A strategic shift of automobile manufacturing firms in Turkey

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Abstract: This paper examines major business environmental changes influencing a strategic shift of automobile manufacturing firms in Turkey. Within a conceptual model consisting of environmental forces, strategic shift, and mediating variables, including firm size, ownership pattern, and market entry mode, it empirically investigates how such market changes influenced the business strategies of automotive firms in Turkey. The findings indicate that the multinational automotive firms in Turkey have shifted their strategic focus from relying solely on the domestic market to balancing domestic and export markets because of environmental forces. The paper concludes with discussions and suggestions for further research on the subject.

Keywords: market environment; strategic shift; FDI; foreign direct investment; export performance; multinational corporations.

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1 Introduction

The success of firms depends heavily upon their responsiveness to the changes in their environments. As a result, firms often strive to adapt to changes in the external environment to gain and sustain their competitive advantages. Consequently, successful firms endlessly monitor and forecast changes that take place in their marketplaces. Since market conditions constantly change because of economic, political, technological, and socio-cultural forces, firms need to follow and timely respond to such changes. Particularly, those firms that operate in fast-cycle and global industries face even more challenges to make the necessary adaptations in their operations and strategies. Likewise, Multinational Companies (MNCs) with investments in developing economies face a daunting task of making continuous adjustments to volatile conditions in host countries. Although MNCs, with their global networks and resources, are in a better position than non-multinational firms in handling market inefficiencies in a single country, they still need to improve their performance in each market. To this end, MNCs in emerging markets, because of expected or unexpected changes in the host country markets, have to make strategic switches to sustain or improve their performances. Therefore, it is important to study the factors contributing to such market changes and their impact on MNCs and study, in turn, how these companies respond to host country market environments.

This paper will study the Foreign Direct Investments (FDI) in the Turkish automotive industry and relate such investments to strategic changes of the automotive companies in Turkey by examining the influence of environmental changes on strategic shifts at these companies. In doing so, it will consider such mediating variables as ownership patterns, market entry modes, and company size affecting the strategic shifts from purely domestic market orientation to a mix of domestic and export orientation. The paper is organised as follows. First, it will present FDI in Turkey and FDI in the automotive industry in particular as a market entry strategy. Second, it will introduce theoretical foundations on relating FDI to strategic changes at the automotive firms. Third, it will develop a conceptual model and hypotheses for testing. Fourth, it will demonstrate a strategic shift from only domestic market orientation to both domestic and export market orientation as business strategies of automobile manufacturing firms in Turkey by providing empirical findings on the export performance of the automotive firms in response to the local market transformations. Finally, it will conclude with remarks reflecting the relationship between market changes and strategic shifts at the automotive firms in Turkey.

2 FDI in the Turkish automotive industry

The Turkish automotive sector emerged in the late 1950s mainly for import substitution purposes. Since there was no domestic manufacturer, it all started with FDI by major automotive MNCs. The first productions included tractors and commercial transportation vehicles. In the 1970s, passenger cars were introduced into the market. At that time, the overall competitiveness of the newly born industry in Turkey was low compared to its counterparts in the global markets. After the liberalisation acts in the 1980s, the automotive industry enhanced its competitive standing because of the governmental incentives which supported export-oriented strategies, and by introducing new products. Even though these were noteworthy developments, they were not enough to make the

industry competitive enough to face the challenges of global competition. The most profound changes in the industry firms took place in the 1990s when Turkey decided to join to the Customs Union (CU) of the European Union (EU). At that time, Turkish automotive firms were under pressure to deal with the major threat from the EU automotive firms. This pressure triggered the revitalisation of the automotive industry. The automotive firms invested in new projects to expand their production capacities and technical capabilities, mainly by attracting more FDI. From 1954 to 2002, Turkey received $16.3 billion of cumulative FDI.[1] It witnessed a major increase in FDI, especially after the 1980s' economic liberalisation. Continually, it received around one billion dollars FDI per annum in the last decade. Among western Asia nations, Turkey has received the second largest FDI ($9.7 billion) after the United Arab Emirates via a few mega cross-border merger and acquisitions in 2005. However, Turkey is categorised among countries with low FDI performances and those that attract FDI below potential (WIR, 2006). Although FDI in Turkey encompasses a variety of industries, they are mostly concentrated in trade, tourism, textile, petroleum and chemical products, transportation, construction, and auto manufacturing. The automotive industry attracted most of the FDI because of Turkey's emerging market for motor vehicles. The FDI into the automotive industry has taken the form of either Wholly Owned Subsidiaries (WOS) or Joint Ventures (JV) (Culpan, 2002). The latter has been a common form of entry into the Turkish automotive market. MAN, Honda, and Toyota (originally started as a joint venture with a local company) preferred WOS, while a majority of foreign companies (Fiat, Iveco, Ford, Renault, Daimler Chrysler, Isuzu, Hyundai, CNH, and Massey-Ferguson Perkins) engaged in joint ventures. As a result of these investments, the Turkish automotive industry has accomplished its turnaround by increasing its capacity to one million vehicles, which comprises 70% passenger cars and 30% commercial vehicles (Geckil, 2004), by introducing new high quality models with modern designs and by diversifying its market penetration.

3 Theoretical bases of the study

The present study is based primarily on two streams of thoughts in the business literature. The first refers to FDIs, which have been studied extensively by numerous researchers with different theoretical lenses (Buckley and Casson, 1976; Caves, 1971; Dunning, 1980, 1993; Hennart, 1982; Vernon, 1966). While Caves (1971) and Dunning (1980, 1993) considered FDI as a way to exploit ownership advantages, Vernon (1966) used the product life-cycle concept to explain firm investments abroad for products that had already been standardised and matured in home markets. Moreover, Buckley and Casson (1976) and Hennart (1982) explained FDI for internalising transactions within the MNCs, and Knickerbocker (1973) suggested that MNCs demonstrate a 'bandwagon effect' when they follow their rivals into overseas markets. In the case of automotive investments in Turkey by MNCs, we find a partial explanation by each of these theories. Of course, the automotive MNCs invested in Turkey and tried to exploit Ownership, Location, and Internalisation (OLI) advantages as suggested by Dunning (1980, 1993). They first manufactured and marketed their outmoded automobiles in the Turkish market, which verifies Vernon's (1966) product life-cycle theory for FDI. Finally, as posited by Knickerbocker (1973), Toyota, Honda, and Hyundai followed the early entrants of Fiat and Ford. Furthermore, we argue that MNCs, being dynamic and responding to the

markets, are able to modify their original objectives and strategies as the environmental conditions change.

FDI inflows to developing economies have been studied from different perspectives. Some researchers examined determinants, motives, and patterns of FDI (Marinova and Marinov, 2003; Tatoglu and Glaiser, 2000) and some others examined the impact of FDI (Szekeres, 2003), while still others investigated MNC and host country relationships and compatibility (Ramamurti, 2001). Nevertheless, less attention has been paid to the strategic changes undertaken by those foreign firms who invested in emerging markets. Our research attempts to fill this void. Toward this end, this research links the FDI strategies of firms to business and marketing strategies of MNCs.

In doing so, our research also engaged in the second stream of thinking that is related with strategic management of firms; in particular, the ability of firms to meet the industry environments. This is called 'strategic fit', and refers to the match between the firm's resources, structure, and strategy and environmental (market) conditions. Such a fit refers to the alignment between the organisational components and its adaptation to its external environment as studied by a number of researchers (Ginsberg and Venkatraman, 1985; Grant, 1998; Miles and Snow, 1994; Venkatraman, 1989; Venkatraman and Camillus, 1984). Zajac et al. (2000) emphasised it by stating that

> "one of the most widely shared and enduring assumptions in the strategy formulation literature is that the appropriateness of a firm's strategy can be defined in terms of its fit, match, or congruence with the environmental or organizational contingencies facing the firm." (Zajac et al., 2000)

Likewise, Andrews (1971) and Hofer and Schendel (1978) underlined the importance of the firm and environment interfaces in strategy formulation. Strategic fit is a core concept in normative models of strategy formulation, and the pursuit of strategic fit has traditionally been viewed as having desirable performance implications (Ginsberg and Venkatraman, 1985; Miles and Snow, 1994; Zajac et al., 2000). Similarly, Fuchs and his colleagues (Fuchs et al., 2000) suggested the key dimensions of effective strategy development and implementation as orchestrating all the elements of strategy around a powerful core theme and alignment of coherent product-market focus supported by operating capabilities and resources.

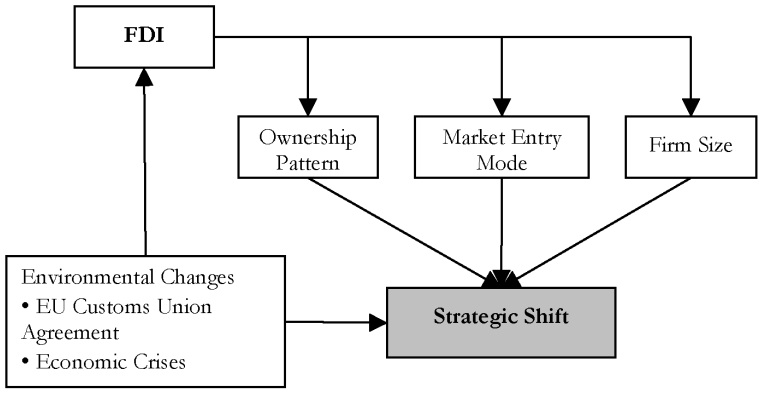
Drawing on these two theoretical considerations, FDI motivations and the strategic fit concept, we developed a model to explain the strategic behaviour of the automotive firms in Turkey. We will use the strategic fit model to explain how automobile manufacturing MNCs in Turkey have shifted their original strategies because of market pressures. This is, probably, the original nature of our study. We believe that the strategic fit model will help us to understand, analyse, and develop business strategies for the automotive companies in Turkey. The model suggests that a strategic fit must exist between company profiles (resources and capabilities) and external environments in order for firms to succeed in their businesses by formulating or reformulating and implementing suitable strategies after their initial strategies.

4 A strategic shift model

A conceptual framework comprising environmental factors, strategic shift of the companies, and mediating variables, including the ownership structure, market entry

modes, and size of the firms is developed. It focuses on the dynamic relationship between the changes in the business environment and revisions in the business strategies of the automotive firms in Turkey. This reflects the strategic fit concept covered above. Figure 1 represents the conceptual model, covering environmental forces, strategic shifts of the firms, and mediating variables.

Figure 1 Strategic shift model



The business environmental changes are defined in two primary categories, including the CU agreement between Turkey and the EU, which intensified competition within the automotive industry and two major economic crises that Turkey experienced in 1994 and 2001. Each of these environmental factors will be described briefly.

The business and economics literature suggests a positive impact of trade liberalisation on economic development and exports of developing countries (Banga, 2006; Clive and Kirkpatrick, 2004; Pailwar, 2001; Ray and Chakrabarti, 2006; Santos-Paulino and Thirlwall, 2004). Scholars in international business have long argued that economic and trade liberalisations also stimulate FDI. In fact, economic liberalisations in Russia, China, and India have encouraged FDI into those countries. Likewise, open-market reforms in Turkey have enticed international trade and FDI into the country. To this end, first, Turkey's joining the CU with the EU countries has lifted trade barriers, which had been a major obstacle in its expansion of trade with the EU countries. In fact, traditionally, Europe has been the major market for Turkish exports. Therefore, the provision of free trade between Turkey and the EU through the CU agreement has stimulated further Turkish exports.

As a corollary to the CU agreement between Turkey and the EU, competition in the automotive industry has intensified. Opening the domestic automotive market to European automobile imports has forced the firms to improve their product qualities in order to stay competitive. Nevertheless, joining the EU CU has created not only competitive threats domestically, but also opportunities in the Turkish automotive industry. Because of these emerging opportunities, new firms like Toyota, Hyundai, and Honda have joined the Turkish automotive industry, creating more competition. Consequently, the new entrants have intensified the rivalry in the Turkish automotive industry. The newcomers have threatened the market share of existing competitors by creating additional production capacity or imports, as Porter (1980) mentioned in his five forces of industry competition model.

Second, environmental uncertainty has long been considered as an important factor in the explanation of a firm's equilibrium and performance (March and Simon, 1958). From a strategic management perspective, a business strategy is based on anticipated changes in the environment. When unforeseeable market changes disturb the current business strategies, firms need to revise or reformulate their strategies (Quinn, 1980).

Additionally, Turkey experienced two major economic crises in the last decade, which altered the business dynamics. Market inefficiencies, in particular economic policies of the government, led to the first economic crisis in 1994, which surfaced as a currency crisis. After this crisis, the International Monetary Fund (IMF) backed an economic stabilisation programme of the government, but the reforms were only partially implemented. Structural reforms in the economy were delayed because of political concerns. Consequently, Turkey experienced a second and much bigger economic crisis in 2001. This time, the IMF took the lead and provided strong supervision over the government's economic policies to accomplish the required economic reforms. Finally, Turkey has completed additional major structural reforms, especially in the financial sector. These two economic crises presented critical market uncertainties for the automotive firms operating in Turkey.

5 Hypotheses

MNCs operating in complex foreign markets tend to exploit and build capabilities to sustain or improve their performances in such markets (Collis, 1991; Dunning, 1993; Hennart, 1982; Luo, 2002). For example, Luo (2002), after studying 167 MNC subunits in the People's Republic of China, found that capability exploitation and building are inversely associated with environmental complexity and industrial uncertainty. As mentioned above, in the last two decades, two major changes, including Turkey's joining the EU CU in January 1996, which intensified competition among the industry firms and structural changes in the economy after the two major economic crises in 1994 and 2001 have added complexity to the Turkish automotive industry. In response to this complexity, the automotive firms in Turkey used their capabilities to adjust to these changes. The intensity of competition in a given industry is usually determined by a number of factors, including new entrants, high-exit barriers, slow industry growth, government policies, and the number of rival firms (Ghemawat, 1994; Porter, 1980, 1985). Changes in the market environment shape the industry competition and more likely stimulate export orientations of the firms (Banga, 2006; Pailwar, 2001). In the light of these arguments, we constructed the following hypothesis.

Hypothesis 1: The changes in the business environment had an impact on the export performances of the Turkish automotive firms.

The major change in the business environment in Turkey was the approval of the EU CU agreement in 1996, which signalled the economic and political commitment of Turkey to join the EU. The augmentation in the number of players in the Turkish automotive industry is the result of liberation of trade policies, most notably the CU agreement with the EU, which enabled more imports. At the same time liberalisation of foreign investment regulations paved the way for new entrants to the market. Aggarwal (2002) asserted that increasing domestic competition encourages exports. Consequently, as an

increasing number of competitors tried to chip in on a piece of saturated market, the firms were pushed to explore new sales opportunities, both domestically and internationally.

In fact, Turkish outward-oriented developmental policy was initiated at the beginning of 1980 and the CU agreement was a great stimulus to this orientation. The CU with the EU went into effect on January 1, 1996, which has led to a closer economic relationship between Turkey and the EU. Through the CU agreement, Turkey has gained access to the large and developed EU market, but it, on the other hand, generated competitive threats to its domestic firms. The CU encouraged Turkey to synchronise its trade policies and laws with those of the EU by adopting most of the EU trade and competition regulations and standards. In the case of India, Ray and Chakrabarti (2006) found in their research that economic liberalisation was the most dominant exogenous factor influencing corporate strategy and the performance of Indian firms. Consequently, while the Turkish economy began expanding, the firms in the country have faced greater competition because of this business environmental change. Prior to the CU agreement, the Turkish automotive industry, like other industries, was protected from foreign competition by high tariffs. However, the signing of the CU agreement has eased the entry of European imports into the country. One of the industries most threatened by the CU agreement was the automotive industry, because the automotive firms were not ready to operate in such a competitive environment. Because of the vulnerability of the firms in the sector, some believed that the automotive industry would be the first to collapse. At this junction, the sector firms faced a big challenge. Basically, the CU agreement triggering new liberal trade policies radically modified the business environment and stimulated the Turkish automotive firms to take more competitive responses by attempting to penetrate to export markets (cif. Banga, 2006; Pailvar, 2001). Based on these arguments, we designed the following first sub-hypothesis (H1a) concerning the impact of the CU agreement on the automotive exports.

> *Hypothesis 1a: Turkey's joining the EU Customs Union had a positive impact on the export performances of Turkish automotive firms.*

As often experienced, economic crises create turmoil in the business environment. Thus, the crises experienced in Turkey in both 1994 and 2001 drastically changed the dynamics of its economy and business environment and increased the market complexity, as suggested by Luo (2002). Especially in the domestic automotive market, there were big shocks and surprises for the automotive firms. The crises caused high volatility in domestic market demand, which put immense pressure on the automotive firms. In these crises periods, the firms tried to deal with this erratic environment but they also learned lessons from this situation. They began searching for alternative markets to compensate for the shrinking domestic demand and attempted to diversify their sales by expanding their exports. After the economic crises, because of low domestic demand growth, Turkish automotive firms tried to use export-led recovery strategies to compensate decreasing domestic demand. Consequently, we develop the following second sub-hypothesis (H1b).

> *Hypothesis 1b: The economic crises experienced in Turkey had a positive impact on the export performances of Turkish automotive firms.*

Additionally, the effects of three mediating variables are considered in our model. The first of these variables is the firm size. In the export literature, researchers found a relationship between the export behaviour of firms and firm sizes (Calof, 1994; Cavusgil

and Nevin, 1981; Culpan, 1989; Verwaal and Donkers, 2002). Some argued (Calof, 1994; Verwaal and Donkers, 2002) that firm size is positively related to the export behaviour of firms (i.e., larger firms with more resources achieve higher export levels) while others (Cavusgil and Nevin, 1981; Culpan, 1989) suggested that firm size is not a determining factor for the export performances of firms. These arguments warrant an attention to inquire into the relationship between firm size and export performance in the Turkish automotive industry. Thus, we propose the following hypothesis.

Hypothesis 2: Firm size is positively related to the export performances of the Turkish automotive firms.

The second mediating variable included in the model is ownership pattern of the firms. Banga (2006) claimed that "FDI may lead to export diversification in the host country if it is positively affect the export intensity of industries that have a low share in world exports."

In fact, foreign ownership in Turkish automotive firms has been much higher than the foreign ownership in other industries. The foreign owners, being multinational automotive companies with major stakes in their Turkish ventures, tend to control operations and formulate the future strategies. In the corporate governance literature, there is strong evidence that the majority or influential shareholders attempt to control and manage the company strategies and even some operations to protect their investments (Fama and Jensen, 1983; Holderness and Sheehan, 1988; Manjon, 2004; Maug, 1998; Shleifer and Vishny, 1986). Thus, we assert that the foreign owners in the Turkish automotive industry are inclined to adopt a more export-oriented strategy to compensate for their dismal domestic sales. Consequently, we proposed the following hypothesis.

Hypothesis 3: Foreign ownership in the automotive firms in Turkey had a positive impact on the export performances of the firms.

FDI represents one of the market entry modes among other alternatives. In fact, FDI itself may take two principal forms – a whollyowned subsidiary and a joint venture. Then, FDI, as not only ownership pattern, but also as market entry mode, is related to the export performances of investing firms in the literature (Lipsey and Weiss, 1984; Pain and Wakelin, 1997). For example, Pfaffermayr (1994), Svensson (1996) and Banga (2006) found a positive relationship between FDI and firm exports. Thus, we wanted to investigate the relationships between the modes of market entry (WOS, International Joint Venture (IJV), and Licensing Agreements (LA) and the export performances of firms. In doing so, we developed the following hypothesis.

Hypothesis 4: The automotive firms in Turkey with different market entry modes experienced different export performances.

6 Data, analysis, and findings

In order to test the hypotheses defined above, financial and export data of Turkish Automotive firms were gathered for a period of 20 years, between 1983 and 2003. For this purpose, databases of the Istanbul Stock Exchange, State Institute of Statistics, and Turkish Automotive Manufacturers Association were used. By doing so, we tried to reveal the trends and transformation of the automotive firms over the last two decades.

From these data, three sets of export performance measures were defined and used in the analyses. The first group of measures refers to *annual export levels* in US dollars. The second group shows the *export orientation* of the firms by considering firm exports to firm net sales (Exp_f/NS_f) and firm exports to firm total assets (Exp_f/TA_f) ratios. The third set is the *export market share* of the automotive firms, which is measured by ratios of firm exports to industry net sales (Exp_f/NS_i) and firm exports to industry exports (Exp_f/Exp_i). All three sets of measures, together, demonstrate the export performances of the automotive firms.

Mean values of the main data items are listen in Table 1. An increasing trend can be easily seen for the size (net sales) and exports of the Turkish automotive firms with respect to foreign ownership levels.

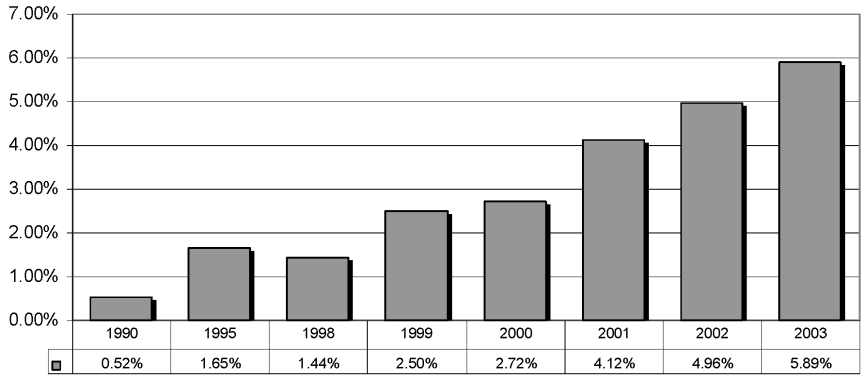
Table 1 Main data description

Year	*N*	*Export* (*Million $*)	*Net sales* (*Million $*)	*Foreign ownership* (%)
1983	9	7.73	68.57	63.6
1984	10	6.40	70.44	63.6
1985	9	6.91	87.48	70.0
1986	8	6.95	94.45	63.6
1987	10	4.02	127.31	60.0
1988	11	7.96	123.15	54.5
1989	10	9.02	148.42	54.5
1990	10	10.93	266.31	58.3
1991	11	6.42	222.67	61.5
1992	12	10.61	272.87	61.5
1993	12	15.44	377.54	61.5
1994	13	15.91	131.77	61.5
1995	13	38.38	214.99	61.5
1996	14	45.47	250.99	64.3
1997	13	34.60	295.48	69.2
1998	14	33.32	279.72	71.4
1999	15	74.70	224.38	73.3
2000	15	73.65	370.67	73.3
2001	14	127.06	190.60	73.3
2002	15	176.43	290.40	73.3
2003	15	293.74	625.17	73.3

The shares of Turkish automotive exports in the total automotive imports of the EU are presented in Figure 2, which shows a great jump in the Turkish automotive exports to the EU after 1996. The automotive industry in Europe is highly concentrated (a limited number of firms in the market), with the presence of major firms like Fiat, Renault, GM, Ford, MAN, BMW, and DaimlerChrysler, most of which have investments in Turkey. These MNCs invested to exploit opportunities provided by emerging Turkish market. Additionally, firms from Asia, including Toyota, Honda, and Hyundai with their

investments in Turkey have enjoyed the liberalisation of trade between Turkey and the EU after the CU agreement.

Figure 2 The shares of Turkish automotive exports in the EU total imports



In addition to Figure 2, the impact of the new business environment on export performances of the Turkish automotive firms was studied by considering the implementation date of the EU CU agreement as a milestone. The mean differences in the export performance measures of the sector firms were compared before and after the CU agreement implementation date of January 1, 1996. The one-way Analysis of Variance (ANOVA) results are shown in the Table 2.

Table 2 Customs Union (CU) and export performance

	F-stats	*p*	$\mu_{beforeCU}$	$\mu_{afterCU}$
Firm export ($)	29.633*	0.000	$12.1 m	$109.6 m
Firm export to firm net sales	79.688*	0.000	6.0%	24.0%
Firm export to firm total assets	39.786*	0.000	12.0%	37.0%
Firm export to industry sales	18.373*	0.000	0.6%	2.3%
Firm export to industry export	2.345	0.127	9.4%	7.0%

μ: The mean values of export performance measures.

*$p < 0.01$.

The *F*-statistics in Table 2 provide strong support for H1a stating the CU agreement influenced the export performances of the automotive firms. The mean values of the export performance measures except one, firm exports to industry exports, are significantly different before and after the implementation of the EU CU agreement. On average, the export level of the automotive firms increased by nine times to $109.6 million from $12.1 million. Also, the export portion of the net sales quadrupled to 24% from 6%, and export generated by total assets tripled to 37% from 12%. While the firms' exports to the industry sales increased, the firm's exports to total exports decreased, which indicates that the automotive firms began having more stable export levels. All these findings confirm the major improvements in the export performances of the Turkish automotive firms after joining the EU CU. Turkish automotive firms seem to be handling

the new business environment well, contrary to the worries about the industry prior to the implementation of the CU agreement.

Second, the impact of the economic crises on export performances of the Turkish automotive firms is studied by considering both the crises and the following recovery years, which are defined as 1994–1995 and 2001–2002, respectively. The mean differences in the export performance measures of the sector firms are tested for the crisis and non-crisis periods to reveal the impact of crises on the export performances of the automotive firms. The ANOVA test results in Table 3 illustrate that all measures, except the firms' export to industry export ratio, show significant mean differences between crisis and non-crisis periods. These findings indicate that the industry firms had significantly different levels of exports during the crisis and non-crisis periods.

Table 3 Crises and export performance

	F-stats	*p*	μ_{crisis}	$\mu_{noncrisis}$
Firm export ($)	4.311**	0.039	$93.3 m	$46.2 m
Firm export to firm net sales	44.289*	0.000	28.2%	10.3%
Firm export to firm total assets	15.790*	0.000	39.5%	19.2%
Firm export to industry sales	14.681*	0.000	2.9%	1.0%
Firm export to industry export	0.454	0.501	7.3%	8.4%

μ: The mean values of export performance measures.
*$p < 0.01$; **$p < 0.05$.

During the crisis periods, the automotive firms had higher export performances compared to the non-crisis periods mainly because of the shrinking domestic sales. Since a majority of the sales income is generated by domestic sales, the firms have tried to diversify their sales by expanding their exports. To complement the ANOVA analysis, the average net sales, domestic sales, and exports are presented in graphical forms in Figure 3. As the graph reveals, there is a steady increase in the exports, especially after 1994. However, we observed significant fluctuations in the domestic sales during the study period. This instability in the domestic sales seems to be the main source of stress on the firms due to their heavy reliance on the domestic market. It appears that the impact of the 1994 economic crisis as well as early signs of joining the 1996 EU CU, triggered the automobile exports. To reduce their business risks as experienced by fluctuations in the domestic sales, the automotive firms promoted their export sales.

In sum, from the findings above we can conclude that the crises during the study period had a significant positive impact on export performances of the Turkish automotive firms as stated in Hypothesis 1b. We believe that the automotive firms have learned an important lesson from the crises; that they should not rely on only the domestic market. They became more engaged in the international markets by diversifying their sales and complementing the domestic markets with the export markets. The end result was that they have enjoyed higher levels of exports and reduced business risks.

For testing Hypothesis 2, firm size is measured by annual net sales. In order to inquire whether firm size is related to export performance, a bivariate correlation analysis is conducted. The correlation value of 0.72 of Net Sales is found to be statistically significant at the 0.01 significance level. This finding indicates a strong positive relationship between the firm size and the export performances of the firms. In addition

to the correlation analysis, *k*-Means Cluster Analysis is conducted to classify relatively homogeneous groups of firms with respect to their sizes. From this analysis, Oyak-Renault, Tofas, Ford-Otosan and Mercedes-Benz Turk emerged as large firms in the industry. These firms hold a mean of net sales of $521.4 million in contrast to small firms, which embrace only $122.2 million. The mean differences between large and small firms' export performances are also tested with ANOVA and the test results are reported in Table 4.

Figure 3 Sales composition of the Turkish automotive firms (see online version for colours)

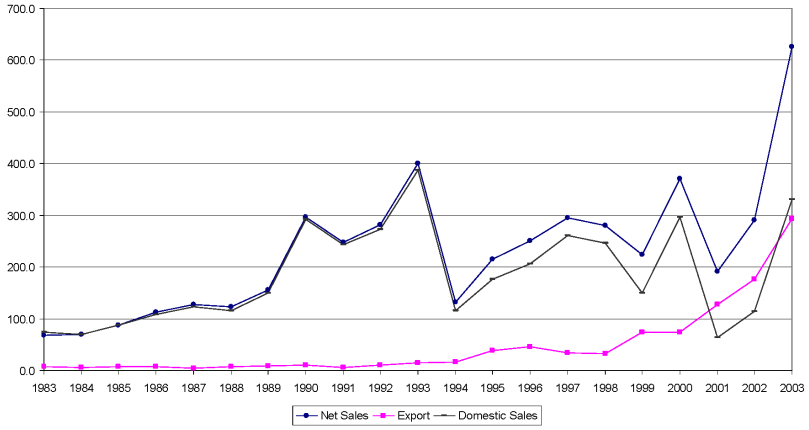


Table 4 Size and export performance

	F-Stats	*p*	μ_{small}	μ_{large}
Firm export ($)	37.202*	0.000	$20.9 m	$137.6 m
Firm export to firm's net sales	8.564*	0.004	11.8%	19.1%
Firm export to firm's total assets	14.240*	0.000	18.0%	36.0%
Firm export to industry sales	50.236*	0.000	0.54%	3.4%
Firm export to industry export	104.386*	0.000	3.7%	18.8%

μ: The mean values of export performance measures.

*$p < 0.01$.

Since all of the *F*-statistics are significant at the 0.01 significance level, the hypothesis of differences in the export performance between the large and small firms confirms that the large industry firms have considerably higher export levels than the small ones. While 19.1% of the net sales of large firms is due to exports, this ratio drops to 11.8% in the small firms. In other words, the large firms appear to be more export-oriented than the small firms. Based on these findings, we conclude that Hypothesis 2, stating that firm size has a positive impact on the export performances of the Turkish automotive firms, is supported.

It is hypothesised in H3 that foreign ownership has an impact on the export performances of the automotive firms. In testing H3, first, the structures covering the ownership types and foreign ownership percentages of the firms are summarised in Table 5.

Table 5 Market entry modes of the Turkish automotive firms

Name	*Foreign ownership* (%)	*Foreign affiliation*	*Market entry modes*
Anadolu Honda	100.0	Honda	Foreign wholly owned subsidiary
Anadolu Isuzu	29.8	Isuzu	International joint venture
B.M.C.	0.0	N/A	Domestic wholly owned subsidiary
Ford Otosan	41.0	Ford	International joint venture
Hyundai Assan	50.0	Hyundai	International joint venture
Karsan	0.0	Peugeot	Licensing agreements
MAN Turkiye	99.9	MAN	Foreign wholly owned subsidiary
Mercedes-Turk	85.0	Daimler Chrysler	International joint venture
Otokar	0.0	Deutz and T.Rover	Licensing agreements
Otoyol	27.0	Iveco	International joint venture
Oyak-Renault	51.0	Renault	International joint venture
Temsa	0.0	Mitsubishi	Licensing agreements
Tofas	37.9	Fiat	International joint venture
Toyota	100.0	Toyota	Foreign wholly owned subsidiary
Turk Traktor	37.5	CNH	International joint venture
Uzel	0.0	Massey Ferguson and Perkins	Licensing agreements

In general, the percentage of all Turkish firms listed on the Istanbul Stock Exchange with foreign ownership is 17.3% (Gursoy and Aydogan, 2002). However, this rate goes up to 73% in the case of the automotive firms. The forms of foreign firm involvement in the Turkish automotive industry include wholly-owned subsidiaries, IJVs, and LA. As shown in Table 5, there are three foreign WOS, four LA, and eight IJVs in the industry. Thus, IJVs between foreign and local firms are most common in the industry. The average foreign ownership in the automotive firms is 59.9%, which indicates that foreign owners hold high stakes in the industry. Overall, only 5 out of 16 automotive firms do not have any foreign ownership; however, all of these nationally owned firms, but one holds a foreign license.

The corporate ownership structure of the automotive firms is another factor that has contributed to the strategic shift in the firm strategies. Since most of the firms in the Turkish automotive industry are either wholly owned by foreign MNCs or IJVs with foreign MNCs holding majority shares of the firms, foreign owners hold the control over those enterprises. Holderness and Sheehan (1988) found out that majority shareholders are usually directly involved in firm management. Likewise, Maug (1998) explained that large shareholders tend to have significant bias towards intervention in business strategies as derived by their high stakes on returns. As a corollary, foreign owners tend to establish governance mechanisms to protect their stakes at the firm and the one-share-one-vote system gives certain privileges to those who control large shares, as asserted by Shleifer and Vishny (1986).

The foreign owners in Turkey, with their high ownership stakes in the automotive firms, have played a major role in the formulation of business strategies. In response to the environmental changes, they reshaped the firms' business strategies by adopting

export orientations. The impact of foreign ownership on the export performances of the Turkish automotive firms was tested by comparing the export performances of firms with and without foreign ownership. The ANOVA test results, as shown in Table 6, provide strong evidence for the significant differences in the means of export performances. Based on this finding, we find a support for Hypothesis 3 that the export levels, export orientations, and export market performances of the firms with foreign ownership are significantly higher than those of other firms without foreign ownership.

Table 6 Foreign ownership and export performance

	F-Stats	*p*	*μfrgn(0)*	*μfrgn(1)*
Firm export ($)	13.380*	0.000	$10.8 m	$81.2 m
Firm export to firm net sales	8.113*	0.005	9.5%	16.4%
Firm export to firm total assets	4.985**	0.026	17.1%	27.2%
Firm export to industry sales	13.483*	0.000	0.4%	2.0%
Firm export to industry export	14.227*	0.000	4.3%	10.5%

Frgn(1): foreign ownership and Frgn(0): no foreign ownership in the capital structures of the firms.

μ: The mean values of export performance measures.

*$p < 0.01$; **$p < 0.05$.

Furthermore, Turkish automotive firms are categorised into three groups based on their market entry modes: WOS, IJVs, and firms involved in LAs. IJVs are very common in the industry with 53.3% of the firms while WOS are only 26.7% of the firms. In fact, a few of those WOS were established as joint ventures originally, but later foreign owners acquired the remaining shares of the local firms. The remaining automotive firms (20%) are locally owned, having LA with foreign automotive companies.

Size (Net Sales), Export and market shares of each market entry modes are examined yearly basis and presented in Table 7. It can easily be seen that IJVs are biggest in size followed by WOS firms. As depicted in Table 7, because IJVs hold the largest sale volumes, they control the largest portion of the market.

Table 7 Means of firms' data in each market entry modes

	International joint ventures			*Wholly owned subsidiaries*			*Licensing agreements*		
Year	*Export**	*Sales**	*Market shares* (%)	*Export**	*Sales**	*Market shares* (%)	*Export**	*Sales**	*Market shares* (%)
1983	11.22	105.8	70	5.60	47.1	19	1.13	28.0	11
1984	4.00	96.1	62	0.97	54.4	21	14.02	43.8	17
1985	3.64	110.9	63	1.83	59.9	21	20.17	70.1	16
1986	6.38	131.4	63	5.47	73.1	21	9.56	54.2	16
1987	6.17	177.3	70	2.18	77.5	12	1.68	77.1	18
1988	11.05	194.8	72	1.79	55.0	8	7.18	67.6	20
1989	16.17	236.9	73	5.03	85.4	10	1.08	69.4	17
1990	16.07	391.5	74	2.36	169.9	11	3.50	126.7	16
1991	10.79	348.0	72	1.66	141.7	15	1.05	95.3	13

Table 7 Means of firms' data in each market entry modes (continued)

	International joint ventures			*Wholly owned subsidiaries*			*Licensing agreements*		
Year	*Export**	*Sales**	*Market shares* (%)	*Export**	*Sales**	*Market shares* (%)	*Export**	*Sales**	*Market shares* (%)
1992	18.33	475.5	80	1.41	67.0	6	3.62	123.2	14
1993	25.98	628.1	77	7.12	165.6	10	3.79	160.7	13
1994	32.77	219.5	77	1.67	47.5	8	1.30	63.4	15
1995	59.12	306.8	77	6.71	96.9	7	17.93	113.5	16
1996	66.16	321.9	73	23.74	149.5	9	14.95	160.0	18
1997	48.88	388.2	81	12.44	178.9	9	11.3	126.0	10
1998	40.45	358.1	82	12.67	118.3	6	25.73	152.2	12
1999	108.13	308.6	83	21.10	93.1	8	28.00	103.2	9
2000	119.59	534.3	77	14.69	193.5	14	29.77	170.5	9
2001	203.00	281.1	84	31.69	80.6	9	19.92	59.4	7
2002	254.95	405.6	74	132.22	215.2	20	25.97	83.6	6
2003	408.63	876.7	75	268.13	477.0	20	21.51	152.0	5

*Millions of US Dollars.

We hypothesised that the type of market entry mode has an influence on the export performances of the automotive firms. We defined export performance measures in three categories as defined above. The impact of market entry mode on export performances of the Turkish automotive firms is examined with the ANOVA test and the test results are shown in Table 8.

Table 8 Market entry modes and export performance

	F-stats	*p*	μ_{WOS}	μ_{IJV}	μ_{LA}
Firm export ($)	5.722*	0.004	$41.6 m	$83.7 m	$11.9 m
Firm export to firm net sales	1.422	0.243	14%	16%	11%
Firm export to firm total assets	1.073	0.344	19%	26%	21%
Firm export to industry sales	6.828*	0.001	0.65%	1.70%	0.37%
Firm export to industry export	13.218*	0.000	2.52%	8.19%	2.96%

μ: The mean values of export performance measures.

*$p < 0.01$.

The firms' export performances show significant differences for each market entry mode at the 0.01 significance level. The IJVs have the highest export levels with a mean of $83.7 million, followed by WOS and LAs, respectively. They not only have the largest export levels, but also are the largest firms in terms of net sales ($350 million) in the industry. On the other hand, WOS are the second largest group ($136 million), followed by the LAs group ($102 million).

As a result of our analysis, we find, consistent with the Hypothesis 4, significant differences in the export levels and export market shares of the firms with respect to their market entry modes. However, there is no significant difference in the export orientations

of the firms as measured for firm exports to firm net sales. We can conclude that of three modes of market entry, IJVs enjoy the highest level of export performance. This finding seems puzzling because we expected that foreign automotive companies with WOS in Turkey would show the highest export performances, based on their ownership and internalisation advantages. Probably local partners' contributions to joint ventures or pressures to the foreign partners have a positive impact on the export levels of IJVs. This point needs further examination though. Nevertheless, the combined modes of entries of WOS and IJVs present much higher export performances than those of LAs, which represent locally owned automotive firms with only LA with foreign automotive companies.

Furthermore, in order to find out the combined impact of all variables included in our conceptual model (firm size, EU CU agreement, economic crises, ownership pattern, and market-entry modes) on the export performances of Turkish automotive firms, a multivariate regression model is developed, as illustrated below.

$$EF = f(FS, CU, EC, OP, MM)$$

where EF: Export Performance of a firm; FS: Firm Size; CU: CU agreement; EC: Economic Crises; OP: Ownership Pattern defined as foreign ownership; MM: Market entry Modes defined as WOS, IJVs, LAs.

By doing so, we attempt to validate individual ANOVA analyses conducted earlier and also analyses the relationship between export performance and all independent variables as listed in the above model. With ANOVA, we tested each factor of the suggested Strategic Shift Model separately to see if the group means of each export performance measures are significantly different from each other. However, with the multivariate regression model, we intended to see relationship between export performance and all factors of the suggested Strategic Shift Model.

In the multivariate regression model, firm size is measured in terms of natural logarithm of net sales to ensure the linearity assumption of the regression. Since the rest of the independent variables are defined as dummy variables, there are no linearity assumption violations. The same multivariate regression model is tested for each relevant combination of the explanatory and dependent variables and the findings are presented in the Table 9. Since our sample consists of time-series–cross-section data, we corrected Ordinary Least-Squares (OLS) linear multivariate regression model estimations by the Generalised Method of Moments (GMM) methodology. Problems that are likely to be encountered in pooled data are generally resolved by applying this methodology, which utilises Newey and West's (1987) way of correcting both heteroskedasticity and autocorrelation.

The firm size is positively related to export performance, indicating that bigger Turkish automotive firms have higher export performances compared to those of the small ones. Additionally, the EU CU agreement seems to be one of the milestones in the export performances of the Turkish automotive manufacturing firms. After Turkey's membership in the EU CU, the industry firms experienced higher exports. Moreover, another important factor in the export performances of the industry firms is the economic crises in the last decade in Turkey. Obviously, these crises also changed the business environment by leading the firms to explore export markets as well. The firms with foreign ownership have higher export performance than locally owned firms. It seems that foreign owners have contributed to access export markets. All market entry modes generally have significant relationships with the export performance measures; however,

out of five export performance measures only three present significant relationships to market entry modes. In sum, we can assert that multivariate regression model results verify the findings of individual ANOVA tests. The univariate ANOVA tests provided evidence that export performance measures are significantly different for each factor (CU, economic crises, market entry modes, ownership pattern, and firm size) of the Strategic Shift Model, meaning that each factor has an influence on the export performance of an automotive firm separately. In addition, the multivariate regression model predicted the relationships supporting the Strategic Shift Model presented in Figure 1.

Table 9 Multivariate regression analysis results

	Firm export ($)	*Firm export to firm net sales*	*Firm export to firm total assets*	*Firm export to industry sales*	*Firm export to industry export*
(Constant)	−3.583	−2.511	−2.777	−3.636	−6.069
	0.000*	0.012**	0.006*	0.000*	0.000*
Firm size	3.601	2.589	2.943	3.700	6.114
	0.000*	0.010*	0.004*	0.000*	0.000*
Economic crises	2.730	5.070	3.200	2.805	0.627
	0.007*	0.000*	0.002*	0.005*	0.531
EU custom union	2.672	5.695	2.348	1.637	−2.947
	0.008*	0.000*	0.000*	0.100***	0.004*
Foreign ownership	1.746	2.166	2.833	1.428	2.684
	0.082***	0.031**	0.005*	0.155	0.008*
International joint ventures	−1.904	−2.206	−3.144	−1.421	−1.123
	0.058***	0.028**	0.002*	0.157	0.262
Wholly owned subsidiary	−1.419	−1.738	−2.660	−1.515	−2.003
	0.157	0.083***	0.008*	0.131	0.046**
Licensing agreements	1.419	1.738	2.660	1.515	2.003
	0.157	0.083***	0.008*	0.131	0.046**
F stats	22.686	30.281	16.996	19.842	18.035
	0.000*	0.000*	0.000*	0.000*	0.000*
R square	0.356	0.425	0.298	0.326	0.306
Adj. *R* square	0.341	0.411	0.281	0.310	0.289

The *t*-statistics and its probability are presented for each variable in the models.

Newey-West correction method for heteroskedasticity and serial correlation is used for every regression model.

To prevent multicollinearity, one mode of market entry is left out for each analysis, meaning wholly-owned subsidiary and licensing agreements are added to the model interchangeably, but not together.

*$p < 0.01$; **$p < 0.05$; ***$p < 0.10$.

7 Discussion and conclusion

The changes in the business environment, such as the crises causing high volatility in the domestic market, and the liberal trading system created by the EU CU, and foreign ownership in the automotive industry, with its high stakes, were instrumental in making strategic changes for the competitiveness of the automotive firms in Turkey. Under the market threats, foreign owners had a choice to either end their operations and liquidate their investments or redefine their strategies in order to deal with the new business environmental challenges and realities. They have selected the latter and tried to diversify their market portfolios by penetrating export markets in addition to the domestic market that they served. Additionally, some of the foreign investors increased their investments in their current ventures, and some of them, like Toyota, bought the shares of their joint venture partner to control, fully, the operations of the venture. Furthermore, they all realised that they could not compete with the old strategies based on import substitution. Thus, they increased their investments to upgrade their technical capabilities and began producing newer models with modern designs to be able to sell in international markets. With this new export-oriented strategy, some companies selected new car models to be produced only in Turkey and began exporting them mostly to Europe. Without the foreign owners, the automotive firms could not easily make this transition and access the export markets. This presents a win-win solution for both the foreign owners and the Turkish automotive industry as a whole. Foreign owners saved their investments and increased their sales while the Turkish automotive industry expanded its horizons to new markets through this strategic shift. This finding is consistent with the findings of Banga (2006) who found that FDI in the Indian manufacturing industry has, to some extent, led to diversification of Indian exports. The automotive firms, with the driving force of FDIs, were able to cope with the new emerging challenges of the market. Albeit, Turkish automotive firms had a very low share in the world market, they have accomplished an important strategic shift by adopting export orientation, especially in the EU countries.

Under the pressure of business environmental changes as depicted in Figure 1, the Turkish automotive firms have gone through a strategic shift from local market emphasis to export market orientation. The new status of Turkey as a candidate for EU membership can be expected to facilitate the developments in the Turkish automotive industry by attracting more foreign investments and even more new firms with global business strategies rather than multinational strategies (e.g., Bartlett and Ghoshal, 1989).

As presented in this study, business environments often change in emerging markets and firms operating in such unstable markets need to revise their business strategies to accommodate such changes. Our paper contributes to understanding this phenomenon of emerging unexpected changes due to economic policies and market dynamics in newly industrialising countries and how MNCs respond to these new market realities. After an empirical investigation into the strategic behaviour of auto manufacturing MNCs in Turkey, we provide evidence for a strategic shift at these firms. Our study, with its conceptual model and empirical findings, provides important insights into analysing and understanding firm strategies in emerging markets in the face of market environmental changes.

Nonetheless, the present study could have been improved by studying not only market changes, but also product changes as a part of the firms' response to environmental changes. Unfortunately, the data on product changes were not available to conduct empirical inquiries. Upon availability of data, future studies can investigate the

firms' strategies concerning product changes. Furthermore, they can compare the strategies and performances of wholly owned foreign subsidiaries and IJVs with respect to product strategies. Moreover, it will be interesting to observe further strategic changes that these firms will craft as Turkey develops closer ties with the EU (e.g., becoming a full member) and expands its economic relations with the Middle East countries.

What can be learned from this Turkish experience? How can MNCs make strategic adjustments in order to sustain their competitiveness in emerging countries where market conditions yield more economic liberalisation, competition, and economic crises and instabilities? MNCs who have invested in emerging economies need to closely watch the changing market and make strategic shifts accordingly. They can modify their strategies, which are geared to the domestic market to a,combination of domestic and export orientations. In other words, they need to develop global business strategies incorporating strategic fit between company profiles and market/industry maturity. As Nohria (2006, p.23) noted "in the complex and uncertain environment of a sustained, evolving crises, the most robust organizations will not be those that simply have plans in place but those that have continuous sensing and response capabilities". Also, as Darwin suggested, the most adaptive species are the fittest. This is also true for MNCs. Thus, MNCs in emerging countries need to make strategic shifts, as our empirical study of Turkish automotive industry attested, when market environment presents uncertainties, complexities, and radical changes.

References

Aggarwal, A. (2002) 'Liberalization, multinational enterprises and export performance: evidence from Indian manufacturing', *The Journal of Development Studies*, Vol. 38, No. 3, pp.119–137.

Andrews, K.R. (1971) *The Concept of Corporate Strategy*, Dow Jones-Irwin, Homewood, IL.

Banga, R. (2006) 'The export-diversifying impact of Japanese and US foreign direct investments in the Indian manufacturing sector', *Journal of International Business Studies*, Vol. 37, pp.558–568.

Bartlett, C.A. and Ghoshal, S. (1989) *Managing Across Borders: The Transnational Solution*. Harvard Business School Press, Boston.

Buckley, P.J. and Casson, M. (1976) *The Future of the Multinational Enterprise*, Macmillan, London.

Calof, J.L. (1994) 'The relationship between firm size and export behavior revisited', *Journal of International Business Studies*, Vol. 25, No. 2, pp.367–387.

Caves, R.E. (1971) 'Industrial corporations: the industrial economics of foreign investment', *Economica*, Vol. 38, pp.1–27.

Cavusgil, S.T. and Nevin, R.J. (1981) 'International determinants of export marketing behavior: an empirical investigation', *Journal of Marketing Research*, Vol. 18, pp.114–119.

Clive, G. and Kirkpatrick, C. (2004) 'Trade and development: assessing the impact of trade liberalization on sustainable development', *Journal of World Trade*, Vol. 38, No. 3, pp.441–469.

Collis, D.J. (1991) 'A resource-based analysis of global competition: the case of hearing industry', *Strategic Management Journal*, Vol. 12, pp.49–68.

Culpan, R. (2002) *Global Business Alliances: Theory and Practice*, Quorum Books, Westport, CT.

Culpan, R. (1989) 'Export behavior of firms: relevance of firm size', *Journal of Business Research*, Vol. 18, pp.207–218.

Dunning, J.H. (1993) *Multinational Enterprises and the Global Economy*, Addison-Wesley, Wokingham, England.

Dunning, J.H. (1980) 'Toward an eclectic theory of international production: some empirical tests', *Journal of International Business Studies*, Vol. 11, No. 1, pp.9–31.

Fama, E.F. and Jensen, M.C. (1983) 'Separation of ownership and control', *Journal of Law and Economics*, Vol. 26, No. 2, pp.301–325.

Fuchs, P.H., Mifflin, K.E., Miller, D. and Whitney, J.O. (2000) 'Strategic integration: competing in the age of capabilities', *California Management Review*, Vol. 42, No. 3, pp.118–147.

Geckil, I.K. (2004) *The Auto Industry in Turkey*, Anderson Economic Group Presentation, Retrieved 16 July, 2005, from http://www.andersoneconomicgroup.com/Pubs/articles_press releases/ turkeyauto0504.pdf

Ghemawat, P. (1994) 'Industry analysis: understanding industry structure and dynamics', in Fahey, L. and Randall, R.M. (Eds.): *The Portable MBA in Strategy*, Wiley & Sons, New York, pp.171–194.

Ginsberg, A. and Venkatraman, N. (1985) 'Contingency perspectives of organizational strategy: a critical review of the empirical research', *Academy of Management Review*, Vol. 10, No. 3, pp.421–434.

Grant, R.M. (1998) *Contemporary Strategy Analysis*, 3rd ed., Blackwell Publishers Inc, Malden, MA.

Gursoy, G. and Aydogan, K. (2002) 'Equity ownership structure, risk taking and performance, an empirical investigation in Turkish listed companies', *Emerging Markets Finance and Trade*, Vol. 38, No. 6, pp.6–25.

Hennart, J.F. (1982) *A Theory of Multinational Enterprise*, University of Michigan Press, Ann Arbor, Michigan.

Hofer, C. and Schendel, D. (1978) *Strategy Formulation: Analytical Concepts*, West Publishing Co., St. Paul, MN.

Holderness, C. and Sheehan, D. (1988) 'The role of majority shareholders in publicly held corporations: an exploratory analysis', *Journal of Financial Economics*, Vol. 20, pp.317–347.

Knickerbocker, F.T. (1973) *Oligopolistic Reaction and Multinational Enterprise*, Harvard University Press, Cambridge, MA.

Lipsey, R.E. and Weiss, M.Y. (1984) 'Foreign production and exports of individual firms', *Review of Economic Statistics*, Vol. 66, pp.304–308.

Luo, Y. (2002) 'Capability exploitation and building in a foreign market: implications for multinational enterprises', *Organization Science*, Vol. 13, No. 1, pp.48–64.

March, J.G. and Simon, H.A. (1958) *Organization*, John Wiley, New York.

Manjon, M.C. (2004) 'The trade-off between risk and control in corporate ownership', *Journal of Institutional and Theoretical Economics*, Vol. 160, No. 2, pp.252–274.

Marinova, S. and Marinov, M. (Eds). (2003) *Foreign Direct Investment in Central and Eastern Europe*, Ashgate Publishing Company, Hampshire, England.

Maug, E. (1998) 'Large shareholders as monitors: is there a trade-off between liquidity and control', *The Journal of Finance*, Vol. 53, No. 1, pp.65–98.

Miles, R.E. and Snow, C.C. (1994) *Fit, Failure and the Hall of Fame: How Companies Succeed or Fail*, Maxwell McMillan International, New York.

Newey, W.K. and West, K.D. (1987) ' simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix',*Conometrica*, Vol. 5, No. 3, pp.703–708.

Nohria, N. (2006) 'Survival of the adaptive', *Harvard Business Review*, 23 May, Vol. 84, No. 5, p.23.

Pailwar, V. (2001) 'Foreign direct investment flows to India and export competitiveness', *Productivity*, Vol. 42, No. 1, pp.115–122.

Pain, N. and Wakelin, K. (1997) *Export Performance and the Role of Foreign Direct Investment*, Paper at National Institute of Economic and Social Research, London.

Pfaffermayr, M. (1994) 'Foreign direct investment and exports: a time series approach', *Applied Economics*, Vol. 26, pp.337–351.

Porter, M.E. (1980) *Competitive Strategy*, Free Press, New York.

Porter, M.E. (1985) *Competitive Advantage*, Free Press, New York.

Quinn, J.B. (1980) *Strategies for Change: Logical Incrementalism*, Richard D. Irwin Inc, Homewood, IL.

Ramamurti, R. (2001) 'The obsolescing 'bargaining model' MNC-host developing country relations revisited', *Journal of International Business Studies*, Vol. 32, No. 1, pp.23–39.

Ray, S. and Chakrabarti, A.K. (2006) 'Strategic change of firms in response to economic liberalisation in an emerging market economy', *International Journal of Strategic Change Management*, Vol. 1, Nos. 1–2, pp.20–39.

Santos-Paulino, A. and Thirlwall, A.P. (2004) 'The impact of trade liberalization on exports, imports and the balance of payments of developing countries', *Economic Journal*, Vol. 114, No. 1, pp.50–72.

Shleifer, A. and Vishny, R.W. (1986) 'Large shareholders and corporate control', *Journal of Political Economy*, Vol. 94, No. 3, pp.461–488.

Svensson, R. (1996) 'Effects of overseas production on home country exports: evidence based on Swedish multinationals', *Weltwirtschaftliches Archiv*, Vol. 132, pp.304–329.

Szekeres, V. (2003) 'Foreign capital and economic development in Hungary', in Marinova and Marinov (Eds.): *Foreign Direct Investment in Central and Eastern Europe*, Ashgate Publishing Company, Hampshire, England, pp.230–247.

Tatoglu E. and Glaister, K.W. (2000) *Dimensions of Western Foreign Direct Investment in Turkey*, Quorum Books, Westport, CT.

Venkatraman, N. (1989) 'The concept of fit in strategy research: toward verbal and statistical correspondence', *Academy of Management Review*, Vol. 14, No. 3, pp.423–444.

Venkatraman, N. and Camillus, J.C. (1984) 'Exploring the concept of 'fit' in strategic management', *Academy of Management Review*, Vol. 9, No. 3, pp.513–525.

Vernon, R. (1966) 'International investment and international trade in the product cycle', *Quarterly Journal of Economics*, Vol. 80, No. 2, pp.190–207.

Verwaal, E. and Donkers, B. (2002) 'Firm size and export intensity: solving an empirical puzzle', *Journal of International Business Studies*, Vol. 33, No. 3, pp.603–613.

World Investment Report (WIR) (2006) *FDI from Developing and Transition Economies: Implications for Development*, United Nations Publication, New York and Geneva, p.24.

Zajac, E.J., Kraatz, M.S. and Bresser, R.K.F. (2000) 'Modeling the dynamics of strategic fit: a normative approach to strategic change', *Strategic Management Journal*, Vol. 21, No. 4, pp.429–453.

Note

[1]Statistical information on the automotive industry is taken from Undersecretariat of the Prime Ministry of Turkey for Foreign Trade database which is downloaded in June 2004.