has an initial (1992) capacitiy of just 10,000 units per annum although this is likely to be incerased in the future - output in 1992 was only a little below capacity. The plant assembles the Opel Vectra model range. The company is Turkey's leading vehicle exporter.

# Otosan Otomobil Sanayi

Fouth passenger car producer is Otosan Otomobil Sanayi AS, which has suffered a sharp decline in output in recent years. The company assembles Ford passenger cars (aswell as pick- ups, trucks and minibuses) at its two plants in Istanbul (where production began in 1968) and Inonu /Eskisehir-which came on stream in 1983. Otosan is 30 per cent owned by Ford and 70 per cent by the Koc group and has an annual capacity of 30,000 cars.

Table 1 General Information About Automotive Manufactures

FIRMS	PLACE OF PLANT MANUFACTURER	START YEAR OF PRODUC TION			FOREGN CAPITAL (%)	OOVERED AREA (M2)	TOTAL AREA (M2)
G. MOTORS	TORBALI/IZMIR	1990	GM OPEL	18,000,000	100	15.949	73, 066
OTOSAN	ISTANBUL INONU/ ESKISEHIR	1959	PORO	110,000,000	30		182,146
OYAK RENAULT	BURSA	1971	RENAULT	305,000,000	57	140.888	325,000
TOFAS	BURSA	1971	FIAT	600,000,000	41.5	273.687	956,245

Source: OSD (Automotive Manufacturers Association) 1993

The two largest companies as sees from Table 2, Tofas and Oyak Renault together enjoyed a market share of 75.53 per cent in 1993. The production of passenger cars by manifacturer is presented in Table 3. Total car sales in 1993 were 441,829, a 40 per cent increase over 1992 with demand fuelled by Turkey's high growth rates, the availability of credit and urbanisation (Turkish Daily News, 20 April 1994). In addition, the number of cars per 1,000 people stands at 34, one tenth of the average in Western Europe (DPT, 1993), highlighting the potential for sales growth.

Despite a few number of manufacturers in the industry which normally makes the competition intense, the existing rivalry may be considered to be relatively less intense due to high industry growth rate. Because the motor industry has been Turkey's fastest growing manufacturing industry with an average annual growth rate of 12.5 per cent.betveen 1987 and 1992. In terms of production, it ranks third after food processing and textiles and provides employment for more than 0.5m people.

#### Structural Analysis

Table 2. Market Shares of the Automobile Manufacturers and Importers(%)

YEAR	TOFAS FIAT	OYAK RENAULT	OTOSAN FORD	GENERAL MOTORS	IMPORT
1989	48.13	41.27	4.80	0.58 2.85 2.95 2.73	5.70 28.00 14.68 16.44
1990 3	38.12	30.00	3.32		
1991	46.84				
, , , , ,	44.81	34.86	0.94		
	45.43	30.10	0.51		21.23

Source: OSD, 1994

Table 3. Production of passenger Cars inTurkeybyManufacturer, 1987-1993

	Production (units)							
	1987	1988	1989	1990	1991	1992	1993	
			60,393					
Oyak- Renault	43,057	49,188	51,781	69,851	78,994	110,659	133,006	
General				1,156	6,528	9,363	12,093	
Otosan	10,332	11,592	6,140	7,737	2,671	2,980	2,256	
Total	107,185	120,796	118,314	167,556	195,574	265,245	348,095	

Source: OSD, 1994

### 5.2 Threat of Entry

Recent trendes towards achieving the global integration of the auto industry and making it competitive since 1984 and particulary when the government offered an incentive package to automobile industry in April 1990, Toyota entered into a joint venture with the major Turkish Sabanci Group. This venture involved the construction of a plant at Adapazari to produce the Corolla small family car. The Turkish company is owned by 40 per cent by Toyota, 10 per cent by Mitsui, the Japanese trading house, and 50 per

cent by Sabanci, Turkey's second largest industrial group. Toyota's production is planned to have an eventual capacitiy of producing 100,000 cars a year (Financial Times, 6 June 1994). The French PSA group, which has licensed the Karsan group to produce minibuses, has also signalled its intent to develop a strong presence in passenger car manufacturing in Turkey. The group is hoping to construct a major plant to manufacture up to 100,000Peugoet and Citroen cars. Besides, Honda and Hyundai obtained government approval for two new car plants under 50 per cent joint ventures with local concerns while Nissan could establish such an operation in due course (Financial Times, 15 April 1994)

Germany's Volkswagen could be the only leading passenger car manufacturer without an operating base in Turkey, a situation which the company could conceivably seek to remedy in the long term although its effots are currently concentrated in Spain, the Czech and Slovak Republics, Mexico, China and elsewhere, and it has internal problems to resolve. Given the group's will to cut its production costs, and its strategy of boosting non-German vehicle output, the low-cost attractions of Turkey could prove irresistible at some stage in the future (Way and Schulte, 1993)

Imports of automobiles to Turkey rose dramatically during 1990 as a result of liberalisation of import regulations and tariff reductions. Such a rapid increase in imports has led the domestic assembly industry to press for the introduction of import guotas along the lines of those imposed on Japanese automobile imports to the EU.Import fell back during 1991 to less than 34,000 units, which corresponded to 14 per cent of the domestic automobile market. However, in 1993, the imports of automobiles almost reached to the level of 90,000 that approximately comprised of 21 per cent of the total market share of automobiles (OSD, 1994). moreover, some multinational companies are showing increased interest in the Turkish market: Honda for instance, in early 1993 announced that it was to form a joint venture with Anadolu Endustri Holding AS in order to establish the first exclusive Honda import distribution in Turkey, Anadolu-Honda Otomobilcilik AS (Dunya Ekonomi-Politika, 8 Mayıs 1993).

As such new competitors enter the automobile industry, industry's productive capacity expands. However, although the market is growing rapidly, much more increase in the number of potential entrants entering the market via forming joint ventures either to manufactures cars or to import automobiles will obviously intensify the competiton for the market share.

Significant scale economies in the automobile industry act as a major barrier to entry and limit the number of domestic and foreign producers. Domestic auto manufacturers in Turkey produced for many years at a small scale, which was even less than 100,000 units per annum. This could be

largely explained by the fact that domestic firms, since the establishment of the industry, have benefited from the high level of protection under the import substitution in histrialisation model. Due to this fact, they did not take the necessary measures to reach a reguired level of scare in order to lower the production costs for automobiles. To explain the situation they occasionally stated the reason of low level of demand in the market. However, since 1990 domestic producers have begun to produce at a much higher scale to be able to compete with much lower prices of the new entrants to the industry.

Another factors hat may act as barriers for the new entrants to the industry are huge capital requirements and after sale customer services since the existing automobile manufacturers have already established a strong brand loyalty and a well-operating system of customer service. In addition, the entrants which think of doing business via forming a joint venture with a domestic firm should meticulously consider the features of potential local partners

Finally, access to distribution channels will obviously create an obstacle for the entrants as existing competitors have distribution channel ties based on contractual arrangements. In the automobile distribution system in Turkey, dealers are tied by contracts which reguired them to trade exclusively with one manufacturer in a specified location, they are all allocated a fixed sales quota and reguired to carry stock (Unusan, 1992).

# 5.3 Bargaining Power of Suppliers

In the past, cooperation between the assemblers and suppliers was the result of the fact that during the ISIM period the assemblers were obliged to organise and help suppliers to meet the reguired local content levels. High protection levels increased the bargaining power of the supplier industries over price and guality. Recently, the relationship has changed in favour of assemblers as the suppliers have been exposed to international competition since 1986. The assemblers are still effective in organising the local suppliers but the new trend is to encourage them to form partnership with the principal companies' international suppliers and to integrate them to their regional production and distribution networks (Nedimoglu, 1993; Gules, Burgess and Lynch, 1995).

The existing geographical location of the industry in Turkey is highly concentrated and facilitates the employment of JIT among existing plants. While initially the adoption of JIT delivery system was largely born out of necessity due to increasing production levels and high financing costs during the 1980s, it is now being demanded and organised by the new assemblers and component producers supplying regional plants. This trend further encourages the spatial concentration of the industry within the country. However, the

regional distances do not seem to restrict the implementation of JIT as proved by the case of GM shipping component parts for the assembly in Turkey and parts and components to Germany.

Even though the existing auto manufacturers in Turkey are dealing with several hundred component manufacturers, they prefer to maintain their vertically integrated structure. As declared by Mr Jan Nahum, general manager of Tfas, that high investment, for example for the engine production, and dependency problems on single sourcing have led them to this structure (Dunya Ekonomi-Politika, 16 Haziran 1992).

### 5.4 Bargaining Power of Buyers

New cars are distributed and sold in Turkey, mainly through networks of dealers. There are two main types of dealers in Turkey, main dealers (Unusan, 1992). The former have full service facilities and are located in all major cities in Turkey. The latter, retail dealers, are appointed and responsible to the main dealers and they only sell automobiles in their locations.

Besides this, automobile manufacturers also use corporate outlets and these outlets are strategically positioned in the biggest five cities of Turkey, each having a population in excess of one million. The main reason for using such corporate outlets is, as argued by Unusan (1992), that automobile manufacturers want to preserve their control on the marketing chain for the places where the population of potential consumers is high. This type of forward integration obviously lessens the actual power of dealers.

Particularly, two main automobile producers, Tofas-Fiat and Oyak-Renault (comprising of 75 per cent of market share in 1993) have a well organised proper functioning dealer network in the country. For instance, Oyak-Renault is tied with 182 main dealers and 88 retail dealers. Similarly, Tofas-Fiat is tied with 98 main dealers and 142 retail dealers. Moreover, both of these companies have company outlets in the five major cities namely Ankara, Istanbul, Izmir, Bursa, Adana.

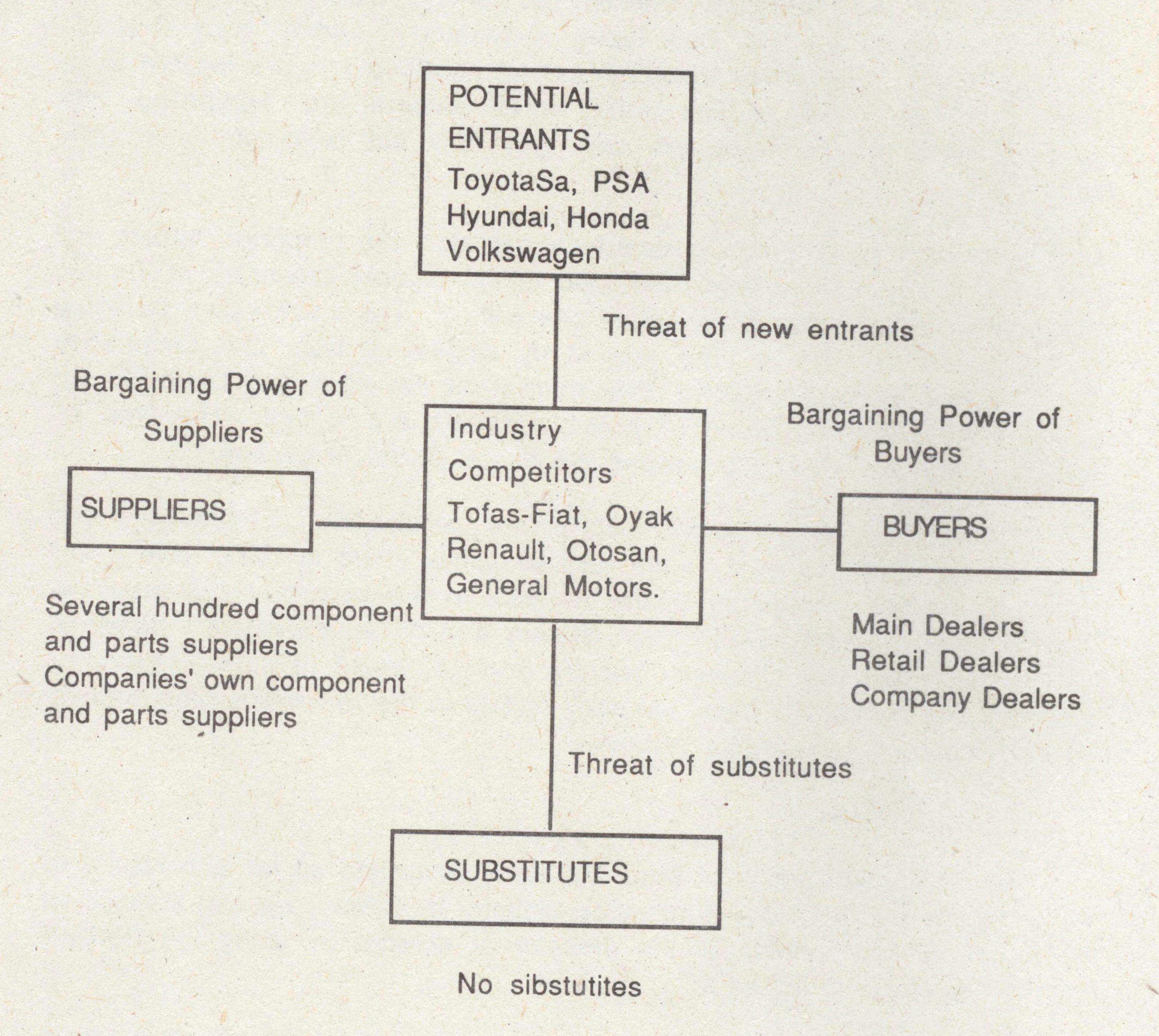
#### 6. Conclusion

When we take stock of what has been discussed so far with regard to the structural profile of the automobile industry in Turkey, we can summarise the structural components of the industry at present by using the Porter's Five Forces Model in Figure 2.

The structure of the industry is characterised much by oligopoly where the concentration ratio is high that the major two firms account for almost 75 per cent of the total market share. However, after the deregulation of the

sector in 1980s the pace of competition has been rapidly accelerating. When viewed from the Porter's Five Forces framework it can be easly observed that the main competitive forces affecting the industry are the rivalry among existing competitors and thread of entry. Substantial economies of scale, brand loyalty, access to distribution channels, high capital reguirements are some of the factors that are likely to act as barriers to entry to the auto market in Turkey. However, high industry growth rate, unsaturated market potential to access to other countries of the region and the government incentives offered to potential entrants are also some factors that may encourage companies which intend to do busineess in the automobile sector either by forming a joint venture or by a full ownership.

Figure 2 The Five Forces Model Applied to Automobile Industry in Turkey



#### SUMMARY

Since the beginning of 1980s Turkish automobile industry has been experiecing a major deregulation concurrent with the attempts to liberalise the Turkish economy. This paper attempts to provide a structural profile of the Turkish automobile industry within the context of Porter's Five Forces Model. When viewed from this framework, the main competitive forces affecting the Turkish automobile industry are the rivalry among existing competitors and threat of new entrants. Substantial economies of scale, brand loyalty, access to distribution channels, huge capital requirements are some of the barriers to entry to the auto market in Turkey. However, high industry growth rate, unsaturated market potential, access to encourage foreign firms in the automobile sector either in the form of partial or sole ownership.

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