Import Competition and Domestic Entrepreneurship
China and Turkey's textile and clothing industry

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Abstract
In today's increased level of competition the success lies in the ability to create innovative solutions to the markets. Therefore, entrepreneurial initiatives are very important both for firm level success and for the development of the national economy as a whole. While the empirical findings, related to the relationship between entrepreneurship and economic growth generate controversial results, entrepreneurship is still important for innovative capacity and success of both developing and developed countries.
Accordingly, among the various determinants of entrepreneurship at the national level, current paper investigates the effect of import competition on entrepreneurship level in textile and clothing industry in Turkey. With its accession to World Trade Organization China is now the world's largest textile and clothing exporter. With the removal of the barriers, Chinese low-cost textile and clothing imports to Turkey increases the competition in the market lowering the product prices. However, examining the entry and exit rates in textile and clothing industry between the years 1996-2006, it has been found that firm entry in textile industry has significant positive correlations with both textile and clothing imports from China. Firm entry in clothing industry has also a positive correlation with textile imports from China but at a relatively low level of significance. Turkish textile and clothing firms and potential entrepreneurs in these industries are now concentrating on high-quality fashion markets in these industries. The firms shift the concentration from competing with low-quality Chinese products and started to focus on high-quality segments of the market. Accordingly it can be concluded that entrepreneurship level in Turkish textile and clothing industry, is not hindered by import competition but instead have a positive association with it.

Introduction

Textile and clothing industry is a major source of competitive advantage for Turkey. However, China's accession to World Trade Organization (WTO) has negatively affected these sectors. China, with its low-cost advantage, dominated most of the export and domestic markets of local producers creating a competitive environment. While the firms currently operating in the sector experienced loss of sales, the effects on the number of prospective firms are unknown creating a need to examine entry and exit trends in textile and clothing

industry. On one hand, import competition may hinder domestic entrepreneurship and a decrease in the number of entrepreneurial initiatives may be observed; on the other hand, the increased competition may stimulate local producers to maintain their position in both domestic and export markets by focusing on high-quality segments and exploiting market opportunities. Therefore, the purpose of this paper is to investigate the effects of import competition – specifically from China – on the entrepreneurship level in Turkish textile and clothing industry.

In the mid-20th century until 1970s, large scale firms were dominant in most of the economies reducing the value of entrepreneurship and the emphasis was on exploitation of economies of scale in production and distribution activities (Carree *et al.,* 2002). However, from 1970s onwards with knowledge and information revolution (Wong *et al.,* 2005) the number of small firms has risen substantially. Even large firms started to restructure themselves in order to be able to serve small niche markets more effectively. The formation of an entrepreneurial class is a crucial function of economic growth for less developed countries where the markets for the effective and efficient allocation of risk across population are insufficient or completely lacking (Grossman, 1984). There are various studies from fields like economics, management theory and industrial economics studying the effects of entrepreneurship on the growth and the development level of countries. Basically, the literature suggests that entrepreneurship contributes to the economic growth through stimulating competition and introducing innovations (Wong *et al.,* 2005).

The effects of determinants of entrepreneurship ranging from economic, technological, demographic, social/cultural to policy determinants (Bosma *et al.,* 2005), vary depending on the level of entrepreneurship under study. At the national level, macroeconomic factors such as unemployment level, industry structure, tax policies or foreign direct investment (FDI) levels have substantial effects on the level of entrepreneurship within a country. Current study focuses on the possible effects of international business activities, specifically import competition, on the entrepreneurship level. With respect to international business activities, the effect of FDI on domestic entrepreneurship has been investigated empirically and the studies concluded that FDI crowd out domestic entrepreneurship in the short run both in developed (Backer and Sleuwaegen, 2003) and in developing countries (Agosin and Machado, 2005). Grossman (1984), studying the effects of international trade, finds that free international trade decreases the supply of local entrepreneurs in less developed countries if the country imports industrial good in equilibrium. Both FDI and import competition has prominent effects on entrepreneurship level while empirical support in literature is underdeveloped. Therefore, current paper will analyze import competition effects – specifically from China – on the entrepreneurship level in Turkish textile and clothing industry. This paper, after analyzing the importance of entrepreneurship at the national level will elaborate on the possible determinants of entrepreneurship. Among the various determinants of domestic entrepreneurship the relationship between international business activities – FDI and import competition – will be discussed next. The paper will than continue with discussions on the accession of China to World Trade Organization (WTO) and its implications on textile and clothing industry. The paper will than follow with the analysis investigating the competition effects of

imports from China to the entrepreneurship level in textile and clothing industry.

Entrepreneurship at the national level

There is consensus in the literature that 1980s have been the turning point when entrepreneurship rates reversed from long-term downward trend. Entrepreneurship as a driver of economic growth has been emphasized by economists for several decades, but the research on the relationship between entrepreneurship and economic growth rate is limited and generates controversial results (Grilo and Thurik, 2004). While most of the economists and public officials emphasize the importance of entrepreneurship in fostering economic growth through creating jobs and wealth (OECD, 1999), some empirical studies report negative relationships (Schultz, 1990; Stel *et al.*, 2005).

Carree *et al.* (2002) analyzing the data for 23 OECD countries from 1976 to 1996 finds evidence for a long-term equilibrium relation between economic development and business ownership but reports that any deviance from the equilibrium self-employment rate could lead to growth penalty due to too little or too much entrepreneurship. Consistent with the findings of Carree *et al.* (2002), Wong *et al.* (2005) using cross-sectional data on 37 countries participating in Global Entrepreneurship Monitor (GEM) find that it is not the existence of entrepreneurial activities that influence the economic growth but the deviation of entrepreneurship levels from the equilibrium rate. Wennekers et al. (2005) analyzing the data of 36 Global Entrepreneurship Monitor (GEM) countries find a U-shaped relationship between nascent entrepreneurship and per capita income indicating that as a country develops economically, entrepreneurship rate decreases, but after a certain level of development, entrepreneurship rate starts to rise again. Tang and Koveos (2004) differentiating between venture entrepreneurship (VE) which covers new venture creation and innovation entrepreneurship (IE) which involves innovations within existing enterprises, find VE to be positively related to GDP growth rate and IE to be negatively related to economic growth rate in high-income countries, while for other countries the results are mixed. Stel *et al.* (2005) conclude that entrepreneurship plays different role in countries at different economic development, while entrepreneurial activity has positive effect on rich countries there exists a negative effect for poor countries.

Entrepreneurship is important in modern open economies due to globalization and the developments in information and communications technology creating a need for structural revolution and reallocation of resources (Wennekers and Thurik, 1999). Fostering entrepreneurship is not only crucial for economic growth but also an urgent imperative to meet the challenge of globalization and structural change affects (OECD, 1999). New start-up firms create jobs, cultivate new entrepreneurs and are important source of new products and new markets (Tang and Koveos, 2004). In essence, the literature suggests that entrepreneurship contributes to economic growth by introducing innovations, creating change and competition (Wong *et al.*, 2005).

The determinants of entrepreneurship

The study of determinants of entrepreneurship integrates views from different fields of study such as psychology, sociology, economy,

technology or governmental policy (Grilo and Thurik, 2004). Authors also state that the study of determinants can also be analyzed in terms of level of analysis: micro, meso and macro levels. Macro level – which is the focus of the current study - integrates micro and meso levels of analysis and focuses on technological, cultural and economic factors. Wennekers and Thurik (1999) analyzing entrepreneurship at individual, firm and macro levels and linking it to economic growth determine three set of conditions affecting entrepreneurship as culture, institutional and personality. Culture, fosters entrepreneurship when it encompasses open-mindedness, risk taking and long-term orientation dimensions. Institutional dimensions such as incentives and competition rules and thirdly, personal characteristics, such as risk taking and tolerance for ambiguity also affect entrepreneurship level positively.

At country level analysis of entrepreneurship, Reynolds *et al.* (2002) develop a model differentiating between nine different entrepreneurship conditions of financial support, government policies, government programs, education and training, research and development transfer, commercial and professional infrastructure, internal market openness, access to physical infrastructure, and cultural and social norms related to entrepreneurship. Bosma *et al.* (2005) distinguishe between economic, technological, demographic, social/cultural and policy determinants at the national level. Carree and Thurik (1999) investigating the variations in entry and exit rates in industries identify four broad category of determinants: industry's environment, stage of the life cycle of the industry, behavioral patterns of incumbents, and business cycle. Brixy and Niese (2003) analyzing the determinants of entrepreneurship to investigate the regional differences in 74 West German planning regions find that high rates of unemployment and urbanization-effects leads to high levels of entrepreneurship. Overall, the literature on the determinants of entrepreneurship suggests that there are various categories of determinants depending on the level of analysis. Because the current paper adopts a macro level of analysis most influential determinants are economic, governmental (policy) and cultural in nature.

Foreign direct investment and import competition effects

Among macro level determinants of entrepreneurship 'openness' of the economy to the international markets will be concentrated. Openness is related to both economic and governmental policy dimensions because international trade and FDI relations are issues that generate policy implications and economic consequences for countries. The effect of FDI and import competition on entrepreneurship within a country has been studied by some authors but the studies generate controversial results in terms of short-term and long-term consequences. Analyzing firm entry and exit in Belgium manufacturing industries, Backer and Sleuwaegen (2003) find that import competition and FDI negatively affect entry and encourage exit of domestic entrepreneurs. The findings are inline with occupational choice models that predict crowding out effect of FDI on domestic entrepreneurs through product and labor market selections (Backer and Sleuwaegen, 2003). However, the empirical findings of the study also state that this crowding out effect would be moderated or reversed in the long-run. These reversed effects occur due to positive effects of FDI on domestic entrepreneurship through linkages, learning and demonstration effects. Formation of backward linkages from affiliates of transnational corporations to domestic firms is important because intangible and

tangible assets are transmitted from affiliates to domestic firms thereby upgrading the domestic enterprises (UNCTAD, 2001). Ayyagari and Kosova (2006) analyzing the effect of FDI on domestic firm entry in 245 industries of Czech Republic during 1994 to 2000 also find positive horizontal and vertical spillovers from FDI. Agosin and Machado (2005) studied the effect of FDI in three developing regions of the world – Africa, Asia and Latin America – between 1971 and 2000. The paper concludes that FDI has best left domestic entrepreneurship unchanged and in some periods crowded out domestic investment. FDI is suggested to be more likely to substitute for domestic investment when it occurs in sectors where domestic firms exist; on the other hand, a complementary relationship between FDI and domestic investment is likely to exist when investment is in an undeveloped sector of the economy (Agosin and Machado, 2005).

Grossman (1984) suggests that openness to international competition in the form of international trade and FDI can hinder the formation of the entrepreneurial class and thus can be unfavorable to the economy as a whole justifying temporary restrictions to trade and inward foreign flows. By developing two models and comparing free trade and autarky, Grossman (1984) finds that openness inhibits the formation of local entrepreneurial class if less developed country imports the product in the free-trade equilibrium. However, all these do not imply that openness is detrimental to a less developed economy and therefore should be avoided to protect local producers. Especially, in today's world where all the markets are integrated and globalization is the central issue, openness is inevitable and undoubtfully contributes to both social and economic development in the long-run. What is important is the ability of the local economy and therefore domestic entrepreneurs to compete with international players. In other words, 'contraction of the supply of local entrepreneurs when faced with competition from abroad whether in the form of international trade of FDI should be seen as indicative of a more fundamental market failure, namely the inability of the economy to share its production risks in an efficient manner' (Grossman, 1984, p. 612). In line with argument of Grossman (1984), Backer and Sleuwaegen (2003) studied the import competition effects on net entry and exit. The results indicated that import competition and the inflow of FDI have a negative effect on the entry of the domestic entrepreneurs. Imports create strong competitive environment which leads to a fall in prices in product markets consequently discouraging domestic entrepreneurs to enter the shrinking domestic market. However, the negative effect of FDI is found to be significantly larger when compared to the effects of import competition indicating that FDI hinder domestic entrepreneurship by both creating a decrease in prices in the market and by skimming of the best workers in the labor market and could have been potential entrepreneurs (Backer and Sleuwaegen, 2003).

China's accession to World Trade Organization

With the liberalization of textile and clothing industry and corresponding accession of China to World Trade Organization (WTO), the pattern of trade in textile and clothing industries has changed considerably. Because China dominated the industry with its low-cost advantage, other leading exporters of textile and clothing in the world have been negatively affected by this liberalization. Considering that textile and clothing industry is a major source of competitive advantage for Turkey and in the year 2006 these two

industries have 34%[1] share in total exports of Turkey, China's accession to WTO has also affected the Turkish textile and clothing industry both in terms of domestic sales and in export markets.

Textile and clothing are integrated industries in terms of both technology and policy considerations because textile provides the inputs of the clothing industry providing opportunities for vertical linkages. These industries are both labor-intensive, low-wage, dynamic and innovative depending on the focused market segment. In high-quality fashion markets the industry uses modern technology, employees and designers are paid high and there is high degree of flexibility but in the other segment there is mass production, female workers are employed with low levels of wages (Nordas, 2004). While high-quality fashion markets are observed in certain clusters of developed countries, the mass production segment usually appears in developing parts of the world because of the less complexity of machinery and technology involved in production.

Textile and clothing industry, and international trade of those products, have been important elements of economic activity since the Industrial Revolution mainly because they are basic items of consumption in all countries (Gelb, 2001). Textiles and clothing played a critical role in the early stage of industrialization in Britain, parts of North America, and Japan, and more recently in the export-oriented growth of the East Asian economies (Yang and Zhong, 1998). After more than forty years of import quotas, the textile and clothing sector has been liberalized and now is subject to the general rules of the General Agreement on Tariffs and Trade as of 1 January 2005 (Yang and Zhong, 1998). With liberalization, in the last two decades, several ASEAN economies (such as India, Pakistan and Bangladesh) and China have become large producers and exporters of textiles and clothing.

The international trade in textile and clothing is dominated by Europe and Asia while North America has considerable share in terms of imports in clothing. Europe has a significant level of share both in imports and exports of textile and clothing industry, yet, when the analysis is made at country level, it is observed that small number of economies, i.e., China, Hong Kong, South Korea, Mexico, India, Italy, the US, Germany dominate the trade in textile and clothing. (Yeung and Mok, 2004). When the global top ten exporter and importer countries are examined in textile and clothing sectors it is observed that developed countries has lost share in exports. The decrease in exports of developed world has been offset by increasing market share of developing countries – especially of China, Hong Kong, Taiwan and South Korea. The global market share of Chinese textile increased from 6.9% in 1990 to 20.2% (US$ 41.05 billion) in 2005 and clothing increased from 8.9% in 1990 to 26.9 % (US$ 74.16 billion) in 2005 (WTO, 2006) and since 1995, China has been the largest exporting country for textile and clothing products in the world (WTO, 2001). When the top ten importing countries are analyzed, significant increase in the import shares of developed countries are observed.

Turkey, ranked among the top ten leading exporters of textile and clothing industry in the world, has reasonable amount of share in export in both textile and clothing industry (Table 1). However,

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[1] Information about textile and clothing trade figures are retrieved from Undersecretariat of the Prime Ministry for Foreign Trade of Turkey.

according to the annual percentage change statistics of World Trade Organization (WTO), Turkey's textile exports increased by only 10% in 2005 as compared to 24% increase in 2003. In clothing industry this increase drops to 6% in 2005, as compared to 24% increase in 2003.

Table 1: Turkey's share (%) in export of world textile and clothing industry*

Turkey	1980	1990	2000	2005	Value in 2005 (billion $)
textile exports	0.6	1.4	2.3	3.5	7.07
clothing exports	0.3	3.1	3.3	4.3	11.82

*Source World Trade Organization (WTO)

The emergence of China as a world trade power has raised concerns both in developed and developing economies about its potential impact on the world market (Wang, 2003). China has been the largest producer and exporter of textiles and clothing of the world since 1995 therefore China's accession to World Trade Organization (WTO) has incredible implications for the development of the whole industry globally (Yeung and Mok, 2004).

Chinese textile and clothing industry profited the most from China's entry into the World Trade Organization (Soranlar, 2003). WTO accession affected the Chinese textile and clothing industry in terms of both the reduction of import tariffs and the elimination of export quotas. Chinese firms are now able to import their raw materials and machines at much lower tariffs lowering their production costs and improving their competitiveness (Yeung and Mok, 2004). Because these industries – especially clothing – are labor-intensive a major source of comparative advantage of Chinese textile and clothing industry lies in its abundant supply of unskilled labor (Yang and Zhong, 1998). With elimination of export quotas in 2005 there has been sudden increase in the export markets and Chinese exports reached to US$41 billion and to US$74 billion in textile and clothing industries respectively (Table 2). The Chinese textile and clothing industry remain to be the major source of foreign trade. Therefore, textile and clothing exports is of vital importance for China both to its economic development and foreign exchange balance (Soranlar, 2003).

Table 2: China's share (%) in export of world textile and clothing industry*

China	1980	1990	2000	2005	Value in 2005 (billion $)
textile exports	4.6	6.9	10.3	20.2	41.1
clothing exports	4.0	8.9	18.2	26.9	74.2

*Source World Trade Organization

Overall, from the perspectives of reducing import tariffs, eliminating export quotas and the regulation on trade disputes, China's accession to WTO does matter for majority of the firms in textile and clothing industry but from the perspective of compliance with international standards some firms may not be able to survive in this competitive environment (Yeung and Mok, 2004). With the elimination of export quotas, the structure of textile industry is changing throughout the world where low-quality and low-price products will lose their competitive advantage in the near future as customers' tastes and

preferences change. With increased competition customers are now more selective and are after high-quality products with lowest prices. This trend will directly affect Chinese producers and oblige them to increase their competitiveness by increasing their output quality without destroying their low-cost advantage.

Turkish textile and clothing industry

Textile and clothing industries have approximately 34% share in Turkey's exports, have 10.9% share in total employment of Turkey and they are important financial sources for the imports of the country[2]. Therefore textile and clothing industries are very important for Turkey in terms of country's competitive advantage in international markets. Turkey is the 6th cotton producer and 5th cotton consumer of the world; in clothing industry it is the 5th supplier of the world and is the second largest supplier in the European Union market and in textile industry it is 10th supplier of the world and is the biggest supplier in the European Union market (Efe, 2005).

Textile and clothing industry had 26.7% share in total exports of the country in 1980 and this share has increased to 39.4% in 1998. However, from 1998 and onwards a downward trend is observed with a share of 28% in the year 2004[2]. There are reasons for this decrease such as economic crisis within the country and increased competition throughout the world due to the elimination of export quotas. When the share of each country in total exports of textile and clothing is analyzed (Table 3) it is observed that, European Union market has a significant share in both textile and clothing exports. Turkey's high level of market share in EU's textile imports can be attributed to the EU-Turkey customs union that entered into force in 1996 (Nordas, 2004). The import shares of textile and clothing industry are approximately at 5% levels with US$2 billion in 1996 increasing only to US$4.8 billion in 2004 (Nordas, 2004). Considering these, total export of textile and clothing industry is approximately four times of imports, in other words Turkey is a net exporter in both of these industries.

Table 3: Turkey's textile and clothing exports by distribution of countries*

Textile			Clothing		
Countries	1996	2001	Countries	1996	2001
Germany	32,6	24,0	Germany	44,5	32,5
UK	8,4	11,0	USA	10,5	18,5
USA	7,0	10,9	UK	5,7	12,8
France	6,1	7,1	France	7,0	6,3
Italy	4,8	6,4	Holland	5,3	4,9
Holland	4,1	3,7	Belgium	1,9	2,6
Belgium	2,2	2,6	Russia	6,9	2,4
Israil	0,9	1,7	Italy	1,8	2,2
Spain	0,7	1,6	Denmark	0,9	1,9
Russia	4,6	1,6	Spain	0,5	1,6
EU counties	63,0	63,0	Sweden	0,8	1,2

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[2] Information about textile and clothing trade figures are retrieved from Undersecretariat of the Prime Ministry for Foreign Trade of Turkey.

			Israil	0,1	1,2
			EU counties	70,7	68,1

* Adapted from Kanoglu and Ongut (2003)

Considering the high share of EU in total textile and clothing exports of Turkey, the effect of elimination of export quotas and accession of China to WTO would have the highest impact to Turkish textile and clothing in European Union market. While in both textile and clothing industry Turkey has high levels of shares in EU market, according to the United Nation's trade database China was the largest supplier in clothing in both 1995 and 2002 and its market share has increased from 14% in 1995 to 20% in 2002. Turkey, although advanced to second place following the customs union between EU and Turkey, its market share has been stable at 10 % (Nordas, 2004) in clothing industry.

Considering that clothing industry is more labor-intensive most of the firms in clothing industry are small and medium sized enterprises and they are usually contract manufacturers. On the other hand, in textile industry the firms are large and capital-intensive. There are approximately 40 thousand firms currently operating in the industry and nearly one fourth of them active exporters (Efe, 2005). Additionally, textile and clothing firms approximately constitute one fourth of the biggest 500 largest firms of Turkey. Overall, having a flexible production capacity and skilled labor supply and being geographically close to the targeted export markets Turkey have a competitive advantage in textile and clothing industry. However, Turkey has a disadvantage in generating competitive prices due to high production costs. For instance, while the OECD average of public burden – tax and social security payments – is 18 % it is 41% in Turkey (Efe, 2005).

Import competition from China and entrepreneurship in Turkey

With the removal of export quotas and emergence of China as an important player in textile and especially clothing industry, Turkish domestic manufacturers of textile and clothing products are faced with a fierce competition. The import competition created by low-priced Chinese imports decreased the prices in the domestic market and destroyed the competitive position of Turkey in export markets. While these are effects on the firms currently operating in the market, the current paper investigates the possible effects on entrepreneurship level in textile and clothing industry.

Entrepreneurship in Turkey

Global Entrepreneurship Monitor (GEM) develops a cross-national assessment of entrepreneurial activity in 42 countries with an aim to measure differences in the level of entrepreneurial activity between countries (Bosma and Harding, 2006). GEM provides two measures of entrepreneurial activity: early-stage entrepreneurial activity and established business owners. Early-stage entrepreneurial activity in Turkey is considerably low (6.1%) when compared to the other countries involved in the monitor (Bosma and Harding, 2006). Bosma and Harding (2006) find that developing or less developed countries have considerably high levels of early-stage of entrepreneurial activity when compared to developed countries. When established business ownership percentages are analyzed (Bosma and Harding, 2006), 11.5% of

the adult population (aged 18-64) in Turkey is established business owners. These results indicate that while dynamic entrepreneurial propensity of Turkey is not very high, percentage of the population actively involved in running businesses is considerably high compared to other countries in the study. On the other hand, the self-employment statistics of OECD reveals that the percentage of people that run their own-business has showed a downward trend between the years 1995 and 2005 (Figure 1) although it has still the highest percentage among the OECD countries.
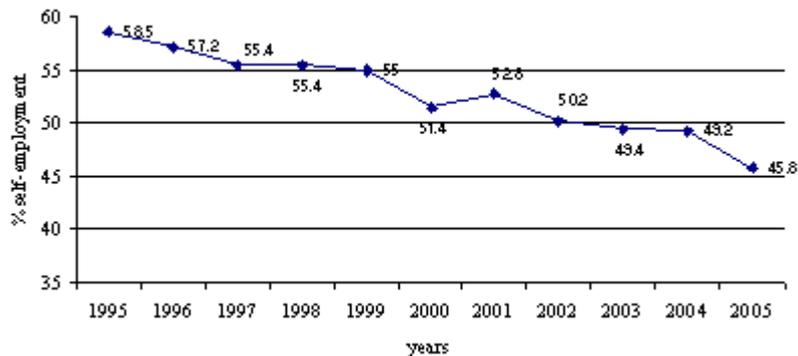
* Source Organisation for Economic Co-operation and Development (OECD)

Figure 1: Self-employment rate in Turkey as a percentage of total civilian employment*

Measuring entrepreneurship

Obtaining a measure of entrepreneurship at the national level is difficult (Wong *et al.*, 2005). Wennekers and Thurik (1999) defined three types of entrepreneurs as Schumpeterian entrepreneurs, managerial business owners and intrapreneurs. Current paper focuses on both Schumpeterian entrepreneurs (entrepreneurs owning innovative and creative small firms) and managerial business owners (self-employed managers) but not intrapreneurs who are entrepreneurs in established firms. Although it is difficult to measure entrepreneurship, it may be appropriate to count numbers at the aggregate level (Wennekers and Thurik, 1999). There are basically two approaches with respect to modeling entrepreneurship at the aggregate level. The first approach focuses on the net development of the number of entrepreneurs in an equilibrium framework (self-employment or business ownership measure) and the second approach focuses on the entries and exits of entrepreneurs (Bosma *et al.,* 2005). Wennekers and Thurik (1999) suggest that using self-employment as yardstick of entrepreneurship at the aggregate level can be misleading because 'it is unknown whether the relatively high number of self-employed in Italy as compared to the Netherlands expresses a high level of Schumpeterian entrepreneurs or merely a time-lag in economic development influencing the number of managerial establishments' (Wennekers and Thurik, 1999, p. 49). Backer and Sleuwaegen (2003) use entry and exit rates as an indicator to measure domestic entrepreneurship. Agarwal and Gort (1996) in examining entry, exit and survival of firms in terms of evolutionary changes in the market, defines entry and exit rates as entry and exit in time *t* divided by the total number of firms in time *t-1*. Considering these, current paper uses exit and entry rates of

businesses as a measure to determine the domestic entrepreneurship level in Turkish textile and clothing industry.

Analysis

The trend of entry and exit in Turkish manufacturing industry is dominantly determined by textile, clothing and engineering sectors (Kaya and Ucdogruk, 2002). With respect to textile and clothing industry, new venture creation is historically high due to export opportunities especially after 1990s (Kanoglu and Ongut, 2003). The ease of firm entry can be attributed to the labor-intensive characteristics of these sectors indicating low investment costs. When the entry and exit in textile and clothing industry is analyzed between the years 1996-2006 (Table 4), it is observed that there is net entry in both of these sectors. While domestic demand for textile and clothing products is high, most the firms in these industries are export-oriented firms. Considering this, the net entry position of Turkey in both textile and clothing sectors indicates that these industries still stimulate entrepreneurs especially with sales opportunities in export markets. This indirectly indicates that Turkey still preserves its competitive advantage in international markets.

Table 4: Firm entry and exit in textile and clothing industry*

Year	entry		exit		net entry	
	textile	clothing	textile	clothing	textile	clothing
1996	346	174	145	71	201	103
1997	180	135	126	124	54	11
1998	236	182	138	103	98	79
1999	221	312	77	51	144	261
2000	213	183	62	10	151	173
2001	100	123	61	53	39	70
2002	330	168	124	59	206	109
2003	521	379	101	69	420	310
2004	605	209	165	32	440	177
2005	524	176	153	31	371	145
2006	474	238	162	63	312	175

* Source: Turkey Statistics Institute

The measurement of entry and exit rates is determined by entry (exit) in time *t* as a percentage of total number of firms in time *t-1*. In textile industry, the lowest number of entry is observed in the year 2001 (Figure 1) followed by entry in the years 1997 and 2005. The low levels of entry in the years 1997 and 2001 are most probably due to the financial crisis in Turkey. These two financial crises inhibit potential entrepreneurs in two ways. First of all, those firms operating in the industry experienced severe financial collapse in terms of profit margins constituting a negative stimulus for those planning to invest in the sector. Secondly, the economic environment in the country negatively effected all investment decisions, especially due to high costs of investment loans. The low level of entry in the year 2005, although there may be many other macroeconomic reasons, may be attributed to the high import competition especially from China decreasing the product prices both in domestic and export markets. This decrease in product prices may prevent those entrepreneurs from investing in textile industry especially if they

focus on the low-quality segment of the market. The highest level of entry is observed in the year 2003 followed by entry in 1999 due to developing economic conditions. When the exit rates are analyzed it is observed that highest level of exit is in the year 1997 due to the financial crisis in Turkey. When compared to entry rates, exit rates have a more stable trend with a rate of approximately 0.2% in the past five years.
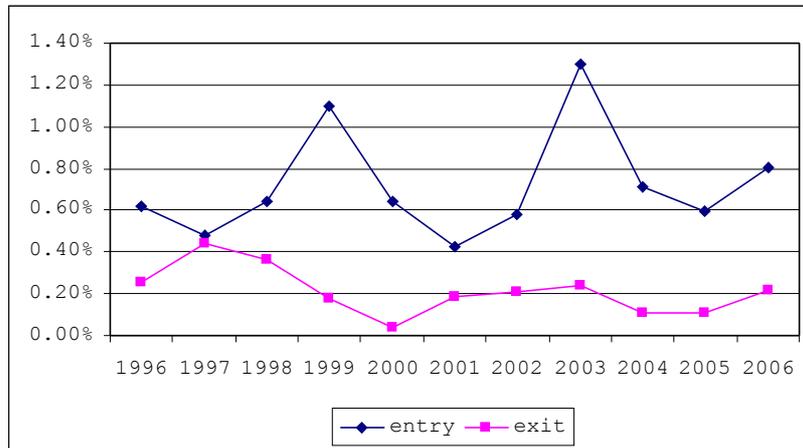
Figure 1: Firm entry and exit rates in textile industry

Entry rates in clothing industry shows a somewhat different trend when compared textile industry (Figure 2). The lowest level of entry is still observed in the year 2001 followed by the entry rate in the year 1997 possibly due to financial crisis. However, between the years 1997 and 2001 no sharp increase is observed in firm entry in clothing sector although this was the case in textile industry. From 2001 and onwards, an upward trend is observed with a peak value in the year 2004 followed by a downward trend from there on. The increasing trend from 2001 can be attributed to progressing economy while the downward trend after 2004 can be attributed to the increased international competition.
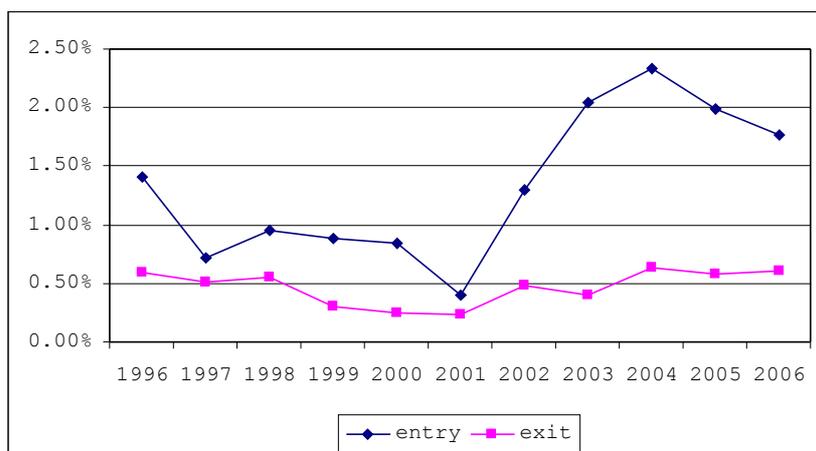
Figure 2: Firm entry and exit rates in clothing industry

When the textile and clothing imports from China is analyzed in the corresponding years (Figure 3), it is observed that textile imports have risen substantially after 2001 which corresponds to China's accession to World Trade Organization (WTO). Although clothing imports have also risen, it is relatively low when compared to textiles mainly because of the quotas still applied to clothing imports from China. The increased amount of China's textile and clothing imports creates a very competitive environment in the domestic market. The most important differentiating characteristics of Chinese imports are their low-cost advantage. The low-cost advantage of these textile imports provides low-cost inputs for clothing firms in Turkey decreasing their unit costs. This is the main reasons behind the sharp increase in Chinese textile imports with the elimination of quotas.

Figure 3: Textile and clothing imports from China*
*Source Undersecretariat of the Prime Ministry for Foreign Trade.

To understand whether Chinese imports hinder domestic entrepreneurship in textile and clothing industry, correlations are computed between entry and exit rates in textile and clothing industry and Chinese textile and clothing imports (Table 5).

Table 5: Correlations of firm entry, exit and imports in textile and clothing industry

	entry_tx	exit_tx	entry_cl	exit_cl	china_tx	china_cl
entry_tx	1.000					
exit_tx	0.406	1.000				
entry_cl	*0.649**	−0.132	1.000			
exit_cl	−0.318	−0.107	0.259	1.000		
china_tx	*0.697**	0.144	*0.533*	−0.309	1.000	
china_cl	*0.729**	0.121	0.484	−0.431	0.977**	1.000

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

The correlation of textile imports from China (china_tx) shows that there is positive correlation ($p = 0.697$) with entry in textile industry (entry_tx). In other words, Chinese increased level of textile imports has a significant positive relationship with the entry rate in textile industry. While it is only significant at 0.10 level there is still a positive correlation ($p = 0.533$) between textile

imports from China (china_tx) and entry in clothing industry (entry_cl). The correlations of clothing imports from China (china_cl) shows a significant relationship with entry rate in textile industry (entry_tx) (p = 0.729) while no significant relationship can be established with entry in clothing industry (entry_cl). Moreover, entry in textile and clothing industries also show a significant positive relationship, constituting an evidence of the close relationship between these two industries. These two industries are integrated because textile provides inputs to clothing industry and they are integrated in terms of policy considerations (Nordas, 2004). The correlations show that the increase in Chinese imports in textile and clothing industry has a positive relationship with firm entry in textile industry while such a conclusion cannot be drawn for firm entry in clothing industry. The results of the analysis reveal that import competition generated from low-cost Chinese textile and clothing imports does not hinder domestic entrepreneurship in textile and clothing industry in Turkey. Moreover, although it is too early to draw a general conclusion and further empirical support is needed, it is observed that import competition stimulates domestic entrepreneurship. This finding is contrary to Backer and Sleuwaegen's (2003) findings that import competition has a negative effect on the entry of the domestic entrepreneurs. However, considering that, contraction of the local supply of entrepreneurs when faced with import competition is a signal of a major market failure, in terms of efficiency in production (Grossman, 1984), an industry level of analysis is more appropriate to investigate the real pattern of relationship. Because textile and clothing industries are developed industries where Turkey has a competitive advantage, it is reasonable to accept that import competition does not inhibit the growth of these industries. Firms in textile and clothing industry are obviously affected by the low-cost products of China. However, the increased international competition, instead of hampering domestic entrepreneurs planning to invest in these sectors, has stimulated them especially in the high-quality segment of the market where China does not have a competitive advantage.

The Chinese exports are low-cost but at the same time low-quality products. While these imports may create competition in low-quality segment of the market, high-quality segment is not affected by increased participation of China in textile and clothing industry. While, in terms of unit costs, Turkey is behind China and India; in terms of weaving quality it is far ahead of these countries (Efe, 2005). An analysis about the Turkey's competitiveness in textile and clothing industry shows that, in terms of weaving quality, technology, marketing capability and clothing fashion, Turkey has a better position compared to China and India and only in terms of unit cost China has an advantage over Turkey (Kanoglu and Ongut, 2003). Turkey's main advantages in textile and clothing industries are, being close to high-quality and fashion markets easing the transportation and communication opportunities, it's developed weaving industry, and its skilled and educated labor force. China's main advantage is its low unit costs due to its low-cost labor. However, China would only be able to preserve it competitive position in the international markets in the short-run (Yeung and Mok, 2004). In the long-un, Chinese firms will face the fierce international competition in terms of higher product quality. With increased globalization, markets are integrated more than ever before and consumers are now looking for the highest quality product with the lowest price. Therefore, the sustainability of the long-term competitive advantage can only be achieved by

concentrating on research and development and providing highest-quality products to the market with differentiating product characteristics. While Turkey can not compete with low-quality textile and clothing products produced by low-skilled and low-cost labor of China, it can compete with high-quality products in developed markets (Kanoglu and Ongut, 2003). Due to high production costs in Italy if Turkey can succeed in high-quality production and marketing capabilities it can even be able to compete with Italian textile and clothing industries. Considering these, textile and clothing firms in Turkey started to concentrate on the high-quality segment of the market. Turkish firms, in order to excel in international markets, need to focus on research and development, develop marketing skills and create 'fashion brands' for the development of the textile and clothing industry in general (Efe, 2005).

Conclusion

With liberalization in textile and clothing industry China is now a dominant player in the world market. The increased participation of China is important for Turkey because textile and clothing industries are important for the country in terms of their contribution to gross national product, export potential and employment opportunities. The potential impact of import competition on entrepreneurship level in these sectors is very crucial. The results of the analysis states that textile and clothing imports from China did not hinder domestic entrepreneurship in textile industry instead have a positive relationship with the level of firm entry. In other words, international competition from China does not negatively affect entrepreneurs planning to invest in textile industry. Although further empirical support is needed it can be concluded that international competition contributes to the development of these industries in general by stimulating potential entrepreneurs to concentrate on high-quality segments of the market. In conclusion, this paper finds that firm entry in textile industry in Turkey is positively associated with the import competition from China indicating that, Turkey still have a competitive advantage in this industry and entrepreneurs can find niche market opportunities with high-quality fashion products.

References

Agarwal, R., and M. Gort, 1996, "The Evolution of Markets and Entry, Exit and Survival of Firms," *The Review of Economics and Statistics,* 78(3), 489-498.

Agosin, M.R. and R. Machado, 2005, "Foreign Investment in Developing Countries: Does It Crowd In Domestic Investment?," *Oxford Development Studies,* 33(2), 149-162.

Ayyagari, M. and R. Kosová, 2006, "Does FDI Facilitate Domestic Entrepreneurship? Evidence From The Czech Republic," Working Paper 0008. School Of Business, The George Washington University.

Backer, K.D. and L. Sleuwaegen, 2003, "Does Foreign Direct Investment Crowd Out Domestic Entrepreneurship?," *Review of Industrial Organization,* 22(1), 67-84.

Bosma, N., G. Wit, and Carree, M., 2005, "Modelling Entrepreneurship, Unifying The Equilibrium and Entry/Exit Approach," *Small Business Economics,* 25(1), 35-48.

Brixy, U., and M. Niese, 2003, "The Determinants of Regional Differences in New Firm Formation in West-Germany," Paper Presented on the 43rd Congress of The European Regional Studies, Finland.

Carree, M.A. and Thurik, A.R., 1999, "The carrying capacity and entry and exit flows in retailing," *International Journal of Industrial Organization*, 17(7), 985-1007.

Carree, M., A. Van Stel, R. Thurik, and S. Wennekers, 2002, "Economic Development and Business Ownership: An Analysis Using Data of 23 OECD Countries in The Period 1976-1996," *Small Business Economics*, 19(3), 271-290.

Efe, B., 2005, *How will Turkish Textile and Clothing Industry Defend its Competitive Position after 2005?*, İzmir Chamber Of Commerce, viewed 24 April 2009, <http://Www.Izto.Org.Tr/NR/Rdonlyres/7475BDA1-95B7-4855-B351-9ADCE4362AFE/4459/Tekstil2.Pdf>.

Gelb, B. A., 2001, *Textile and Apparel Trade Issues*, viewed 24 April 2009, < http: // www.Ncseonline.Org/NLE/Crsreports/Economics/Econ-134 .Cfm>.

Grilo, I., and Thurik, R., 2004, "Determinants of Entrepreneurship in Europe," Discussion Papers on Entrepreneurship, Growth and Public Policy 2004-30. Max Planck Institute of Economics, Group for Entrepreneurship, Growth and Public Policy.

Grossman, G.M., 1984, "International Trade, Foreign Investment, and The Formation of The Entrepreneurial Class," *The American Economic Review,* 74(4), 605-614.

Kanoglu, N., and E. Ongut, 2003, "Textile and Clothing Industry in The World and Turkey's Competitive Power," State Planning Organization, Paper 2668, Ankara.

Kaya, S., and Y. Ucdogruk, 2002, "The Dynamics of Entry and Exit in Turkish Manufacturing Industry," Paper Presented at the ERC/METU International Conference In Economics VI, Ankara, September 11-14.

Nordås, H.K., 2004, "The Global Textile and Clothing Industry Post The Agreement on Textiles and Clothing," Discussion Paper 5, World Trade Organization, Geneva.

OECD, 1999, "Fostering Entrepreneurship," The OECD Job Strategy, OECD, New York.

UNCTAD, 2001, *World Investment Report: Promoting Linkages*, United Nations, New York and Geneva.

Reynolds, P.D., W.D. Bygrave, E. Autio, L.W. Cox, and M. Hay, 2002, *Global Entrepreneurship Monitor Executive Report*, Ewing Marion Kauffman Foundation.

Stel, A. Van, M. Carree, and R. Thurik, 2005, "The Effect of Entrepreneurial Activity on National Economic Growth," *Small Business Economics,* 24(3), 311-321.

Schultz, T. P., 1990, "Women's Changing Participation in The Labor Force: A World Perspective," *Economic Development and Cultural Change,* 38(3), 457-488.

Soranlar, B., 2003, "China's WTO Accession and it's Implications on Textile Industry," Unpublished Master Thesis, Master Of Science In Administrative Studies, Metropolitan College, Boston University.

Tang, L. and P.E. Koveos, 2004, "Venture Entrepreneurship, Innovation Entrepreneurship, and Economic Growth," *Journal of Developmental Entrepreneurship,* 9(2), 161-171.

Yang, Y. and C. Zhong, 1998, "China's Textile and Clothing Exports in a Changing World Economy," *The Developing Economies,* 36(1), 3-23.

Yeung, G. and Mok, V., 2004, "Does WTO Accession Matter For The Chinese Textile and Clothing Industry?," *Cambridge Journal Of Economics,* 28(6), 937-954.

Wang, Z., 2003, "The Impact of China's WTO Accession on Patterns of World Trade," *Journal of Policy Modeling,* 25(1), 1-41.

Wennekers, S. and R. Thurik, 1999, "Linking Entrepreneurship and Economic Growth," *Small Business Economics,* 13(1), 27-55.

Wennekers, S., A. Van Stel, R. Thurik and P. Reynolds, 2005, "Nascent Entrepreneurship and Economic Development," *Small Business Economics*, 24(3), 293-309.

Wong, P.K., Y.P. Ho, and E. Autio, 2005, "Entrepreneurship, Innovation and Economic Growth, Evidence From GEM Data," *Small Business Economics,* 24(3), 335-350.

World Trade Organisation, 2001, *International Trade Statistics 2001*, viewed 24 April 2009, <http:// www.wto.org/english/res_e/statis2001_ e/its06_toc_e. htm>.

World Trade Organisation, 2006, International *Trade Statistics 2006*, viewed 24 Aprill 2009, <http:// www.wto.org/english/res_e/statis_e/i ts2006_e/its06_toc_e.htm>.