## COMPETITIVENESS OF TURKISH TEXTILES AND CLOTHING INDUSTRY

# A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF SOCIAL SCIENCES OF MIDDLE EAST TECHNICAL UNIVERSITY

 $\mathbf{BY}$ 

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# IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN THE DEPARTMENT OF BUSINESS ADMINISTRATION

**JANUARY 2013** 



I hereby declare that all information in this document has been obtained and

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iii

**ABSTRACT** 

COMPETITIVENESS OF TURKISH TEXTILES AND CLOTHING INDUSTRY

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Turkish textile and clothing industry is one of the pillar industries of Turkish

economy with its contribution to export, GDP and employment. Also, it has linkages

with many other industries. As a consequent, developments emerged in the industry

eventually affect the overall economy of Turkey. Hence, analysis of the

competitiveness of the enterprises operating in the textile and clothing industry of

Turkey is very important for a more competitive country.

Within this context, the purpose of this study is to explore the key determinants of

competitiveness of Turkish textiles and clothing industry, and analyze the effects of

firm characteristics and future expectations on perceived competitive advantage of

Turkish textiles and clothing firms. The study further purposes to analyze the Turkish

textiles and clothing industry's structure.

**Keywords:** Competitiveness, textiles and clothing industry, perceived competitive

advantage, Turkey

iv

ÖZ

TÜRK TEKSTİL VE HAZIR GİYİM SEKTÖRÜNÜN REKABETÇİLİĞİ

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Tez Yöneticisi: Prof. Dr. Özlem YILMAZ

Ocak 2013, 127 sayfa

Türk tekstil ve hazır giyim sektörü ihracata, GSYİH'ye ve istihdama olan katkısı

bakımından, Türkiye ekonomisinin en önemli sektörlerinden biridir. Ayrıca, pek çok

sektör ile bağlantısı bulunmaktadır. Anılan nedenle, sektörde ortaya çıkan gelişmeler

tüm Türkiye ekonomisini etkilemektedir. Dolayısıyla, tekstil ve hazır giyim

sektöründe faaliyet gösteren firmaların rekabetçiliğinin analizi, daha rekabetçi bir

ülke için oldukça önemlidir.

Bu çerçevede, bu çalışmanın amacı, Türk tekstil ve hazır giyim sektöründe

rekabetçiliğin belirleyici faktörlerinin araştırılması ve firma özellikleri ile gelecek

beklentilerinin Türk tekstil ve hazır giyim firmalarının rekabetçi avantaj algısı

üzerindeki etkilerinin analiz edilmesidir. Çalışma ayrıca, Türk tekstil ve hazır giyim

sektörünün yapısının analiz edilmesini amaçlamaktadır.

**Anahtar Kelimeler:** Rekabetçilik, tekstil ve hazır giyim sektörü, algılanan rekabetçi

avantaj, Türkiye

to my beloved grandfather and grandmother

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## TABLE OF CONTENTS

PLAGIAF	RISM		iii
ABSTRA	CT		iv
ÖZ			v
LIST OF	ABBR	EVIATIONS	X
LIST OF	TABLI	ES	xi
LIST OF	FIGUR	ES	xiv
CHAPTE	R		
1. INTRO	DUCT	TON	1
2. TURKI	SH TE	XTILES AND CLOTHING INDUSTRY	4
2.1. H	History	of Turkish Textiles and Clothing Industry	4
2.2. F	Product	ion Processes of Textile and Clothing Industry	5
2.3. F	Present	Situation of Turkish Textiles and Clothing Industry	7
2.3.1	Tex	xtiles and Clothing Industry's Contribution to the Turkish	
Econo	omy		7
2.3.2	For	reign Trade of the Turkish Textiles and Clothing Industry	8
2.3.3	Tu	rkish Textiles and Clothing Industry's Cluster Map	13
2.3.4	Tu	rkish Textiles and Clothing Firms and Brand Shares	14
2.3.5	E-0	Commerce of the Turkish Textiles and Clothing Industry	19
2.3.6	Ch	aracteristics of the Turkish Textiles and Clothing Products	21
2.3.7	Leg	gal Environment of Turkish Textiles and Clothing Industry	23
2.3.8	SW	OT Analysis of the Turkish Textiles and Clothing Industry	24
2.3.9	Pro	oblems of the Turkish Textiles and Clothing Industry	29
2.3	3.9.1	High Production Costs	29
2.3	3.9.2	Inadequacy of Marketing Efforts – Branding	31
2.3	3.9.3	Unplanned Investments – Excess Capacity	32
2.3	3.9.4	Unregistered Labor Force	33
2.3	3.9.5	Financing	33
2.3	3.9.6	Shrinking Demand Because of the Global Crisis	34

	2.3.9.7	Insufficient Coordination and Cooperation between	
	Governm	ent and Private Sector	34
3. PO	RTER'S A	PPROACHES FOR COMPETITIVENESS AND CHINA	
EXAN	MPLE		35
3.1.	Nation	Level Competitiveness	36
3.2.	Firm –	Industry Level Competitiveness	39
3.3.	Porter's	s Diamond Model	42
3.4.	Porter's	s Five Forces Model	46
3.5.	China I	Example	50
4. TH	E MODEL	AND HYPOTHESES DEVELOPMENT	53
5. SU	RVEY DE	SIGN	58
6. SA	MPLING A	AND DATA	61
7. RE	SULTS		90
8. CO	NCLUSIO	N	106
REFE	RENCES.		109
APPE	NDICES .		115
1. <b>Q</b>	Questionnai	re	115
2. R	Results of the	he Stepwise Regression Analysis	125
3. T	ez Fotokoj	pisi İzin Formu	127

#### LIST OF ABBREVIATIONS

ATC The Agreement on Textiles and Clothing

BKM The Interbank Card Center

CUR Capacity Utilization Ratio

E-Commerce Electronic Commerce

EU European Union

FDI Foreign Direct Investments

GDP Gross Domestic Product

ITC International Trade Center

ITKİB Istanbul Textile and Apparel Exporters' Associations

İTO İstanbul Chamber of Commerce

KOSGEB Small and Medium Enterprises Development Organization

OECD Organization for Economic Cooperation and Development

R&D Research and Development

SME Small and Medium Sized Enterprise

T&C Textiles and Clothing

TL Turkish Lira

TOBB The Union of Chambers and Commodity Exchanges of Turkey

TTSİS Turkish Textile Employers' Association

TÜİK Turkish Statistical Institute

UK United Kingdom

USA United States of America

VAT Value Added Tax

WTO World Trade Organization

## LIST OF TABLES

## **TABLES**

Table 1: Top 20 Markets of Turkish Textiles and Clothing Products
(Thousand US Dollars)9
Table 2: Top 20 Products Exported by Turkey (Thousand US Dollars)10
Table 3: Top 20 Supplying Markets of Textiles and Clothing Products
Imported by Turkey (Thousand US Dollars)
Table 4: Top 20 Products Imported by Turkey (Thousand US Dollars)
Table 5: Number of Work Places According to Branch of Activities
Table 6: Sales of Apparel by Category 2008-2011 (Billion TL, Retail Value) 15
Table 7: Apparel Brand Shares in Turkish Market 2008-2011 (% retail value) 16
Table 8: Apparel Brand Shares in Worldwide Market 2008-2011 (% retail value) 18
Table 9: Internet Retailing by Category: Value 2006-2011 (Million TL)21
Table 10: World Economic Forum's Global Competitiveness Index
Table 11: China Textile Market Segmentation, by value, 2010
Table 12: Frequencies: Product Group
Table 13: Descriptive Statistics: Firm Age
Table 14: Frequencies: Firm Size
Table 15: Descriptive Statistics: Firm Size
Table 16: Frequencies: Production Type
Table 17: Frequencies: Market Share
Table 18: Descriptive Statistics: Market Share
Table 19: Frequencies: Compensation
Table 20: Descriptive Statistics: Compensation
Table 21: Frequencies: Export
Table 22: Frequencies: Export Quantity Change
Table 23: Descriptive Statistics: Export Quantity Change
Table 24: Frequencies: Export Share in Total Sales
Table 25: Descriptive Statistics: Export Share in Total Sales
Table 26: Frequencies: Export Markets 60

Table 27: Frequencies: Capacity Utilization Ratio (CUR)	. 69
Table 28: Descriptive Statistics: Capacity Utilization Ratio (CUR)	. 70
Table 29: Frequencies: Imported Machines	. 70
Table 30: Descriptive Statistics: Imported Machines	. 70
Table 31: Frequencies: Imported Raw Materials to Total Raw Materials	.71
Table 32: Descriptive Statistics: Imported Raw Materials to Total Raw Materials	.71
Table 33: Frequencies: Focus of R&D activities	.71
Table 34: Descriptive Statistics: Focus of R&D activities	.73
Table 35: Frequencies: Best Measure for Competitiveness	.73
Table 36: Descriptive Statistics: Best Measure for Competitiveness	. 75
Table 37: Frequencies: Performance Change	. 75
Table 38: Descriptive Statistics: Performance Change	.77
Table 39: Descriptive Statistics: Determinants of Competitiveness	. 77
Table 40: Reliability Statistics: Determinants of Competitiveness	. 78
Table 41: Item-Total Statistics: Determinants of Competitiveness	. 79
Table 42: Frequencies: Government Services	. 80
Table 43: Descriptive Statistics: Government Services	. 81
Table 44: Descriptive Statistics: Entry Barriers	. 81
Table 45: Descriptive Statistics: Power of Substitutes	. 82
Table 46: Descriptive Statistics: Power of Buyers	. 82
Table 47: Descriptive Statistics: Power of Suppliers	. 83
Table 48: Descriptive Statistics: Rivalry	. 83
Table 49: Descriptive Statistics: Perceived Competitive Advantage of Firms	. 84
Table 50: Reliability Statistics: Perceived Competitive Advantage of Firms	. 84
Table 51: Item-Total Statistics: Perceived Competitive Advantage of Firms	. 85
Table 52: Descriptive Statistics: Perceived Competitive Advantage of Turkish	
T&C Industry	. 86
Table 53: Descriptive Statistics: Perceived General Economic Conditions	. 86
Table 54: Descriptive Statistics: Effects of Turkey's General Economic	
Situation on Competitiveness of Firms	. 87
Table 55: Descriptive Statistics: Managers's Expectations on General	
Economic Situation	. 87

Table 56: Reliability Statistics: Managers's Expectations on General	
Economic Situation	88
Table 57: Item-Total Statistics: Managers's Expectations on General	
Economic Situation	88
Table 58: Descriptive Statistics: Managers's Expectations on T&C Industry	88
Table 59: Reliability Statistics: Managers's Expectations on T&C Industry	89
Table 60: Item-Total Statistics: Managers's Expectations on T&C Industry	89
Table 61: KMO and Bartlett's Test	90
Table 62: Mean of Rating on Each Factor	92
Table 63: Total Variance Explained	93
Table 64: Rotated Component Matrix(a)	95
Table 65: Model Summary	97
Table 66: ANOVA(b)	97
Table 67: Coefficients(a)	98
Table 68: Correlations	99
Table 69: Model Summary of Later Model	102
Table 70: ANOVA(b) of Later Model	102
Table 71: Coefficients(a) of Later Model	102
Table 72: Correlations of Later Model	103
Table 73: Mean of Rating on Five Forces	103
Table 74: Descriptive Statistics: Five Forces	104
Table 75: Correlations: Five Forces	105
Table 76: Variables Entered/Removed(a)	125
Table 77: Model Summary	125
Table 78: ANOVA(b)	125
Table 79: Coefficients(a)	126
Table 80: Excluded Variables(b)	126

## LIST OF FIGURES

## **FIGURES**

Figure 1: Turkey's Textiles and Clothing Industry's Foreign Trade by Years	8
Figure 2: Turkish Textile Industry's Cluster / Potential Cluster Map	13
Figure 3: Labor Costs in Textile Industry, 2011	30
Figure 4: Ambastha and Momaya's Select Connotations of Firm Level	
Competitiveness	41
Figure 5: Determinants of National Competitive Advantage	43
Figure 6: Porter's Five Forces Model	47
Figure 7: Figure Structure of Firms	63
Figure 8: Compensation Structure of Firms	66

#### **CHAPTER I**

#### INTRODUCTION

Competitiveness is a popular concern of today's business strategists. Although there are a lot of researches studying competitiveness, there is no general agreement on how to explain and measure it (Daniels, 1991). This multiple meaning and multi-dimensional term is examined at firm level, industry level and nation level. Although nation level competitive advantage is the first thing coming to mind while discussing about international competitive advantage, it is argued that studying enterprise level competitive advantage is more meaningful (Bedir, 2009). According to Krugman (1994) competitiveness is meaningless when applied to national economies. However, studies regarding competitiveness of firms are lacking.

Determinants of competitiveness of firms vary according to the industry in which firms operate. Therefore, studying of firms operating in different industries would not give accurate results. In this context, competitiveness of firms operating in Turkish textiles and clothing industry is examined in this study.

Textiles and clothing industry is one of the most important industries of Turkey as it employs thousands of people and generates remarkable foreign currency by exporting. Also, it accounts for more than 10% of Gross Domestic Product-GDP (Ministry of Science, Industry and Technology, 2012/2).

The textiles and clothing industry, which is totally dominated by private sector, employs almost 746.617 thousands of people - 356.477 employees in textile and 390.140 employees in clothing - according to the statistics of Ministry of Labor and Social Security (December 2011). However, it is projected that textile industry's employment is 450 thousands of people and clothing industry's employment is 1500

thousands of people in consideration of undeclared work (Ministry of Science, Industry and Technology, 2012/2).

The textile and clothing industry is one of the most important exporting industries of Turkey as it generates remarkable foreign currency by exporting. The industry is one of the few industries of Turkey that have foreign trade surplus. According to International Trade Center (ITC) Trademap statistics, textile and clothing export of Turkey was 23.4 billion US dollars and it constituted 17 percent of Turkey's total exports in 2011. And, Turkey is the 7<sup>th</sup> largest exporter of textiles and clothing in the world, in terms of trade volume.

Turkey is also 7<sup>th</sup> largest producer of cotton, 2<sup>nd</sup> largest producer of organic cotton, and 3<sup>rd</sup> largest exporter of textiles and clothing to EU-27 (Ministry of Science, Industry and Technology, 2012/2).

As the textiles and clothing industry has unique position in Turkish economy and have linkages with many other industries, developments emerged in the industry eventually affect the overall economy of Turkey. Therefore it is worth examining the competitiveness of Turkish textiles and clothing firms.

In this context, the aim of this thesis is threefold. First, to identify determinants of competitiveness of Turkish textiles and clothing industry. Second, to analyze the effects of firm characteristics, future expectations and industry structure on the perceived competitive advantage of Turkish textiles and clothing firms. Third, to analyze the Turkish textiles and clothing industry's structure.

With this aim, outline of the thesis is as follows: In chapter 2, history and present situation of Turkish textiles and clothing industry is presented. Furthermore, production processes of the industry are explained. In chapter 3, fundamental terminology and concepts regarding the competitiveness is reviewed, and Porter's Diamond and Five Forces models are presented. Moreover, China example regarding competitiveness of Chinese textile and apparel industries is examined. Chapter 4

covers the model description and hypotheses development. Chapter 5 includes design of the survey that is conducted to collect data. Chapter 6 covers the sample characteristics and description of the data. In chapter 7, results of the survey study is presented. Lastly, chapter 8 is the conclusion of the thesis.

#### **CHAPTER II**

#### TURKISH TEXTILES AND CLOTHING INDUSTRY

#### 2.1. History of Turkish Textiles and Clothing Industry

As textile products are one of the basic needs of humanity, they have been one of the most popular product groups that have been traded internationally for a long time. Popularity of the Silk Road during the Middle Ages proves that commerce of textile products have been very important to people.

Being on the Silk Road of Anatolia caused the expansion of the industry throughout Anatolia. Development of weaving in Anatolia was particularly during the growth period of Ottoman Empire. Prices of goods and competition were totally controlled and managed by Guilds (Lonca) in that period. Important textile clusters were Denizli and Tokat for wovens and Bursa for silk goods (Ministry of Science, Industry and Technology, 2010). However, machine production began to expand in Europe since the 18<sup>th</sup> century and textile factories were founded across the Europe. Ottoman Empire could not catch the industry revolution and could not use modern production techniques. Also, capitulations given to European countries made it impossible for Turkish producers to compete with European merchants. Although some factories were founded in Turkey between 1830 and 1860, just a few of them remained to Republic Period. After 1923, the industry began to be promoted by government and Sümerbank was founded in 3 June 1933. All textile factories and workshops were brought together under the same roof of Sümerbank. Sümerbank led private sector by its investments. And in time, Sümerbank transferred its experiences and knowhow to the private sector (Ministry of Science, Industry and Technology, 2010)

Turkish textiles and clothing industry has been structured by government until 1950's. After that, private sector began to invest in that area. Turkey was an importer country of textile products in the first years of Republic; however, it began exporting activities after 1950's. Industry began to use high technology in production processes between 1960 and 1970. As a result the industry began to export processed goods.

Private sector's share in the industry production increased from 28% in 1952 to 62% in 1962 (Ministry of Science, Industry and Technology, 2010). And, in 1980's, clothing industry began to develop in a rapid pace. While Turkey had been exporting yarn, fiber and fabric in the beginning of 1980's, it began exporting much more apparel in 1987.

Turkish textiles and clothing industry became the largest industry of Turkey between 1990 and 1996. The industry grew by 56% after the Customs Union in 1995. Industry's portion in the total exports of Turkey reached to 30 percent in 1990's. Incentives to the sector increased and numerous foreign companies invested in Textiles and clothing industry in Turkey in that period. The economic crisis that the country experienced in 1994 had affected textile industry. Sümerbank was one of the institutions that privatized after the crisis. In 2000, apparel exports constituted 27.5% of total Turkish exports and textile exports constituted 9.5% of Turkish exports. So the Turkish textiles and clothing industry totally constituted 36.9% of total Turkish exports.

### 2.2. Production Processes of Textile and Clothing Industry

Textile and clothing industry has wide production processes which convert fibers into yarn, fabric, clothes and other materials. European Commission defines the industry as:

The textile and clothing (or T&C) industry is a diverse and heterogeneous industry which covers an important number of activities from the transformation of fibers to yarns and fabrics to the production of a wide variety of products such as hi-tech synthetic yarns, wool, bed-linen, industrial filters, geo-textiles, clothing etc. (European Commission, January 2013).

Fibers are threadlike materials that can be in natural or synthetic forms. Natural fibers come from plant, animal or mineral sources. Synthetic fibers are made by various chemical compositions. Textile fibers are those that can be made into fabrics by several operations (Bralla, 2007). Firstly, fibers are converted into yarns. Then, yarns are used to manufacture fabrics and fabrics are processed to produce clothes.

Processes that transform fibers into articles of usage are spinning, weaving, knitting, and finishing. Processes from fibers to fabrics are in textile part and processes from fabric to garment are in clothing part.

Spinning: It is an ancient textile art in which plant, animal or synthetic fibers are twisted together to form yarn. For thousands of years, fiber was spun by hand using simple tools, the spindle and distaff. Only in the High Middle Ages did the spinning wheel increase the output of individual spinners, and mass-production only arose in the 18th century with the beginnings of the Industrial Revolution. Hand-spinning remains a popular handicraft (Swarthmore College Computer Society, May 2012).

Weaving: It is the interlacing of yarns in a regular order to create a fabric. The operation is performed in a machine called a *loom*.

Knitting: Knitting is fabric-or garment-making by forming a series of interlocking loops in a continuous yarn or a set of yarns.

Finishing: Finishing processes include a variety of operations to make a textile fabric more suitable for its application. Finishing operations can be chemical, mechanical, or a combination of the two. They include treatments to improve the appearance or

touch of the fabric and processes intended to improve its performance. Before finishing, woven or knit cloths are sometimes referred to as "gray goods". Companies that finish gray goods are referred to as converters. Finishing processes include bleaching, washing, coloring, etc. (Bralla, 2007)

#### 2.3. Present Situation of Turkish Textiles and Clothing Industry

## 2.3.1 Textiles and Clothing Industry's Contribution to the Turkish Economy

Textiles and clothing industry is one of the most important industries of Turkey as it employs thousands of people and generates remarkable foreign currency by exporting. Also, it accounts for more than 10% of GDP (Ministry of Science, Industry and Technology, 2012/2).

The textiles and clothing industry, which is totally dominated by private sector, employs almost 746.617 thousands of people - 356.477 employees in textile and 390.140 employees in clothing - according to the statistics of Ministry of Labor and Social Security (December 2011). However, it is projected that textile industry's employment is 450 thousands of people and apparel industry's employment is 1500 thousands of people in consideration of undeclared work (Ministry of Science, Industry and Technology, 2012/2).

The textile and clothing industry is one of the most important exporting industries of Turkey as it generates remarkable foreign currency by exporting. The industry is one of the few industries of Turkey that have foreign trade surplus. According to International Trade Center (ITC) Trademap statistics, textile and clothing export of Turkey was 23.4 billion US dollars and it constituted 17 percent of Turkey's total exports in 2011. And, Turkey is the 7<sup>th</sup> largest exporter of textiles and clothing in the world, in terms of trade volume.

Textile and clothing industry also has a unique position in Turkish economy in terms of value added it produce. In 2009, textile and clothing industry, with leather industry, generated 15.5% of value added of manufacturing industry and 5.2% of value added of Turkey (Ministry of Science, Industry and Technology, 2012/2).

#### 2.3.2 Foreign Trade of the Turkish Textiles and Clothing Industry

Turkish textiles and clothing sector is an export-oriented sector. With the investments made especially after 1990, production capacities increased considerably. Now, present capacities are more than domestic demand. Annual Turkish textiles and clothing industry's production is worth approximately 30 billion dollars and, almost 80% of the production is being exported (İstanbul Sanayi Odası, 2010). According to International Trade Center (ITC) Trademap statistics, total textiles and clothing export of Turkey was 23.4 billion US dollars in 2011 and it constituted 17 percent of Turkey's total exports in 2011. The industry is one of the few industries of Turkey that have foreign trade surplus. Except that the decrease in 2009 because of the shrinking demand in Europe market, exports of the industry grew all years between 2004 and 2011. However, imports of the industry also increase by years. Total textiles and clothing import of Turkey was 13.6 billion US dollars in 2011 and it generated 5.6 percent of Turkey's total imports in 2011.

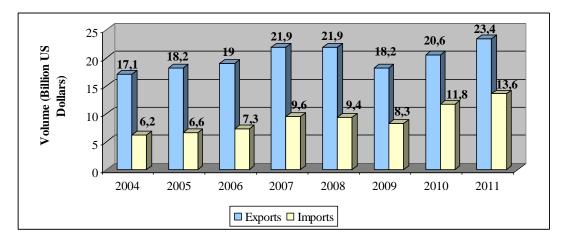


Figure 1: Turkey's Textiles and Clothing Industry's Foreign Trade by Years

Source: International Trade Center (ITC) Trademap Statistics, December 2012

According to ITC Trademap statistics, Turkey is the 7<sup>th</sup> largest exporter of textiles and clothing in the world, in terms of trade volume. Major markets of Turkish textiles and clothing products are Germany, United Kingdom, Italy, Spain and France.

**Table 1: Top 20 Markets of Turkish Textiles and Clothing Products (Thousand US Dollars)** 

	Importers	Exported value in 2008	Exported value in 2009	Exported value in 2010	Exported value in 2011	Share in 2011
1	Germany	4.093.076	3.554.820	3.926.048	4.342.245	18,6%
2	United Kingdom	2.306.954	1.969.206	2.244.881	2.325.132	9,9%
3	Italy	1.450.292	1.196.189	1.308.395	1.596.751	6,8%
4	Spain	1.147.046	1.088.680	1.288.029	1.549.564	6,6%
5	France	1.286.768	1.163.662	1.310.067	1.430.289	6,1%
6	Russian Federation	1.066.932	710.707	1.073.387	1.300.955	5,6%
7	Netherlands	1.139.257	747.391	826.778	1.007.843	4,3%
8	USA	763.816	506.297	627.072	702.506	3,0%
9	Belgium	405.140	413.819	500.250	542.437	2,3%
10	Free Zones	866.439	490.609	450.523	507.443	2,2%
11	Denmark	505.544	422.728	454.997	488.847	2,1%
12	Poland	408.962	323.905	345.095	453.277	1,9%
13	Romania	488.406	361.616	458.307	435.928	1,9%
14	Iran	236.323	269.423	306.114	366.424	1,6%
15	Bulgaria	346.313	255.826	303.989	319.530	1,4%
16	Sweden	319.905	280.332	294.104	312.066	1,3%
17	Iraq	163.549	246.459	234.340	301.248	1,3%
18	Ukraine	270.352	179.324	170.893	285.061	1,2%
19	Greece	420.923	317.063	240.390	263.258	1,1%
20	Egypt	192.265	200.742	261.425	260.558	1,1%
	World	21.893.262	18.244.037	20.576.547	23.374.675	100,0%

Source: International Trade Center (ITC) Trademap Statistics, May 2012

Knitted or crocheted t-shirts, singlets and other vests is the first product group that has been exported most for a long time by Turkey. It constituted 13% of industry's total exports in 2011. It is followed by women's suits, jackets, dresses, skirts etc. Third most popular product group was men's suits, jackets, trousers etc.

Table 2: Top 20 Products Exported by Turkey (Thousand US Dollars)

	Code	Product label	Exported value in 2009	Exported value in 2010	Exported value in 2011
1	'6109	T-shirts, singlets and other vests, knitted or crocheted	2.398.899	2.759.825	3.053.308
2	'6204	Women's suits, jackets,dresses etc	1.704.683	1.855.484	2.072.015
3	'6203	Men's suits, jackets, trousers & shorts	1.192.489	1.285.572	1.383.134
4	'6110	Jerseys, pullovers, cardigans, etc, knitted or crocheted	1.080.213	1.207.068	1.322.191
5	'6302	Bed, table, toilet and kitchen linens	989.098	1.058.198	1.207.833
6	'6104	Women's suits,dresses,skirt etc&short, knit/croch	816.362	1.053.802	1.125.060
7	'6115	Panty hose, tights, stockings & other hosiery, knitted or crocheted	881.179	953.636	1.057.788
8	'6006	Fabrics, knitted or crocheted, of a width of > 30 cm	549.242	715.506	854.823
9	'5407	Woven fabrics of synth. filam yarn	696.263	731.357	836.515
10	'6106	Women's blouses&shirts, knitted or c.	590.566	627.632	622.823
11	'5209	Woven cotton fabrics, 85% or more cotton, weight over 200 g/m2	444.513	484.219	559.631
12	'6205	Men's shirts	411.597	458.725	547.492
13	'6206	Women's blouses & shirts	431.955	448.357	512.392
14	'5402	Synthetic filam yarn, not put up	302.423	432.594	508.451
15	'5205	Cotton yarn (not sewing thread) 85% or more cotton, not retail	227.979	279.068	423.048
16	'6305	Sacks and bags of a kind used for the packing of goods	251.343	319.784	391.391
17	'6004	Knitted or crocheted fabrics, of a width > 30 cm, containing by weight >= 5% of elastomer	254.929	318.029	389.416
18	'5509	Yarn of synth staple fibre,not put for retail sale	200.229	235.468	292.714
19	'5208	Woven cotton fabrics, 85% or more cotton, weight less than 200 g/m2	262.046	270.859	285.704
20	'6304	Furnishing articles nes	158.823	211.570	274.973
		Total Textiles and Clothing Products	18.013.043	20.273.752	23.374.675
		All products	102.138.526	113.979.452	134.827.997

Source: International Trade Center (ITC) Trademap Statistics, May 2012

According to ITC Trademap statistics, total textiles and clothing import of Turkey was 13.5 billion US dollars in 2011 and it generated 6.5% of Turkey's total imports in 2011. Turkey is the 10<sup>th</sup> largest importer of textiles and clothing in the world, in

terms of trade volume. Major supplying markets of textile and clothing products imported by Turkey are China, USA, India and Bangladesh. China, which became the largest producer and exporter of textiles and clothing after the termination of quotas in 2005, generated 23.7% of Turkish textile and clothing industry's imports in 2011. Other Asia and Pacific countries such as India, Bangladesh, Indonesia and Pakistan are the other largest suppliers after USA.

**Table 3: Top 20 Supplying Markets of Textiles and Clothing Products Imported by Turkey (Thousand US Dollars)** 

	Exporters	Imported value in 2008	Imported value in 2009	Imported value in 2010	Imported value in 2011	Share in 2011
1	China	1.729.056	1.560.102	2.428.478	3.202.990	23,6%
2	USA	706.472	583.454	888.202	1.397.894	10,3%
3	India	706.994	547.232	867.175	918.072	6,8%
4	Bangladesh	444.904	516.800	830.774	880.045	6,5%
5	Italy	841.216	592.070	627.498	737.473	5,4%
6	Indonesia	451.789	410.273	586.764	700.742	5,2%
7	Pakistan	391.011	404.675	456.991	562.390	4,1%
8	Germany	476.278	381.109	451.719	503.901	3,7%
9	Vietnam	120.647	219.455	357.529	474.540	3,5%
10	Egypt	100.681	151.216	267.129	344.824	2,5%
11	Republic of Korea	276.728	215.352	306.377	335.083	2,5%
12	Thailand	247.828	192.700	271.116	268.941	2,0%
13	Turkmenistan	129.419	152.251	311.801	242.686	1,8%
14	Spain	208.368	161.353	219.597	230.900	1,7%
15	Malaysia	271.928	164.103	208.322	217.941	1,6%
16	Austria	112.012	137.861	152.596	158.635	1,2%
17	Free Zones	232.266	130.906	135.288	153.958	1,1%
18	Brazil	39.579	34.495	91.839	151.266	1,1%
19	United Kingdom	142.928	140.400	114.463	136.820	1,0%
20	Greece	179.024	273.536	366.019	133.461	1,0%
Carre	World	9.423.932		11.783.346	13.552.742	100,0%

Source: International Trade Center (ITC) Trademap Statistics, May 2012

Although Turkey is the 7<sup>th</sup> largest producer of cotton which is the primary input of the industry, it is not sufficient for local demand. Cotton constitutes approximately 80% of the products of the Turkish clothing industry, therefore large quantities of

cotton is also being imported. Cotton (not carded or combed) constituted 13.65% of industry's total imports in 2011. After cotton, synthetic filam yarn and artificial staple fibers are the next two products that have been imported most by Turkey for a long time.

**Table 4: Top 20 Products Imported by Turkey (Thousand US Dollars)** 

	Code	Product label	Imported value in 2009	Imported value in 2010	Imported value in 2011
1	'5201	Cotton, not carded or combed	1.002.940	1.720.010	1.849.973
2	'5402	Synthetic filam yarn, not put up	771.522	1.064.000	1.296.297
3	'5504	Artificial staple fibres, not carded	399.159	567.085	689.956
4	'5208	Woven cotton fabrics, 85% or more cotton, weight less than 200 g/m2	397.012	554.470	586.741
5	'5407	Woven fabrics of synth. filam yarn	343.332	469.684	522.789
6	'5205	Cotton yarn (not sewing thread) 85% or more cotton, not retail	275.952	545.018	495.057
7	'5509 '6204	Yarn of synth staple fibre,not put for retail sale  Women's suits, jackets,dresses etc	281.626 301.750	373.223 395.920	487.679 449.418
9	'5209	Woven cotton fabrics, 85% or more cotton, weight over 200 g/m2	268.316	354.825	447.334
10 11	'6110 '6203	Jerseys, pullovers, cardigans, etc, knitted or crocheted Men's suits, jackets, trousers & shorts	320.042 229.316	414.367 307.028	400.006 341.648
12	'5503	Synthetic staple fibres, not carded	191.089	265.867	341.148
13	'5603	Nonwovens, w/n impregnated, coated, covered or laminated	267.241	313.934	313.482
14	'5510	Yarn of artif staple fibre, not put up for retail sale	148.132	241.167	256.311
15	'5307	Yarn of jute or of other textile bast fibres of hd no 53.03	104.193	206.932	194.671
16	'6109	T-shirts, singlets and other vests, knitted or crocheted	133.296	166.159	194.208
17	'5903	Textile fabrics impregnated, coated, covered/laminated w plastics, nes	115.878	140.271	193.274
18	'6201 '6001	Men's overcoats, capes etc  Pile fabrics incl long pile fabrics &terry fabrics, knitted/crocheted	119.968 48.028	160.945 78.946	177.954 159.394
		Knitted or crocheted fabrics, of a width > 30 cm, containing by weight			
20	'6004	>= 5% of elastomer	70.805	133.673	158.814
		Total textile and clothing products	8.318.262	11.783.346	13.552.742
Sour	ce: Inter	All products national Trade Center (ITC) Trademap Stati	140.869.013	185.541.037	240.838.853

#### 2.3.3 Turkish Textiles and Clothing Industry's Cluster Map

Firms operating in the textiles and clothing industry are clustered in some regions over Turkey. Istanbul is the most important cluster of the industry. Most of the ready-made garments of the industry are being produced in Istanbul. Ankara and Denizli are the other important regions in terms of textiles and clothing production. Ready-made garments and some other textiles are produced in Ankara. Besides, Denizli is the leader region for towels & bathrobes and home textiles.

Kahramanmaras, Adıyaman, Istanbul and Bursa are the centers for yarn production whereas Gaziantep is the center for polypropilen and machine carpet production. There is also a remarkable yarn production in Gaziantep. Also, blanket and yarn production is being prioritized in Uşak, and cotton weaving and finishing is being prioritized in Adana. Çorlu and Çerkezköy are the other important regions for textile finishing (Ministry of Science, Industry and Technology, 2012/2). Bursa is also the most important region for silk production.

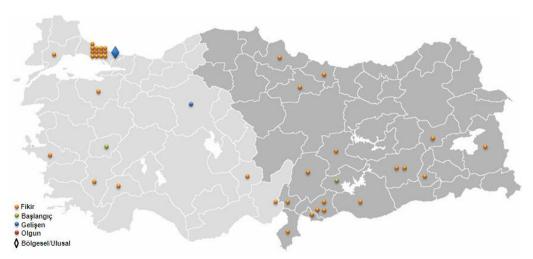


Figure 2: Turkish Textile Industry's Cluster / Potential Cluster Map

Source: Common Competition Areas For Clusters Strategy Report, Ministry of Economy, July 2012

#### 2.3.4 Turkish Textiles and Clothing Firms and Brand Shares

With its huge population of approximately 80 million people, Turkey is a large market for textiles and clothing products. Thus, there are a lot of domestic firms manufacturing textiles and clothing products. According to the statistics of Ministry of Labour and Social Security (December 2011), there are totally 43.035 firms in the industry of which 14.624 firms are operating in textiles and 28.411 firms are operating in clothing industry.

**Table 5: Number of Work Places According to Branch of Activities** 

Size of Work Places	Manufacturing of Textile Products	Manufacturing of Clothing Products
1-3 Person	6.321	13.756
4-6 Person	2.228	5.025
7-9 Person	1.276	2.773
10-19 Person	1.666	2.898
20-29 Person	817	1.298
30-49 Person	937	1.382
50-99 Person	585	683
100-499 Person	714	545
500-999 Person	68	40
1000+ Person	12	11
Total	14.624	28.411

Source: Ministry of Labour and Social Security (December 2011), Labour Statistics 2010

Domestic manufacturers such as LC Waikiki, Koton and Mavi dominate the Turkish clothing market; however, international brands such as Zara, Mango, H&M, Marks and Spencer have also entered the Turkish market. Some of the important Turkish apparel brands are LCW, Koton, Mavi, Fabrika, Collezione, Kiğili, Sarar, İpekyol, Vakko, Damat, Ramsey, Colin's, Twist, Network and LTB.

According to the Euromonitor Statistics Turkish clothing market is worth 27.5 bilion TL (approximately 16.2 billion US dollars). The market has grown 15.4 percent between 2006 and 2011.

Table 6: Sales of Apparel by Category 2008-2011 (Billion TL, Retail Value)

	2008	2009	2010	2011
Clothing	24.9	25.1	26.3	27.5
Footwear	6.7	6.3	6.9	7.3
Apparel	31.6	31.4	33.2	34.8

Source: Euromonitor International, "Apparel in Turkey", November 2012

LCW, the leader Turkish clothing retailer, has approximately 370 stores in 71 cities of Turkey. At first, it was founded as a French brand by George Amoual and his partner in 1985. Later, the firm began to work with Turkish Taha Textile to meet its increasing production demand. In 1997, Taha Group bought the brand and so, LCW became a Turkish brand. In 2009 the company began to invest in abroad. It opened its first store in Romania. Now, it has 43 stores in 13 countries including Iraq, Albania, Kazakhstan, Bulgaria, Bosnia Herzegovina, Russia, Syria, Egypt and Germany (LCW, 2012). Moreover, the company began to sell online in March 2011 via its web site http://www.lcwaikiki.com/. Company officials, surprised with the deep interest that customers showed to the e-shop, plans to make 2% of total sales via e-shop in 2012. And they also plan to increase the ratio to 5% in five years and 10% in ten years.

Koton, which opened its first store in 1988 in Istanbul, has 203 stores in Turkey presently. It is one of the most important clothing brands of Turkey as it has the second largest share in Turkish apparel industry. Each year, it creates more than 50 collections which include more than 20.000 different models. Also, approximately 55 new products take their places in the showcases of Koton each day. Koton has 88 overseas stores in 24 different countries including Germany, Russia, Greece and UAE. It does not sell via its own web site; however, its products are being sold via e-commerce web sites such as trendyol.com, markafoni.com and

1v1y.com. Koton offers a wide product range for both women&man and children (Koton, 2012).

Mavi, one of the most famous Turkish clothing brands in the world, began its operations in 1991 in İstanbul. Now, it has more than 280 "Mavi Shop" in 50 different countries including USA, Canada, UK, Germany and Australia. Its products are also being sold in almost 4000 stores around the world. Although it has a wide product range, its primary product group is jeans. In 2006 Time Magazine showed Mavi in 16 best jean brands of the world. The brand is so successful that famous stars such as Lady Gaga, Avril Lavigne, Kate Winslet, Hillary Duff and Cher wear Mavi. Mavi is also one of the most successful Turkish brands in terms of online appearance. Its products are being sold via its web site and international B2C ecommerce sites such as Amazon, Zappos and Nordstrom. Furthermore, it has accounts on Twitter and Facebook (Mavi, 2012).

Fabrika, which is founded in 2000 in Istanbul, serves its customers with more than 100 domestic and international stores. Although it has a variety of product including casual wear and bags, its primary focus is business wear (Fabrika, 2012).

Table 7: Apparel Brand Shares in Turkish Market 2008-2011 (% retail value)

Brand	Company	2008	2009	2010	2011
LC Waikiki	Tema Magazacilik Hizmetleri Ticaret AS	4.6	6.1	8	10.1
Koton	Gulyilmazlar Tekstil Sanayi Ticaret AS	1.7	1.9	2.2	2.6
Mavi	Mavi Giyim Sanayi ve Ticaret AS	0.9	0.9	1.1	1.4
Fabrika	Altinyildiz Mensucat ve Konf. Fabrikalari AS	0.8	0.9	1.4	1.3
Zara	Inditex, Industria de Diseño Textil SA	1	1.2	1.1	1.1
Collezione	Akyigit Tekstil Konfeksiyon ve Magazacilik Sanayi ve Ticaret AS	0.9	0.9	1	1.1
Kigili	Kigili Giyim Ticaret AS	0.8	0.8	0.9	1
Sarar	Sarar Giyim Sanayi ve Ticaret AS	0.9	0.9	0.9	0.9
Network	Altinyildiz Mensucat ve Konf. Fabrikalari AS	0.5	0.5	0.6	0.6
Mango	Punto Fa SL (Mango)	0.5	0.5	0.5	0.6
Benetton	Benetton Group SpA	0.4	0.4	0.5	0.5
Levi's	Levi Strauss & Co	0.5	0.5	0.5	0.5
Desa	Desa Deri Sanayi ve Ticaret AS	0.3	0.3	0.3	0.5

**Table 7 (continued)** 

Defacto	Ozon Giyim Sanayi Ticaret AS	0.2	0.2	0.2	0.5
Damat-Tween	Orka Tekstil Sanayi ve Turizm Ticaret AS	0.3	0.4	0.4	0.4
Marks & Spencer	Marks & Spencer Plc	0.2	0.2	0.2	0.4
Nike	Nike Inc	0.2	0.2	0.3	0.3
Tekbir	Tekbir Giyim ve sanayi AS	0.3	0.3	0.3	0.3
Bershka	Inditex, Industria de Diseño Textil SA	0.1	0.2	0.3	0.3
Gap	Gap Inc, The	0.1	0.2	0.2	0.3
Roman	Roman Hazirgiyim ve Tekstil San ve Tic AS	0.2	0.2	0.2	0.3
Adidas	adidas AG	0.2	0.2	0.2	0.3
Twist	Ayaydin Miroglio Group	0	0.1	0.2	0.2
Kom	Kom Tekstil AS	0.2	0.2	0.2	0.2
Beymen	BBA Beymen Bogazici Alboy Magazacilik Tekstil San ve Tic AS	0.2	0.2	0.2	0.2
Massimo Dutti	Inditex, Industria de Diseño Textil SA	0.1	0.1	0.1	0.2
Zeki Triko	Zeki Triko AS	0.1	0.1	0.1	0.2
Ten	Ten AS	0.1	0.1	0.1	0.2
Wrangler	VF Corp	0.1	0.1	0.1	0.1
Hotic	Hotic Deri Urunleri Sanayi ve Ticaret AS	0.1	0.1	0.1	0.1
Stradivarius	Inditex, Industria de Diseño Textil SA	0.1	0.1	0.1	0.1
Rodimood	Rodi Giyim Sanayi ve Ticaret AS	0.1	0.1	0.1	0.1
Pull & Bear	Inditex, Industria de Diseño Textil SA	0.1	0.1	0.1	0.1
Lee	VF Corp	0.1	0.1	0.1	0.1
Banana Republic	Gap Inc, The	0.1	0.1	0.1	0.1
Others		83.0	80.6	77.1	72.8
Total	Little Control of the	100	100	100	100

Source: Euromonitor International – Passport Statistics, December 2012

As seen in the above table, top 4 brands that have the largest market share in Turkish clothing market (including footwear) are LCW, Koton, Mavi and Fabrika. The sum of their market shares is 15.4 percent. That means Turkish clothing industry has a low concentration ratio and it is a competitive market. Also there are so many buyers and suppliers in the market. However, firms offer differentiated products to the customers. Almost every product offered to the market has a different design. So, it is possible to say that there is a monopolistic competition in the Turkish clothing market.

Although there are a lot of Turkish firms manufacturing clothing products, a few of them has international brand reputation. LCW, Mavi, Koton, Colins and Sarar are some of these brands. However, LCW is the unique Turkish brand among first 50 brands that has largest market share in worldwide market according to Euromonitor statistics. That is because Turkish firms do not place emphasis on marketing. Although brands are very important for the customer preferences in clothing industry, many of the Turkish firms do not have a strong brand image. Because of the lack of branding efforts, Turkish products are being sold cheaper than its rivals such as Italian or French products.

Table 8: Apparel Brand Shares in Worldwide Market 2008-2011 (% retail value)

	Brands	2008	2009	2010	2011
1	H&M (H&M Hennes & Mauritz AB)	1.1	1.1	1.2	1.2
2	Zara (Inditex, Industria de Diseño Textil SA)	0.8	0.8	0.8	0.9
3	Nike (Nike Inc)	0.9	0.9	0.8	0.8
4	adidas (adidas AG)	0.7	0.7	0.7	0.7
5	Uniqlo (Fast Retailing Co Ltd)	0.4	0.5	0.6	0.6
6	C&A (Cofra Holding AG)	0.6	0.5	0.5	0.6
7	Gap (Gap Inc, The)	0.5	0.5	0.5	0.5
8	Old Navy (Gap Inc, The)	0.4	0.5	0.4	0.4
9	Levi's (Levi Strauss & Co)	0.4	0.4	0.4	0.4
10	Hanes (Hanesbrands Inc)	0.4	0.4	0.4	0.4
11	Next (Next Plc)	0.4	0.3	0.3	0.4
12	Esprit (Esprit Holdings Ltd)	0.3	0.3	0.3	0.3
13	Victoria's Secret (Limited Brands Inc)	0.3	0.3	0.3	0.3
14	Shimamura (Shimamura Co Ltd)	0.2	0.2	0.3	0.3
15	Primark (Associated British Foods Plc (ABF))	0.2	0.2	0.2	0.2
16	Forever 21 (Forever 21 Inc)	0.2	0.2	0.2	0.2
17	Jones (Jones Apparel Group Inc)	0.2	0.2	0.2	0.2
18	Carter's (Carter's Inc)	0.2	0.2	0.2	0.2
19	Banana Republic (Gap Inc, The)	0.2	0.2	0.2	0.2
20	Triumph (Triumph International AG)	0.2	0.2	0.2	0.2
21	New Look (New Look Group Plc)	0.2	0.1	0.1	0.2
22	Diesel (Diesel SpA)	0.2	0.2	0.2	0.2
23	Lee (VF Corp)	0.1	0.2	0.2	0.2
24	American Eagle Outfitters (American Eagle Outfitters Inc)	0.2	0.2	0.2	0.2
25	Ann Taylor (Ann Inc)	-	-	-	0.1

**Table 8 (continued)** 

26	Reebok (adidas AG)	0.1	0.1	0.1	0.1
27	Liz Claiborne (Liz Claiborne Inc)	0.2	0.2	0.2	0.1
28	Renner (Lojas Renner SA)	0.1	0.1	0.1	0.1
29	Mango (Punto Fa SL (Mango))	0.1	0.1	0.1	0.1
30	Edgars (Edcon Holdings Pty Ltd)	0.1	0.1	0.1	0.1
31	Express (Express Inc)	-	-	0.1	0.1
32	Abercrombie & Fitch (Abercrombie & Fitch Co)	0.1	0.1	0.1	0.1
33	Riachuelo (Guararapes Confecções SA)	0.1	0.1	0.1	0.1
34	Tommy Hilfiger (Phillips-Van Heusen Corp)	-	-	0.1	0.1
35	The Children's Place (Children's Place Retail Stores Inc, The)	0.1	0.1	0.1	0.1
36	LC Waikiki (Tema Magazacilik Hizmetleri Tic. AS)		0.1	0.1	0.1
37	Calvin Klein (Phillips-Van Heusen Corp)	0.1	0.1	0.1	0.1
38	Benetton (Benetton Group SpA)	0.1	0.1	0.1	0.1
39	Kiabi (KIABI Europe SAS )	0.1	0.1	0.1	0.1
40	Matalan (Matalan Ltd)	0.2	0.1	0.1	0.1
41	Metersbonwe (Metersbonwe Group)	0.1	0.1	0.1	0.1
42	Wrangler (VF Corp)	0.1	0.1	0.1	0.1
43	J Crew (J Crew Group Inc)	0.1	0.1	0.1	0.1
44	Cross Plus (Cross Plus Inc)	0.1	0.1	0.1	0.1
45	Champion (Hanesbrands Inc)	0.1	0.1	0.1	0.1
46	Marisa (Marisa SA)	0.1	0.1	0.1	0.1
47	Polo Ralph Lauren (Polo Ralph Lauren Corp)	0.1	0.1	0.1	0.1
48	Jet (Edcon Holdings Pty Ltd)	0.1	0.1	0.1	0.1
49	Semir (Semir Group Co Ltd)	0.1	0.1	0.1	0.1
50	Kik (Tengelmann Group, The)	0.1	0.1	0.1	0.1

Source: Euromonitor International – Passport Statistics, December 2012

#### 2.3.5 E-Commerce of the Turkish Textiles and Clothing Industry

Rapid developments in information and communication technologies result in disappearance of borders in whole world and huge changes in economic, social and cultural areas. Companies globalizing and adapting to changing conditions of competition via using new opportunities offered by technology, become successful and sustain their assets.

Increasing internet penetration rates all over the world caused traditional trade to converge online trade. In recent years online trade, especially in clothing sector, achieved a remarkable growth. Clothing sector has become the second best-seller product group of online sales after consumer electronics (Euromonitor, 2011). In our day, a significant part of consumers prefer to buy their clothing via internet and their number is increasing with each passing day.

Adapting to changing market conditions and implementing new marketing tools has substantial importance for the future of the textiles and clothing sector, which has a key position in Turkish economy.

According to a research done by Turkish Statistical Institute (TUIK) 47.4 percent of the Turkey's population uses internet. That mean approximately 35.5 million people are internet users. Furthermore, many of the internet users are members of social networks. According to statistics of The Interbank Card Center (BKM), e-commerce transactions carried out by domestic bank cards worth 22.1 billion TL in 2011. That means a growth of 57 percent compared to last year. On the other hand, e-commerce volume was 2 billion TL according to the statistics of Euromonitor. Statistics of BKM and Euromonitor are different because Euromonitor do not include ticket sellings such as flight tickets and bus tickets to the e-commerce volume. Also, the other reason for the difference in statistics is the difference of their resources.

There are 5 e-commerce web sites among most popular 50 web sites of Turkey (Alexa, February 2012). These e-commerce sites are sahibinden.com, gittigidiyor.com, hepsiburada.com, markafoni.com and trendyol.com.

According to Euromonitor statistics, clothing (including footwear) internet retailing reached 68.1 million TL sales revenues in 2011 from 17.6 million TL in 2010. Industry's sales grew by 832.9 percent between 2006 and 2011. Furthermore, a growth rate of 127 percent is expected between 2011 and 2016. And, the industry will be the most growing industry with this growth rate (Euromonitor, 2012). Consumer appliances will follow the clothing with a growth rate of 98.7 percent.

Table 9: Internet Retailing by Category: Value 2006-2011 (Million TL)

							Change
	2006	2007	2008	2009	2010	2011	2006- 2011
Beauty and personal care	17.4	26.1	32.8	45.3	58	71.7	312.10%
Clothing							
(including footwear)	7.3	7.6	8.3	11.4	17.6	68.1	832.90%
Consumer electronics and							
video games hardware	423.4	561.8	745.9	761.3	976.7	1.090.50	157.60%
Consumer healthcare	2.3	2.9	3.3	3.8	4.7	10.4	352.20%
DIY and gardening	-	-	-	-	-		-
Consumer appliances	118.9	132.7	141.6	134	149.2	176.5	48.40%
Home care	-	-	-	-	-		-
Housewares and home							
furnishings	-	-	-	-	-		-
Media products	82	105	128.1	143.5	163.9	179.6	119.00%
Food and drink	-	-	-	-	-		-
Toys and games	27.1	36	46.7	47.4	40.5	44	62.40%
Other internet retailing	177.3	213.7	219.1	369.6	340.8	378.7	113.60%
Internet retailing	855.7	1085.70	1,325.90	1,516.30	1,751.40	2,019.60	136.00%

Source: Euromonitor, 2012

Increasing volume of e-commerce attracts attention of clothing firms. Therefore, many clothing firms including LCW, Mavi, Collezione, Kiğılı, Defacto and Sarar began to sell their product online via its web sites. Furthermore many e-retailing sites such as Trendyol, Markafoni, Limango, Morhipo and 1v1y emerged in recent years. Some clothing firms who do not sell online via its web site uses e-retailing sites to sell online. Everyday, more companies offer online services and it seems that online trade will replace traditional trade in near future.

#### 2.3.6 Characteristics of the Turkish Textiles and Clothing Products

Turkish textiles and clothing industry has a wide product range including cotton yarn, fabrics, women wear, men wear, etc. Its equipment pool has widened with

investments especially after 1990. According to ITKIB (2010) Turkey has 3% of staple spinning capacity of the world, 5% of long staple spinning capacity of the world, 7.3% of OE rotor capacity of the world, 3.5% of shuttleless weaving looms capacity of the world, 1.9% of shuttle weaving looms capacity of the world and 5.1% of wool weaving looms capacity of the world by the year 2008.

Most of the Turkish clothing products are cotton products. 80% of exported clothing products are cotton products (Istanbul Sanayi Odası, 2010).

Although Turkey is the 7<sup>th</sup> largest cotton producer of the world (Ministry of Science, Industry and Technology, 2012/2), production is not sufficient for domestic needs. So, it imports significant amounts of cotton. Turkey is the 4<sup>th</sup> largest cotton consumer of the world (Ministry of Science, Industry and Technology, 2012/2). In 2010, there had been national disasters in major cotton producers such as major flood in Pakistan and major drought in China. As a result, cotton prices have increased. The increase in cotton prices throughout the world has affected Turkish clothing market deeply. Manufacturers get through with the increasing cotton prices by reducing the percentage of cotton in fabric compositions. For instance, the use of non-cotton composites in denims has increased from 5% to 30-40%, to include polyester, polyamide and modal.

In recent years, hosiery industry has developed more rapidly than other textile subsectors. With new investments, production capacity reached to 200 million dozens (Ministry of Science, Industry and Technology, 2010)

From the point of view of consumers, most important characteristics of the industry's products are price, quality and design. Price is an important factor affecting costumers' preferences. Because there are a lot of firms manufacturing clothing products, switching costs are low. Therefore, clothing industry is a price sensitive industry, and elasticity is high. However, fashion changes rapidly nowadays. Adapting to today's trends and manufacturing fashionable products is also important. Furthermore, power of complements is very high in clothing industry. A customer

wants to buy a shirt in accord with his jean. That is why clothing companies manufacture its products as sets. Also, brand is an important determinant of the purchasing decision of consumers. Brand is generally seen as an indicator of user's social class. Therefore, brand loyalty can be powerful in many cases.

## 2.3.7 Legal Environment of Turkish Textiles and Clothing Industry

Quotas that had been implementing in textile and clothing industry were terminated in 1 January 2005 as a part of The Agreement on Textiles and Clothing (ATC) of World Trade Organisation. This resulted in a fierce competition in worldwide markets. Furthermore, China emerged as an important exporter of the industry. Its exports grew by 171 percent between 2004 and 2011 (ITC Trademap Statistics, July 2012).

Turkey on the other hand, has the opportunity of nonquota exporting to European Union (EU) since the Customs Union in 1996. However, quota implementation on exports to USA continued till 2005.

Turkey supposed to harmonize its regulations with EU regulations in the negotiation period. Turkey's textile and clothing industry is affected from this regulation changes as the other industries. Many directives are published about environmental liabilities, social liabilities, etc. in terms of textile and clothing industry. Turkish textile and clothing industry is also regulated with Turkish laws such as Labor Law, Law on Trade Unions, etc.

Although quotas were terminated in 2005, other barriers such as tariffs and standards are used by countries to restrict trade, especially to restrict imports. Tariffs implied to textile and clothing imports change from country to country. Turkey on the other hand, implies policies to enhance trade with other countries. However, Turkey began implying an additional tax on the imports of textiles and clothing products to protect

local producers in 2011. In terms of value added tax (VAT), Turkey implies 8% to some of textile and clothing products and 18% VAT to other textile and clothing products.

Turkish government imply several programs to support firms, especially SMEs. For instance, firms can benefit from customs exemption, VAT (value added tax) exemption, etc. for their investments through receiving incentive certificate from Ministry of Economy. Exporter firms can also benefit from government funds for their activities of market research, training, advertising, etc. by applying to Ministry of Economy. Furthermore, Türk Eximbank supports exporter firms through short-medium-long term credits, and assurance and guaranty programs. Moreover, KOSGEB (Small and Medium Enterprises Development Organization) provides several programs such as Thematic Project Support Programme, Cooperating-Leaguing Support Program, Entrepreneur Support Programme, General Support Programme, SME Project Support Programme, R&D, Innovation and Industrial Application Support Programme, Emerging Enterprises Market SME Support Programme and Loan Interest Support Programme (KOSGEB, 2012).

## 2.3.8 SWOT Analysis of the Turkish Textiles and Clothing Industry

## Strengths

- Geographic location
  - As closeness to export markets is very important for reaching large populations and achieving quick delivery, Turkey has the advantage of being close to markets such as Europe, Africa and Asia. Especially being close to Europe is very advantageous because Europe is the primary market for Turkish textile and clothing products.
- Being of world's 7<sup>th</sup> largest producer of cotton which is the primary input of the industry
  - Availability, price and quality of the inputs used in the production are crucial for the competitiveness. One of the primary inputs of textiles and clothing

industry is cotton and Turkey is the 7<sup>th</sup> largest producer of cotton (Ministry of Science, Industry and Technology, 2012/2).

#### Qualified and educated labor force

Turkey has a large, young and educated population, so it is easy for businesses to find out qualified labor force.

#### • Know-how

Know-how is one of the most valuable assets of today's businesses. As Turkey has a big and long-established textile industry, it owns both the technical and administrative know-how about the textiles and clothing industry.

#### Quick delivery

Delivery speed is very important for businesses in the competition. And, Turkey's textiles and clothing industry achieves quick delivery by its modern machines, qualified labor force and strategic location (Ministry of Science, Industry and Technology, 2010/2).

Customs Union with EU and Free Trade Agreements with other countries
 Trade agreements are vital for eliminating entry barriers and enhancing trade.
 Turkey is a part of Customs Union with EU and has 16 free trade agreements with different countries including Egypt, Israel, Croatia, etc. And, that enables Turkey's textiles and clothing industry to reach markets with preferential tariffs and regulations.

#### • New equipment pool

Turkey's textiles and clothing industry has a new and modern equipment pool that enables fast and elastic production.

#### • Flexible production

Fashion and trends are very important for Textiles and clothing industries. Trends are changing over time and so, a flexible production system is required for adapting new trends to products. In this context, Turkey has a flexible Textiles and clothing industry.

#### • Qualified products

Quality is one of the most important characteristics of product that is vital for achieving competitive advantage. And, Turkey's Textiles and clothing products are qualified and desirable products.

## • Wide product range

Offering different products is very important for Textiles and clothing industry as all consumers demand different kinds of products. Therefore, owning a wide product range is very advantageous for Turkish Textiles and clothing industry.

#### • Developed textile finishing industry

Finishing processes include a variety of operations to make a textile fabric more suitable for its application. In this context, Turkey benefit from its developed textile finishing industry (Ministry of Science, Industry and Technology, 2010/2).

#### • Large-scaled domestic market

Turkey has a large population of approximately 80 million people that provide opportunities for businesses. There is a large demand for Textiles and clothing products. And, large demand results in a developed and competitive industry.

#### • Organic cotton production

Organic products are being more and more popular everyday. As more consumer demand organic products, organic textile emerged. And, the organic textile industry is raising everyday. Turkey is the 2<sup>nd</sup> largest producer of organic cotton (Ministry of Science, Industry and Technology, 2010/2). In this context, organic cotton production provides advantages for Turkey's textiles and clothing industry.

#### Weaknesses

#### Lack of marketing efforts

Marketing is crucial for the success of businesses. Firms promote products to customers via advertising and campaigns. However, Turkish Textiles and clothing producers' marketing efforts are not sufficient for a successful operation.

#### • Lack of branding

Brands are firms' precious assets that distinguish them from competitors. Brands become more and more important for consumers and consumer demand branded products more. However there are very few Turkish Textiles and clothing brands known by world. Thus, Turkish producers sell the same quality product cheaper than its rivals such as Italy.

- High production costs (energy, labor, taxes, finance, etc.)
   Offering same quality products in lower prices give businesses competitive advantage. However, production costs are relatively higher in Turkey comparing to Asian countries such as China and Indonesia (Ministry of Science, Industry and Technology, 2010/2).
- Insufficient coordination and collaboration between government and private sector

Sufficient coordination and collaboration between government and private sector provide more competitive industries. Because, it is more possible for governments to regulate the industry better if there are sufficient coordination and collaboration. However, there are not sufficient coordination and collaboration between government and private sector in Turkey (Ministry of Science, Industry and Technology, 2010/2).

Insufficient coordination and collaboration between the sector and subsectors
 Clusters are one of the most important factors of competitive industries.
 Strong and efficient linkages between suppliers-producers and distributors
 provide many advantages. However, there are not sufficient coordination and
 collaboration between the sector and subsectors. And, there are a few clusters
 in Textiles and clothing industry in Turkey.

#### • Dependency to EU market

Europe is the primary market of Turkey's Textiles and clothing industry. Therefore, the industry is affected by the economic conditions in Europe. Exports of the Turkish textile industry fall when the Europe is in economic recessions or crisis.

## • Scales of the firms in the industry

Most of the firms in the Turkey's textiles and clothing industry are SMEs. They have not strong capital structures. Therefore, they have difficulty of competing with strong and macro-sized international rivals (Ministry of Science, Industry and Technology, 2010/2).

## Opportunities

Clustering of small and medium sized Turkish textile producers

As clusters provide many opportunities for the industries, formation of clusters is vital. There are many SMEs in the Turkey's textiles and clothing industry and they have the opportunity to act in concert.

Popularizing of organic products

Turkey is the second largest producer of organic textile (Ministry of Science, Industry and Technology, 2012/2). Therefore, popularizing of organic products bring advantages for Turkish industry.

• Government subsidies

Turkish government offers subsidies to Turkish firms with the aim of enhancing trade. These include Turquality, design subsidy, market research subsidy, etc.

• Globalization of the world

With the globalization of the world, more consumers become willing to buy from abroad. And, that give firms the opportunity to reach the whole world.

#### Threats

• Global economic crisis

Global economic crisis reduce the demand for textiles and clothing products. Therefore, sales revenue of the industry drops during economic crisis.

China and Far East

China and Far East are important competitors for Turkey's textile industry because they have the advantage of lower production costs. They acquire the biggest share in the world's textile exports (Ministry of Science, Industry and Technology, 2012/2).

#### • Tariff and non-tariff barriers

Tariffs and non-tariff measures are entry barriers that affect international operations of firms. Some countries implements high tariffs, so it is difficult to enter these markets.

 Difficulty of entering markets because of regional economic integrations and trade agreements

Regional economic integrations and trade agreements affect outside parties badly because outsiders cannot benefit from privileges and so, have difficulties to compete with its rivals (Ministry of Science, Industry and Technology, 2012/2).

Environmental sanctions originating from EU regulations
 EU regulations involve different kinds of environmental sanctions and sometimes Turkish producers have difficulties to perform these obligations.

Rising of imported products in the domestic market
 Globalization result in increasing imports as well as exports. So, imported products in the Turkish textiles and clothing industry also increased. That influence local producers negatively, especially micro producers.

## 2.3.9 Problems of the Turkish Textiles and Clothing Industry

## 2.3.9.1 High Production Costs

Costs are very important for the competitiveness of the industries. According to the surveys done by several organizations, largest cost constitutes of the Turkey's textile and clothing industry are raw material costs and labor costs, following by energy costs (Ministry of Science, Industry and Technology, 2012/2). In this context,

highness of costs, especially labor and energy costs, affects Turkish textiles and clothing industry negatively. For example labor cost is \$4.50 per hour in Turkey whereas it is \$2.89 in Morocco, \$2.72 in Mexico, \$2.03 in Bulgaria and \$2.10 in China (Werner International, 2011).

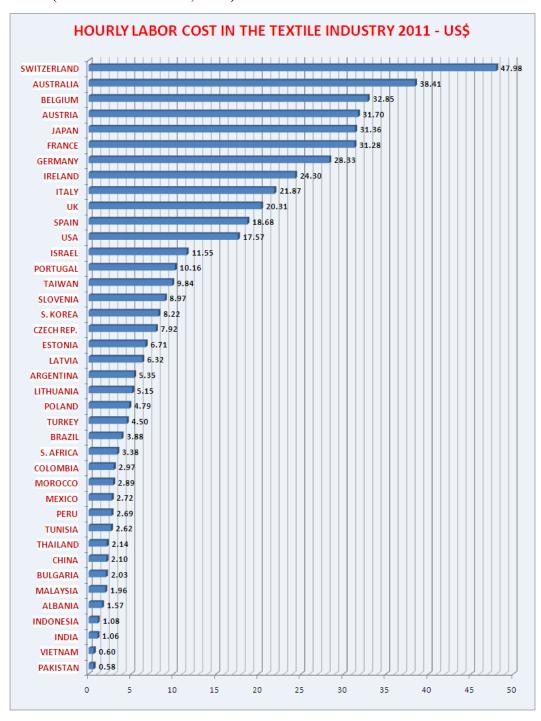


Figure 3: Labor Costs in Textile Industry, 2011

Source: Werner International, 2011

Textile and clothing industry is one of the largest electricity consuming industries of Turkey. According to the Ministry of Science, Industry and Technology (2012/2), textiles is the first industry within manufacturing industry in electricity consumption with its 18 percent share. Clothing industry is the 8<sup>th</sup> industry with its 5 percent share. However, electricity prices in Turkey are higher than many countries. Average electricity price in OECD countries is 0,088 \$/kWh as of date of 2006 whereas most expensive electricity price is in Italy with 0,237 \$/kWh. In Turkey, electricity price is 0,109 \$/kWh, and it is higher than the average OECD price (Keskin and Ertuğrul, 2009).

In the past, production shifted from developed countries to Turkey when apparel industry had got into maturity phase in developed countries. However, now, countries with lower wages begin to get much more shares from the production and world trade of apparel. Some of Turkish apparel companies also shifted their production to developing countries such as Egypt. Management of this transition period and orientation to changing competition conditions is very important for the future of Turkish apparel industry. Focusing on fashion and branding will be much more important for Turkish textile companies than price competition (Ministry of Science, Industry and Technology, 2010/2). For example, Turkey exports 1 kg trousers for \$17.8 whereas Italy exports for \$53.3. That is because Italy has a strong brand image for clothing products. Also, its products are fashionable products and its designs are admired around the world.

#### 2.3.9.2 Inadequacy of Marketing Efforts – Branding

Nowadays, creating new designs and branding became much more important than costs for competitiveness. Brand is one of the most important determinants of consumer preferences. It is especially important in apparel industry as it is a value-added industry.

Despite the high export of Turkish textiles and clothing industry, it does not make good of its potential because of the inadequacy of marketing efforts. For example Turkey sells 1 kg men shirts for \$30.5 whereas Italy sells for \$49. Turkey exports 1 kg trousers for \$17.8 whereas Italy exports for \$53.3 (Çağlayan, 2012). Also, many of the Turkish textiles and clothing producers are still subcontractors of famous world brands. Therefore, it is vital for textile companies to create strong brands and to promote these brands to become successful. Knowing that the most important determinants of success in textile industry are fashion, brand and design, Turkish companies have to make enough R&D and branding.

Also, implementing new marketing tools such as e-commerce has substantial importance for the future of the textile sector, which has a key position in Turkish economy. Increasing internet penetration rates all over the world caused traditional trade to move beyond and resulted with emergence of online trade. In recent years online trade, especially in clothing sector, achieved a remarkable growth. Clothing sector has become the second most popular product segment of online sales after electronic products. In our day, a significant part of consumers prefer to buy their clothing on internet and their number is increasing with each passing day. So, companies globalizing and adopting to changing competition conditions via using new opportunities offered by technology, become successful and acquire a sustainable growth.

#### 2.3.9.3 Unplanned Investments – Excess Capacity

In 1990's, especially after the Customs Union in 1995, so many investments in Turkish textiles and clothing industry were made with the expectation of market boom. However, not realization of market boom resulted with excess capacity and low capacity utilization ratio. Furthermore, not existing of market entry barriers in clothing industry make it is easy for investors to enter the industry. Therefore, many investments for the manufacturing of ordinary clothing products that have little value added are done by nonexpert investments (Arslan, 2008).

According to Central Bank of Turkey statistics, capacity utilization ratio was 76% for textile industry and 77% for apparel industry in December 2011.

#### 2.3.9.4 Unregistered Labor Force

Textiles and clothing industry employs almost 746.617 thousands of people according to the statistics of Ministry of Labor and Social Security (December 2010). However, it is projected that textiles industry's employment is 450 thousand of people and clothing industry's employment is 1500 thousand of people in consideration of undeclared work. That means that the total textile and clothing industry employs more than 2 millions of people in consideration of undeclared work (Ministry of Science, Industry and Technology, 2010/2). Textiles and clothing companies that work informally cause unfair competition. Also uninsured employees are very big social problem for the country.

#### **2.3.9.5** Financing

Approximately 90% of the companies that operate in Turkish textiles and clothing industry are SMEs that have incapable capital structures (Ministry of Economy, 2012). They have to use external financing options such as bank loans, factoring, commercial papers, etc. However, interest rates are relatively high in Turkey. There are so many textile firms that have difficulties to pay its credit debt. On the other hand, several programs for financial support of SMEs are being implemented all over the world. In Turkey, there are several institutions that support SMSs. These institutions are KOSGEB (Small and Medium Enterprises Development Organization), Türk Eximbank, Ministry of Economy, Halkbank, etc. KOSGEB is the main organization supporting SMEs. It provides several programs such as Thematic Project Support Programme, Cooperating-Leaguing Support Program, Entrepreneur Support Programme, General Support Programme, SME Project Support Programme, R&D, Innovation and Industrial Application Support Programme, Emerging Enterprises Market SME Support Programme and Loan

Interest Support Programme (KOSGEB, 2012). SMEs can also benefit from customs exemption, VAT (value added tax) exemption, etc. for their investments through receiving incentive certificate from Ministry of Economy. Furthermore, Türk Eximbank supports exporter firms through short-medium-long term credits, and assurance and guaranty programs.

## 2.3.9.6 Shrinking Demand Because of the Global Crisis

European Union is the primary market of Turkish textiles and clothing industry. That is why the Turkish textiles and clothing industry has been affected deeply from the financial crisis in 2009. The crisis has caused decreasing of European countries' purchasing power. As a result Turkey's textiles and clothing exports decrease by 17% in 2009. That shows the importance of diversification strategy. However, 69% of total textiles and clothing exports of Turkey were to EU in 2011.

## 2.3.9.7 Insufficient Coordination and Cooperation between Government and Private Sector

One industry's success depends on both private sector and the government. Two sides should coordinate to create industry's database, set strategies and solve problems. Legal regulations, government subsidies, bilateral agreements should be based on private sector's needs. However, there is insufficient coordination and cooperation between government and private sector in Turkey.

#### **CHAPTER III**

# PORTER'S APPROACHES FOR COMPETITIVENESS AND CHINA EXAMPLE

Competitiveness is a popular concept used in business administration literature. This multiple meaning and multi-dimensional term refers generally to the market share, profitability, and productivity. Competitiveness is examined at two levels: enterprise-industry level (micro) and nation level (macro). Competition between enterprises and effects of this competition to the national/international markets are examined at micro level approach. A country's position in international competition is examined at macro level (Çivi et. al., 2008).

Although nation level competitive advantage is the first thing coming to mind while discussing about international competitive advantage, it is argued that studying enterprise or industry level competitive advantage is more meaningful (Bedir, 2009). According to Krugman (1994) national performance should be measured by productivity growth and competitiveness is meaningless when applied to national economies. Although international competitiveness of countries is a popular concern of today, it is an elusive term. And, there is no general agreement on how to explain and measure it (Daniels, 1991).

Traditional theories such as Heckscher (1919) and Ohlin (1933) about competitiveness generally focus on costs. Such theories pay attention to abundance of natural resources and low cost production. On the other hand, latter theories highlight non-price factors such as innovation and clustering for the competitive advantage. However, it is insufficient to define competitiveness by just one factor (Bedir, 2009). For example Italy's textiles and clothing industry is one of the most

competitive textiles and clothing industries in the world despite the high unit labor costs in Italy.

## 3.1. Nation Level Competitiveness

There are many theories trying to explain competitiveness at the national level (macro-level). Some of these theories relate competitiveness with natural resources while some others relate it with exchange rates, budget deficits, and interest rates. Also, some argues that competitiveness is dependent on government policy as well as one of the latter theories say that national competitiveness is driven by management practices, involving management-labor relations (Porter, 1990).

EU defines international competitiveness as the ability of the economy to provide increasing living standards and high level of employment sustainably (European Competitiveness Report, 2011). Likewise, according to one of the OECD definitions, international competitiveness is the ability of firms, industries, regions or countries to create higher factor income and higher level of employment comparatively and sustainably (OECD, 1996; Bedir, 2009).

Although market share of one nation's products in world markets is the first thing coming to mind while discussing about nation level (macro) competitive advantage, it is not a right approach to measure national competitiveness through market share (Porter, 2004). Porter associate nation level international competitiveness to the productivity. According to Porter, competitiveness has a direct relationship with a nation's standard of living. He says "a nation's standard of living is determined by the productivity of its economy, which is measured by the value of goods and services produced per unit of the nation's human, capital, and natural resources" (World Economic Forum - The Global Competitiveness Report 2003-2004). Therefore, competitiveness should be measured by productivity according to him. Also, he

argues that productivity is dependent on innovation<sup>1</sup>, and being competitive is achieved by innovation, not by low wages or low taxes (Porter, 1990).

According to Çivi (2008), national competitiveness has three key features:

- 1. The aim of gaining competitive advantage is raising nation's standard of living and welfare of the citizens.
- Countries should focus on specific characteristics, abilities and capabilities to catch up competitor countries in the production and distribution of goods and services.
- There are too many indicators such as international market share, country's trade balance, employment, etc. that are used in the examination of countries' competitive advantages.

Also, World Economic Forum defines competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country (The Global Competitiveness Report 2012-2013). They determined 12 pillars that drive competitiveness. They press annual reports in which countries are analyzed and listed according to their competitiveness.

Table 10: World Economic Forum's Global Competitiveness Index

	1.Institutions
BASIC REQUIREMENTS  U  Key for factor-driven economies	Public institutions
	Private institutions
	2.Infrastructure
	Transport infrastructure
	Electricity and telephony infrastructure
	3.Macroeconomic environment
	4.Health and primary education
	Health
	Primary education

<sup>&</sup>lt;sup>1</sup> Porter defines innovation as "Implementing new ways to compete in one industry and bringing competitive advantage"

37

**Table 10 (continued)** 

	5.Higher education and training
EFFICIENCY ENHANCERS	Quantity of education.
	Quality of education
	On-the-job training
	6.Goods market efficiency
	Competition
	Quality of demand conditions
	7.Labor market efficiency
	Flexibility
	Efficient use of talent
Key for efficiency-driven economies	8.Financial market development
	Efficiency
	Trustworthiness and confidence
	9.Technological readiness
	Technological adoption
	ICT use
	10.Market size
	Domestic market size
	Foreign market size
INNOVATION AND	
SOPHISTICATION FACTORS	11 Pusiness conhistination
<b>1</b>	11.Business sophistication
Key for innovation-driven economies	12.R&D Innovation

Source: World Economic Forum - The Global Competitiveness Report 2012-2013

According to the Global Competitiveness Report 2012-2013, Turkey is the 43<sup>rd</sup> competitive nation among 144 economies. Turkey benefited from macroeconomic stability, easily accessible finance, developed institutional framework, great competition in local markets, developed infrastructure and large local market. However, ports and the electricity supply need more improvement. According to the Report "In order to further enhance its competitiveness, Turkey must focus on building up its human resources base through better primary education and healthcare (63rd) and higher education and training (74th), increasing the efficiency of its labor market (124th), and reinforcing the efficiency and transparency of its public institutions (67th)." Turkey's rank is 57 (4.75 points over 7) for basic

requirements, 42 (4.42 points over 7) for efficiency enhancers and, 50 (3.79 points over 7) for innovation and sophistication factors. Also, Turkey is in the transition from an efficiency-driven economy to an innovation-driven economy.

## 3.2. Firm – Industry Level Competitiveness

Many of the academicians who studied competitiveness focus on micro-level competitiveness in their researches. That is because competitiveness is meaningless when applied to national economies (Krugman, 1994). Although competitive advantage is regarded as a national notion, firms are competing in markets, not governments (Kester and Luehrman, 1989). Thus, firm-level competitiveness is more popular than nation and industry level competitiveness in the competitiveness literature (Ambastha and Momaya, 2004).

OECD (1992: 239) defines firm level competitiveness as firm's capacity to compete, increase market share, grow and increase profits. According to Porter (1990), an enterprise could gain micro level competitive advantage via two ways: price advantage and differentiation. With price advantage, Porter means a more productive production than competitors. And with differentiation, he means satisfying customers' needs with different goods and services. Also, he argues that the indicators of enterprise level international competitive advantage are the productivity and market share of the enterprise. Parallel to Porter, productivity is seen as one of the best indicators of competitiveness by many researchers (Ambastha and Momaya, 2004).

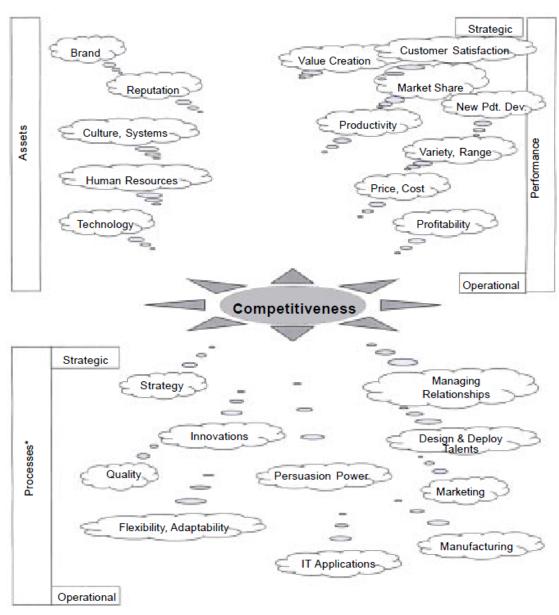
According to Kurnaz and Kayık (2008) competitiveness of an enterprise is the ability of the enterprise to make customers prefer its products instead of alternatives sustainably. According to Timurçin (2010), measures of competitive advantage of enterprises are productivity, costs, production flexibility, qualified labor, innovation, compliance with standards and quality, speed, export share and market share.

Aeker (1989) argues that the basis of competition is the assets<sup>2</sup> and skills<sup>3</sup> that the firm has. Unique and inimitable assets and skills provide sustainable competitive advantages to the firm. However, role of processes for competitive advantage even became popular. Operational processes, technological processes, marketing processes, and strategic management processes are all important for firm-level competitive advantage (Ambastha and Momaya, 2004).

Sources of firm-level competitiveness have received considerable research attention. Ambastha and Momaya (2004) reviewed literature for the sources of firm-level competitiveness in their study and grouped these resources into Asset, Process and Performance dimensions. They argue that competitiveness involves a combination of assets, processes and performance. Assets include brand, human resources, firm culture, etc. Processes include quality, design, innovation, marketing, etc. Performance includes productivity, market share, profitability, price, cost, etc.

<sup>&</sup>lt;sup>2</sup> An asset is something the enterprise owns such as a brand name or retail location that is superior to the competition (Aeker, 1989; 1)

<sup>&</sup>lt;sup>3</sup> A skill is something the enterprise does better than rivals such as advertising and efficient manufacturing (Aeker, 1989; 1)



<sup>\*</sup>These include management processes

Figure 4: Ambastha and Momaya's Select Connotations of Firm Level Competitiveness

Source: Ambastha and Momaya (2004:49)

Some authors associate competitive advantage with firm characteristics such as firm structures, competencies, and other tangible and intangible resources. Specific capabilities of firms are the sources of performance differences (Hawawini, Subramanian and Verdin, 2001).

On the other hand, some authors associate competitive advantage with industry structure (Oster, 1990; Porter, 1980). They argue that structural characteristics of specific industries affect profitability of firms. Powel (1996) examined industry effect on firms' performances and found that industry factors (main effects) and interactions among industry factors together explain 20 percent of the variation on overall performance, and 17 percent of variance on profitability. Although Porter's Five Forces Model is one of the most popular models of strategy literature, it has little empirical support (Powel, 1996).

The effect of firms' internal characteristics and effect of industry on firms' performances is much of interest. According to Rumelt (1991), firm specific factors explain more than 44 percent of the variation on profits whereas industry effects explain more than 4 percent of the variation on profits. Similarly, many of the researches showed that firm-specific effects are more than industry effects (Brush, Bromiley and Hendrickx, 1999; McGahan and Porter, 1997). On the other hand, Hawawini, Subramanian and Verdin (2001) argue that industry effect on firms' performances is more than firm-specific factors for most of the firms whereas firm-specific factors are more important for the leader and loser firms.

Although industry-level effects and firm-level effects on firms' performances attracted too much interest, there are only a few researches about what constitute industry-level and firm-level factors. And, this merits further investigation (Hawawini, Subramanian and Verdin, 2001).

## 3.3. Porter's Diamond Model

Porter presents a new theory of how nations and regions compete in his book called "The Competitive Advantage of Nations (1990)". His model, named as Diamond Model, is one of the most popular and accepted models of analyzing competitiveness. His model could be applied to an enterprise, industry or nation. His

model determines factors affecting national competitive edge. These interlinked factors are grouped into four categories: (1) factor conditions, (2) related and supporting industries, (3) demand conditions, (4) firm strategy, structure and rivalry. Because of the graphical representation of the model, it is referred to as the *diamond*. Diamond model demonstrate how a factor is affected by other three factors and it is used to determine competitive positions of countries and industries (Bulu, Eraslan and Kaya, 2006).

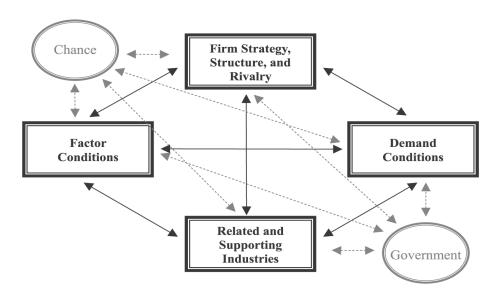


Figure 5: Determinants of National Competitive Advantage

Source: Porter (1990)

Factor (input) conditions regards to the abundance, efficiency, quality, and specialization of the inputs such as human resources, capital resources, physical infrastructure, administrative infrastructure, information infrastructure, scientific and technological infrastructure and natural resources. Porter grouped these inputs into two categories: 1) Basic factors 2) Advanced factors. Basic factors include land (including natural resources and climate), location, unskilled and semiskilled labor and debt capital. According to Porter, basic factors are inherited or need little investment to create. Although classical international trade theories including Smith (1776) and Ricardo (1817) mentioned these factors as mainstays of competitive advantage, these factors become increasingly unimportant for competitiveness of

nations as the advantage they provide is unsustainable. Advanced factors include modern data communications infrastructure, highly educated personnel and university research institutes in sophisticated disciplines. They are necessary to achieve higher-order competitive advantages such as differentiated products and proprietary production technology, however, their development needs large and often sustained investments in both human and physical capital (Porter, 1990). The success of an economy comprises two stages: first stage of improving competitiveness depends on abundant natural resources and labor force; and the second stage involves competitive processes such as product quality control, quick delivery, product customization and after-sale services (Lau, To and Chen, 2009). According to Bedir (2009), importance of determinants of international competitiveness varies by time and location. In this context, countries that have different levels of development may implement different policies to develop international competitive advantage.

Demand conditions regards to the sophistication of home demand and the pressure from local buyers to innovate products and services. Nations gain competitive advantage in industries where the home demand gives local firms a clearer or earlier picture of buyer needs than foreign rivals have (Porter, 1990). The higher the expectations the customers have, the higher the performance the product has. That is, the firm with sophisticated home demand has competitive advantage compared to foreign rivals. Also, large domestic markets are attractive for foreign multinational companies to invest. And, with the transfer of know-how from foreign firms to local firms, foreign direct investments can enhance the competitiveness of economy.

Related and supporting industries regards to the availability and quality of local suppliers and related industries, and the state of development of clusters<sup>4</sup>. According to Porter, linkages between the value chains of firms and their suppliers are important to competitive advantage because competitive advantage in some industries such as semiconductors, software, and trading, transfers potential

<sup>&</sup>lt;sup>4</sup> Clusters are geographically proximate groups of interconnected companies, suppliers, service providers, and associated institutions in a particular field, linked by commonalities and complementarities (Porter, 1994)

advantages on a nation's firms in many other industries. The competitive supplier industries provide rapid, efficient and cheap inputs to downstream industries. Also, suppliers help firms perceive new methods and opportunities to apply new technology. All these benefits are improved if the suppliers and firms are located closely, for example, in clusters. With more efficient access to specialized suppliers, employees and information for the enterprises in clusters, transaction costs reduced and higher profit margins are enjoyed (Zhang, 2004).

Firm strategy, structure and rivalry is the context in which companies are created, organized, and managed, as well as the nature of domestic rivalry (Porter, 1990). Internal organizational aspects of strategy relates to external structural aspects of the industry and inter-firm relations<sup>5</sup>. The way firms' managers think, employees' attitudes, firms' ownership situation all influence the success of the firms. National advantage results if these sorts of thinks match well with the competitive requirements of the industry. Also, domestic rivalry has an important role in the competitiveness of industries. If there is a strong domestic rivalry, it results in an internationally competitive industry.

Besides four elements, *governments* also influence competitive advantage, however, in an indirect and proactive way. According to Porter (1990) government policies' primary goal is the optimum distribution of country's sources among productive industries. However, governments cannot create competitive industries, only companies can do that. He argues that, governments encourage companies to raise their aspirations and move to higher levels of competitive performance by regulations, safeguard measures, subventions, etc.

The second outsider that influences competitive advantage is the role of *chance*. According to Porter, chance events are emergences that have little to do with circumstances in a nation and are often largely outside the power of firms. Oil shocks, political decisions of foreign governments and wars are the examples of

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<sup>&</sup>lt;sup>5</sup> Resource: Hansen's book review of Porter's "The competitive Advantage of Nations"

chance events. Chance events may allow shifts in competitive position (Porter, 1990). For instance, Singapore's apparel industry developed after Western nations placed quotas on apparel imports from Hong Kong and Japan.

Subsequent articles have handled clusters and other viewpoints of the Porter's model. Some of these articles criticized the model from some viewpoints. For example, while Porter is considering government and chance as outside variables, John H. Dunning applied the multinational firms' activities as a third important outside variable (Rugman and D'Cruz, 1993) asserting that its place could not be among the variables of "Firm strategy, structure and rivalry" – side of the diamond.

Also, some of the subsequent articles argue that the model is missing the asset mobility (Postelnicu and Ban, 2007; Dunning, 1995). According to the Postelnicu and Ban, taking into consideration the activity and economic determinants of multinational firms, not only one competitiveness diamond can be defined, but multiple diamonds, corresponding with all these interactions.

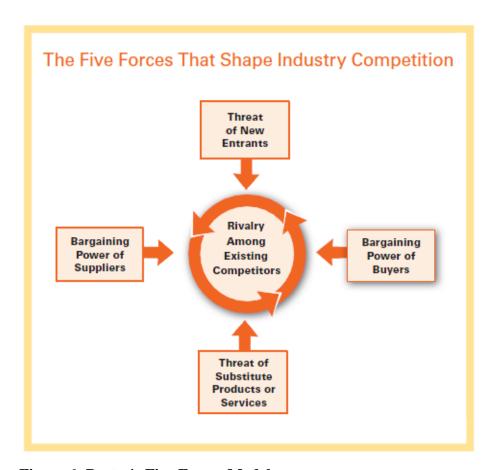
#### 3.4. Porter's Five Forces Model

Different industries provide different advantages and disadvantages for the profitability of firms. Managers should have a good understanding of these advantages and disadvantages to compete successfully.

In 1979, Porter came up with a model which is now known as 5 Forces Model (5FM). His model analyzes the industry structure and determines the competitive intensity within an industry through five forces. According to Porter (2008), industry's underlying structure must be analyzed in terms of the five forces to understand industry competition. These five competitive forces that shape strategy are (1) threat of new entrants, (2) bargaining power of suppliers, (3) threat of substitute products or services, (4) bargaining power of buyers, (5) rivalry among

existing competitors. Although some of the researchers use the Model to measure industry attractiveness, Porter says "The point of industry analysis is not to declare the industry attractive or unattractive but to understand the underpinnings of competition and the root causes of profitability" (2008:87).

Porter's 5FM is discussed in many studies. Some of them criticized the model arguing that the model is missing some other issues. In 1996, Mr. Andrew Grove, the CEO of Intel added "Force of the Complementary" as a 6<sup>th</sup> force to the model. However, Porter (2008) rejects it as a force as it does not affect profitability directly just influences five forces. Similarly, government is seen as another force by some researches. However, it affects profitability through the way it influence the five forces (Porter, 2008).



**Figure 6: Porter's Five Forces Model** 

Source: Porter (2008:80)

#### Threat of new entrants:

Industries with high rate of return attract new firms to enter the market. However, new entrants lead to share of revenues and decrease profitability. If there are high entry barriers in an industry, threat of new entrants is less. Likewise, new firms would enter to the industry and there would be fierce competition if it is a high profit industry and there are no or little entry barriers. Porter (2008) argues that industry profitability is moderated if the threat of entry is high. According to Porter and latter studies entry barriers can be listed as:

- > Supply-side economies of scale
- ➤ Demand-side benefits of scale
- > Capital requirements
- ➤ Unequal access to distribution channels
- > Incumbency advantages independent of size
- ➤ Restrictive government policy
- > Existing loyalty to local brands
- ➤ Need for product differentiation

#### Bargaining power of suppliers:

As competition is not only among direct rivals but also other sides such as suppliers and buyers, suppliers are one of the important determinants of profitability within an industry (Porter, 2008). Power of suppliers would be high if:

- > Switching cost between suppliers is high
- > Supplier group is more concentrated than the industry it sells to
- The supplier group does not depend heavily on the industry for its revenues
- > Suppliers offer products that are differentiated
- > There is no substitute input
- The supplier group can credibly threaten to integrate forward into the industry
- > There are a few suppliers

## Bargaining power of buyers:

Buyers have a great influence on the profitability within an industry via demanding low prices and high quality products (Porter, 2008). Buyers are powerful if:

- There are few buyers, or each one purchases in volumes that are large relative to the size of a single vendor
- > Switching cost between sellers is low
- ➤ The industry's products are standardized or undifferentiated
- > They are price sensitive
- > There is no brand loyalty between them
- > Buyers can credibly threaten to integrate backward and produce the industry's product themselves if sellers are too profitable

#### Threat of substitute products or services:

A substitute product is the product (or service) that can be used instead of another product (or service). Porter (2008) argues that industry profitability decreases in case of high threat of substitutes. According to Porter and latter studies the threat of a substitute is high if:

- Substitutes offer an attractive price-performance trade-off to the industry's product
- The buyer's cost of switching to the substitute is low
- ➤ There are a lot of substitute products

#### Rivalry among existing competitors:

Rivalry is one of the most important determinants of profitability of an industry. For instance, fierce competition on prices can transfer profits to customers from the industry (Porter, 2008). Rivalry among existing competitors is high if:

- > There are a lot of competitors
- ➤ Competitors are roughly equal in size and power
- ➤ Industry growth rate is slow
- Exit barriers are high

- ➤ Rivals are highly committed to the business and have aspirations for leadership, especially if they have goals that go beyond economic performance in the particular industry
- > The products of rivals are identical
- Fixed costs are high and marginal costs are low
- ➤ There is excess capacity in the industry
- > Brand loyalty among buyers is low

## 3.5. China Example

China is the largest exporter of textiles and apparel in the world. According to the ITC Trademap statistics, China constituted 32 percent of the world exports of textiles and clothing in 2011. China's textiles and clothing industry achieved a rapid development especially after 1 January 2005 with the termination of quotas. The industries' exports grew by 171 percent between 2004 and 2011 (ITC Trademap Statistics, July 2012).

Thanks to low labor costs, many of the international Textiles and clothing companies shifted their production to China. It accounts for one-fifth of the world's total production. Textiles and clothing exports of China accounted for 12.5 percent of the total exports of China in 2011 (ITC Trademap Statistics, July 2012). Also the industry employed 19 million people in China in 2005.

China, with a population of 1.3 billion people, is a large domestic market for textile products itself. As a result, the Chinese textiles market had total revenue of \$325.9 billion in 2010. It grew by 18.1% (compound annual growth rate-CAGR) between 2006 and 2010. Non-apparel products<sup>6</sup> have the biggest share in China's textile market. It is followed by apparel products. China corresponds to 47.3% of the Asia-

<sup>&</sup>lt;sup>6</sup> Non-apparel products comprise of household, technical, and other made-up non-clothing products.

Apparel products are all clothing products out of leather and footwear

Pacific textile market value, followed by India with a ratio of 32.8% (Datamonitor, 2011).

Table 11: China Textile Market Segmentation, by value, 2010

Category	% Share
Non-Apparel Products	32.4%
Apparel	29.7%
Fabrics	29.0%
Yarns	8.9%
Total	100%

Source: Datamonitor, Industry Profile: Textiles in China, November 2011

With its low-price products, huge exports and high growth rates, China's Textiles and clothing industry is one of the most threatening competitors of Turkey's Textiles and clothing industry. Therefore, it is worth searching factors of competitiveness of China's Textiles and clothing industry.

Lau, To, Zhang and Chen (2009) explored firm-specific determinants of competitiveness of the textiles and clothing industry of China. In their study, they conducted a survey that is designed to use productivity, supply-side and demand-side determinants to measure enterprises' competitiveness. They delivered 120 surveys and 67 were returned. 51 of them were used in the analysis. The enterprises surveyed are generally located in two regions where textile and apparel clusters are well established: Pearl River Delta in Guangdong Province and Yangtze River Delta in Zhejiang and Jiangsu Provinces. Also, 94.2 percent of the surveyed firms are apparel manufacturers. In the survey, researchers asked 19 questions about determinants of competitiveness. They used factor analysis with the rotation of varimax in the analysis. They found 6 generalized factors affecting competitiveness: (1) factor conditions, (2) government and related supporting industries, (3) product upgrading strategy, (4) company marketability strategy, (5) domestic demand (6) abroad demand. According to the results government policies and related industry infrastructure are the most important determinants of competitiveness in the China's textiles and apparel industries. And, domestic demand plays the third most important

role in improving industry competitiveness. Their study demonstrates that some government policies should be applied to reinforce inter-enterprise cooperation and to improve local government services for the textile and clothing industries. Governments should also develop infrastructure and implement stable monetary policies.

#### **CHAPTER IV**

#### THE MODEL AND HYPOTHESES DEVELOPMENT

The aim of this study is threefold. First, to identify determinants of competitiveness of Turkish textiles and clothing industry. Second, to analyze the effects of firm characteristics, future expectations and industry structure on perceived competitive advantage of Turkish textiles and clothing firms. Third, to analyze the Turkish textiles and clothing industry's structure.

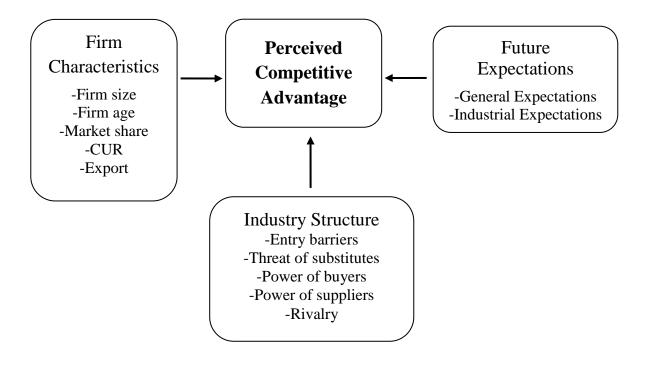
Although there are a lot of studies regarding competitiveness, a few of them focus on perception of competitiveness. This study is the first one that investigates the perceived competitive advantage of Turkish textiles and clothing firms. In this study it is tried to find out what affects managers' perception of their firms' competitive advantage. Managers' perception on competitiveness is related with firm characteristics, managers' future expectations and industry structure. Relationship between future expectations and perception on competitiveness has never been studied before. Also, the study focused on Turkish textiles and clothing industry which is one of the most important industries of Turkish economy in our study. There are just a few studies regarding competitiveness of Turkish textiles and clothing industry.

Moreover, this study gives a comprehensive and integrated view of competitiveness of Turkish textiles and clothing industry. In the study, key determinants of competitiveness of Turkish textiles and clothing industry are explored in terms of Porter's Diamond Model, and effects of firm characteristics, future expectations and industry structure on firms' perceived competitive advantage are analyzed.

Furthermore the industry's structure is analyzed in terms of Porter's Five Forces Model to understand industry competition.

Based on the Porter's Diamond Model, indicators of factor conditions, demand conditions, related and supporting industries, and firm strategy, structure and rivalry were explored as determinants of competitiveness in the survey.

Firm characteristics, future expectations of managers and industry structure are considered as if they affect managers' perception of their firm's competitiveness The model used to examine the effects of firm characteristics, future expectations and industry structure is;



#### Perceived Competitive Advantage

Firms' capacity to compete, increase market share, grow and increase profits regard to the competitiveness of firms (OECD, 1992: 239). Unique abilities that are difficult

to imitate provide advantages to the firms to compete (Barney, 1991). In line with the literature; these abilities are named as price, quality, costs (labour cost, raw material cost, capital cost, energy cost, transportation cost), product differentiation, product variety, new product development, delivery speed, human resources, distribution network, operating and management skills, technical know-how, machines used in the production, design and fashion capacity, marketing capabilities (advertising, branding and public relations) dimensions (Navarro et. al., 2010; Timurçin, 2010; Ambastha and Momaya, 2004; IFM [Institut Français De La Mode] et. al., 2004; Chacko, Wacker, and Asar, 1997; Porter, 1990). Managers of the surveyed firms were asked whether their firm is more competitive or less competitive than their rivals on these dimensions. Managers indicated their firms' competitiveness on a five point Likert scale.

#### Firm Characteristics

Firm characteristics are considered as one of the important determinants of perceived competitive advantage of firms. Researches demonstrate that firms' characteristics and actions affects profitability of the firms (Ambastha and Momaya, 2004; McGahan, 1999). Firm size, firm age, market share of the firm, capacity utilisation ratio and being an exporter or not are specified as firm characteristics.

## Future Expectations

Future expectations of the managers' are considered as if they affect perceived competitive advantage of firms. Both national expectations and industrial expectations are questioned in the survey. For national expectations macroeconomic indicators such as GDP, inflation rate, unemployment rate and GDP per head were used. For industry expectations managers were asked whether production quantity, costs, domestic and international sales volume, productivity, technology,

profitability, and competitive advantage of the Turkish textiles and clothing industry would increase or decrease in the upcoming ten years time.

#### Industry Structure

Industry structure is considered as if it affects perceived competitive advantage of firms. Past researches showed that structural characteristics of particular industries affect firms' profitability (Oster, 1990; Porter, 1980). Competition and profitability is driven by industry structure, and underpinnings of competition are examined by industry analysis (Porter, 2008). In line with Porter's Five Forces Model, bargaining power of suppliers, entry barriers, bargaining power of buyers, thereat of substitute products or services, and rivalry among existing competitors dimensions are used to examine industry structure. A positive relationship is expected between industry structure and perceived firm competitive advantage.

A survey is applied to the Turkish textiles and clothing firms to test the model. The variables are selected based on the theoretical literature and surveys of prior researches. As a result, the thesis models the perceived firm competitive advantage as a function of firm characteristics including firm size, firm age, market share of the firm, capacity utilisation ratio and being an exporter or not; future expectations including general expectations and industrial expectations, and industry structure including power of suppliers, entry barriers, power of buyers, thereat of substitute products or services and rivalry among existing competitors.

A positive relationship is expected between firm size and perceived competitive advantage. It is assumed that economies of scale affect competitive positions of firms. Hence, larger firms are supposed to have more competitive advantages than their smaller rivals. Parallelly, firm age, market share and capacity utilisation ratio are expected to have positive relationships with perceived competitive advantage. Furthermore exporter firms are supposed to have more competitive advantages than their non exporter rivals.

Also, it is expected that there is a positive relationship between future expectations and perceived firm competitive advantage. A manager with optimistic future expectations is supposed to perceive his firm more competitive.

Furthermore, an industry structure that has low power of suppliers, low power of buyers, low power of substitutes, low entry barriers and low rivalry among existing competitors is supposed to affect perceived competitive advantage positively. It is assumed that there is negative relationship between five forces and perceived competitive advantage.

#### **CHAPTER V**

#### **SURVEY DESIGN**

The survey was designed as of four parts including 30 questions in total (see Appendix). First part of the survey (question 1 to question 14) is about firm characteristics. Product group of the firm, firm age, number of employees, production type, market share, average compensation, export quantity change, export share in the total sales, export markets, capacity utilization ratio, imported machines to total machines ratio, imported inputs to total inputs ratio, and focus of the R&D activities of the firm were asked in this part of the survey. These questions are all multiple choice questions excluding firm age and focus of the R&D activities of the firm. Firm age was asked as an open-ended question. On the other hand, focus of the R&D activities was asked as a Likert question (1=completely unimportant, 5=completely important).

The second part of the survey which involves questions from 15 to 19, and questions 25 and 26 is consisting competitiveness measures. Determinants of competitiveness in terms of Porter's Diamond Model, governments' role on the competition of the industry, and managers' perception of their firm's competitiveness were investigated in this part of the survey. Based on the Porter's Diamond Model, key determinants of competitiveness in the textile and clothing industry were explored in question 17. Totally 28 factors were developed for the four determinants of competitive advantage (factor conditions, demand conditions, related and supporting industries, and firm strategy, structure and rivalry) cited by Porter. Participants were asked to indicate the importance of each factor on a 1 to 5 scale (1=completely unimportant, 5=completely important). These factors include raw material costs, labor costs, capital costs, energy costs, local availability of inputs, local availability of machines, qualified labor force,

easy access to capital, physical infrastructure, administrative infrastructure, industrial research institutes, local demand, buyer sophistication, product quality, product differentiation, innovation, foreign direct investments (FDI) in domestic market, number of local suppliers, quality of local suppliers, clustering of the industry, vertical and horizontal linkages, presence of domestic rivals, intense of domestic rivalry, management of the firm, firm culture, technical development, easy access to information and government support.

As Diamond Model includes governments as an influencing factor for competitive advantage, governments' role on the competition of the industry was investigated in the survey. Participants were asked to indicate the importance of 6 elements provided by governments on a 5 point scale in question 18. These elements are logistic infrastructure, technological infrastructure, property rights, education, tax support and elimination of entry barriers to foreign markets. Question 19 is an open-ended question which asks what additional elements governments should provide.

Perceived firm competitive advantage is measured in question 25. Some assets, processes, and abilities are selected from theoretical literature and surveys of prior researches to measure perceived firm competitive advantage (Navarro et. al., 2010; Timurçin, 2010; Ambastha and Momaya, 2004; IFM [Institut Français De La Mode] et. al., 2004; Chacko, Wacker, and Asar, 1997; Porter, 1990). These assets, processes, and abilities are price, quality, costs (labour cost, raw material cost, capital cost, energy cost, transportation cost), product differentiation, product variety, new product development, delivery speed, human resources, distribution network, operating and management skills, technical know-how, machines used in the production, design and fashion capacity, marketing capabilities (advertising, branding and public relations). Participants were asked whether their firm is more competitive or less competitive than their rivals on these dimensions. Managers indicated their firms' competitiveness on a five point scale (1=Lesser competitive, 5=Much more competitive).

In the third part of the survey which range from question 20 to question 24, Turkish textiles and clothing industry's structure was explored on the basis of Porter's Five Forces Model. Totally 25 measures were developed for the 5 competitive forces (threat of new entrants, threat of substitute products or services, bargaining power of buyers, bargaining power of suppliers, and rivalry among existing competitors) cited by Porter. Participants were asked to mark the best response to each statement on a 1 to 5 scale (1=strongly disagree, 5=strongly agree)

Last part of the survey which range from question 27 to question 30, involves managers' perception on Turkey's general economic situation and managers' future expectations. For future expectations both national expectations and industrial expectations of the managers' were investigated. Expectations on macroeconomic indicators such as GDP, inflation rate, unemployment rate and GDP per head were used as proxies for national expectations in question 29. Expectations on industry's production quantity, costs, domestic and international sales volume, productivity, technology, profitability, and competitive advantage were used as proxies for industrial expectations in question 30. Participants were asked to mark the best response to each statement on a 1 to 5 scale (1=strongly disagree, 5=strongly agree) in these questions for future expectations.

## **CHAPTER VI**

## SAMPLING AND DATA

The survey was sent to 1.945 Turkish textiles and clothing firms via e-mail. Convenience sampling is used for this field research. E-mail addresses of the firms were gathered from TOBB Industry Database and Exporter Unions' member lists. And, 53 firms returned to the survey.

Firms participated in the survey are mainly home textiles and clothing producers. Some of the firms produce two different product groups. 48.2% of the firms produce home textiles, 30.4% of the firms produce clothing, 12.5% produces yarn & fabric, and 8.9% of the firms produce other products which are carpets, hospital textile and labels.

**Table 12: Frequencies: Product Group** 

		Re	esponses	Percent of Cases
		N	Percent	N
Product group(a)	clothing	17	30,4%	32,1%
	home textile	27	48,2%	50,9%
	yarn & fabric	7	12,5%	13,2%
	other	5	8,9%	9,4%
Total		56	100,0%	105,7%

a Dichotomy group tabulated at value 1.

Ages of the firms participated in the survey range from 1 year to 62 years. Mean of the firm age is 21.30 years.

Table 13: Descriptive Statistics: Firm Age

	N	Minimum	Maximum	Mean	Std. Deviation
Firm age	53	1	62	21,30	15,153
Valid N (listwise)	53				

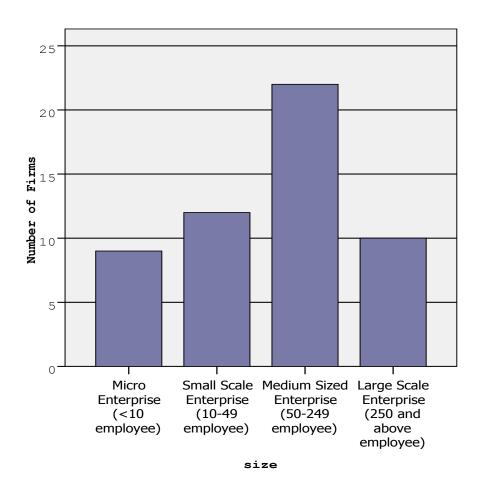
Number of employees of the firms participated in the survey vary from 1 to 3,000. Firms employ 287 people in average. Number of the employees used as a proxy for the firm size in the study. Among participants, 17% is micro enterprise, 22.6% is small scale enterprise, 41.5% is medium sized enterprise and, 18.9% is large scale enterprises.

**Table 14: Frequencies: Firm Size** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Micro Enterprise (<10 employee)	9	17,0	17,0	17,0
	Small Scale Enterprise (10-49 employee)	12	22,6	22,6	39,6
	Medium Sized Enterprise (50-249 employee)	22	41,5	41,5	81,1
Large Scale Enterprise (250 and above employee)	10	18,9	18,9	100,0	
	Total	53	100,0	100,0	

**Table 15: Descriptive Statistics: Firm Size** 

	N	Minimum	Maximum	Mean	Std. Deviation
Firm size	53	1	3000	287,11	567,428
Valid N (listwise)	53				



**Figure 7: Figure Structure of Firms** 

Although Turkish textile and clothing industry is one of the biggest exporters of world textile industry, there are still many Turkish contract manufacturers. 60.4% of the participants produce for their own brands whereas 41.5% of the participants are contract manufacturers.

**Table 16: Frequencies: Production Type** 

		Responses		Percent of Cases
		N	Percent	N
Production type(a)	Contract manufacturing	22	34,9%	41,5%
	Own brand manufacturing	32	50,8%	60,4%
	Other	9	14,3%	17,0%
Total		63	100,0%	118,9%

a Dichotomy group tabulated at value 1.

Most of the firms' domestic market share is between 0% and 5%. One of the reason of having little market share is that firms participated in the survey are export oriented firms and so, domestic market is not their primary market. Mean of the market share is 4.81 which reflect that mean market share is between 16% and 25%. However, it is also notable that %20.8 of the firms have a market share of 51% and above.

**Table 17: Frequencies: Market Share** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	%0-%5	19	35,8	36,5	36,5
	%6-%10	4	7,5	7,7	44,2
	%11-%15	4	7,5	7,7	51,9
	%16-%20	3	5,7	5,8	57,7
	%21-%25	3	5,7	5,8	63,5
	%26-%30	3	5,7	5,8	69,2
	%31-%35	1	1,9	1,9	71,2
	%41-%45	2	3,8	3,8	75,0
	%46-%50	2	3,8	3,8	78,8
	%51 and above	11	20,8	21,2	100,0
	Total	52	98,1	100,0	
Missing	System	1	1,9		
Total		53	100,0		

**Table 18: Descriptive Statistics: Market Share** 

	N	Minimum	Maximum	Mean	Std. Deviation
Market share	52	1	11	4,81	4,063
Valid N (listwise)	52				

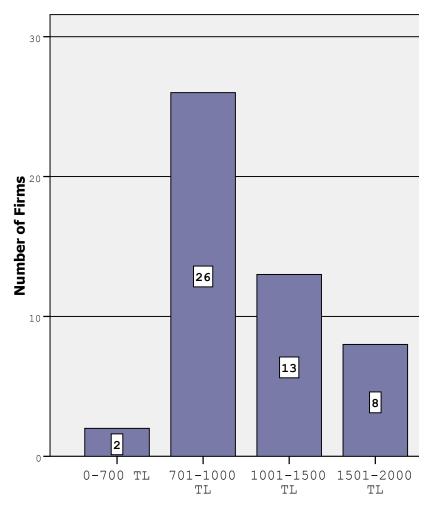
49.1% of the firms pay their employees an average monthly compensation ranging from 701 TL to 1000 TL.

**Table 19: Frequencies: Compensation** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-700 TL	2	3,8	3,8	3,8
	701-1000 TL	26	49,1	49,1	52,8
	1001-1500 TL	13	24,5	24,5	77,4
	1501-2000 TL	8	15,1	15,1	92,5
	2001 TL and above	4	7,5	7,5	100,0
	Total	53	100,0	100,0	

**Table 20: Descriptive Statistics: Compensation** 

	N	Minimum	Maximum	Mean	Std. Deviation
Compensation	53	1	5	2,74	1,022
Valid N (listwise)	53				



**Figure 8: Compensation Structure of Firms** 

52 of the 53 firms participated in the survey are exporter firms. This ratio indicates that Turkish textiles and clothing industry is very important for Turkey's export revenues.

**Table 21: Frequencies: Export** 

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	52	98,1	98,1	98,1
	no	1	1,9	1,9	100,0
	Total	53	100,0	100,0	

Although Turkish textiles and clothing firms are export oriented, their export quantity changes over time. Some of the firms' export quantity decreases while some of the firms' increases. 28.1% of the firms indicated that their export quantity increased moderately (between 5% and 10%) compared to the last year. However, mean of 4.92 reflect that mean export quantity change is between 0% and 5%.

**Table 22: Frequencies: Export Quantity Change** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rapidly decreasing (more than -10%)	4	7,5	7,7	7,7
	Moderately decreasing (between -5% and -10%)	7	13,2	13,5	21,2
	Slowly decreasing (between 0 and -5%)	3	5,7	5,8	26,9
	No change	2	3,8	3,8	30,8
	Slowly increasing (between 0 and 5%)	8	15,1	15,4	46,2
	Moderately increasing (between 5% and 10%)	15	28,3	28,8	75,0
	Rapidly increasing (more than 10%)	13	24,5	25,0	100,0
	Total	52	98,1	100,0	
Missing	System	1	1,9		
Total		53	100,0		

**Table 23: Descriptive Statistics: Export Quantity Change** 

	N	Minimum	Maximum	Mean	Std. Deviation
Export quantity	52	1	7	4,92	2,018
Valid N (listwise)	52				

Firms' export shares in total sales are generally more than 50 percent. 60.4% of the firms participated in the survey earn more than half of their revenues from international sales. This ration indicates the importance of the industry for the foreign exchange earnings of Turkish economy.

**Table 24: Frequencies: Export Share in Total Sales** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0%-10%	9	17,0	17,3	17,3
	11%-30%	5	9,4	9,6	26,9
	31%-50%	6	11,3	11,5	38,5
	51%-100%	32	60,4	61,5	100,0
	Total	52	98,1	100,0	
Missing	System	1	1,9		
Total		53	100,0		

**Table 25: Descriptive Statistics: Export Share in Total Sales** 

	N	Minimum	Maximum	Mean	Std. Deviation
Export share	52	1	4	3,17	1,184
Valid N (listwise)	52				

EU is the primary market of Turkey's textile and clothing industry. According to ITC Trademap statistics 69 percent of Turkey exported 69 percent of its textiles and clothing exports to EU (27) market in 2011. Parallel to these rations, 88.5% of the surveyed firms are exporting to EU. However, firms diversify their markets and export other markets too. Other Europe follows EU as 44.2% of the firms export to other Europe. Middle East and Gulf is the third most popular market as 30.8% of the

firms export to Middle East and Gulf. Latter most important market of Turkey's textiles and clothing industry is USA as 30.8% of the firms export to USA.

**Table 26: Frequencies: Export Markets** 

		Responses		Percent of Cases
		N	Percent	N
Export markets(a)	EU	46	32,9%	88,5%
	Other_Europe	23	16,4%	44,2%
	USA	16	11,4%	30,8%
	ME_Gulf	23	16,4%	44,2%
	Africa	13	9,3%	25,0%
	Asia_Pacific	12	8,6%	23,1%
	Other	7	5,0%	13,5%
Total		140	100,0%	269,2%

a Dichotomy group tabulated at value 1.

Excess capacity is one of the problems of Turkey's textile and clothing industry. Although 28.3% of the firms indicated that their capacity utilization ratio (CUR) is between 91% and 100%, mean is 6.5% which reflect that mean CUR is between 71% and 90%.

**Table 27: Frequencies: Capacity Utilization Ratio (CUR)** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	31%-50%	2	3,8	4,0	4,0
	51%-60%	3	5,7	6,0	10,0
	61%-70%	7	13,2	14,0	24,0
	71%-80%	9	17,0	18,0	42,0
	81%-90%	14	26,4	28,0	70,0
	91%-100%	15	28,3	30,0	100,0
	Total	50	94,3	100,0	
Missing	System	3	5,7		
Total		53	100,0		

**Table 28: Descriptive Statistics: Capacity Utilization Ratio (CUR)** 

	N	Minimum	Maximum	Mean	Std. Deviation
CUR	50	3	8	6,50	1,418
Valid N (listwise)	50				

Turkey's textile and clothing industry mainly uses imported machines. 73.6% of the firms indicated that more than the half of their machines is imported machines. These ratios indicate the dependency of the Turkish textiles and clothing industry to the imported machines.

**Table 29: Frequencies: Imported Machines** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0%-10%	4	7,5	8,3	8,3
	31%-50%	5	9,4	10,4	18,8
	51%-100%	39	73,6	81,2	100,0
	Total	48	90,6	100,0	
Missing	System	5	9,4		
Total		53	100,0		

**Table 30: Descriptive Statistics: Imported Machines** 

	N	Minimum	Maximum	Mean	Std. Deviation
Imported machines	48	1	4	3,65	,863
Valid N (listwise)	48				

Although Turkey produces some of the raw materials of the textile and clothing industry, it is still dependent on imported raw materials. Mean of the imported raw materials to total raw materials ratio is 2.54 which reflect that average ratio of imported raw materials to total raw materials is between 11% and 50%.

**Table 31: Frequencies: Imported Raw Materials to Total Raw Materials** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0%-10%	13	24,5	26,0	26,0
	11%-30%	11	20,8	22,0	48,0
	31%-50%	12	22,6	24,0	72,0
	51%-100%	14	26,4	28,0	100,0
	Total	50	94,3	100,0	
Missing	System	3	5,7		
Total		53	100,0		

**Table 32: Descriptive Statistics: Imported Raw Materials to Total Raw Materials** 

	N	Minimum	Maximum	Mean	Std. Deviation
Imported raw materials	50	1	4	2,54	1,164
Valid N (listwise)	50				

Primary focus of the Turkish textile and clothing firms' R&D activities is decreasing costs. It is followed by increasing productivity, product differentiation and increasing product quality, respectively. Developing environmental approach is not as important as others.

Table 33: Frequencies: Focus of R&D activities

				Valid	Cumulative
Quality		Frequency	Percent	Percent	Percent
Valid	Unimportant	1	1,9	2,0	2,0
	Neutral	1	1,9	2,0	3,9
	Important	20	37,7	39,2	43,1
	Completely Important	29	54,7	56,9	100,0
	Total	51	96,2	100,0	
Missing	System	2	3,8		
Total		53	100,0		

**Table 33 (continued)** 

				Valid	Cumulative
Costs	_	Frequency	Percent	Percent	Percent
Valid	Unimportant	1	1,9	1,9	1,9
	Neutral	1	1,9	1,9	3,8
	Important	11	20,8	21,2	25,0
	Completely Important	39	73,6	75,0	100,0
	Total	52	98,1	100,0	
Missing	System	1	1,9		
Total		53	100,0		
				Valid	Cumulative
Productiv	rity	Frequency	Percent	Percent	Percent
Valid	Unimportant	1	1,9	2,0	2,0
	Neutral	1	1,9	2,0	3,9
	Important	13	24,5	25,5	29,4
	Completely Important	36	67,9	70,6	100,0
	Total	51	96,2	100,0	
Missing	System	2	3,8		
Total		53	100,0		
				Valid	Cumulative
Product d	lifferentiation	Frequency	Percent	Percent	Percent
Valid	Unimportant	2	3,8	3,8	3,8
	Neutral	1	1,9	1,9	5,8
	Important	17	32,1	32,7	38,5
	Completely Important	32	60,4	61,5	100,0
	Total	52	98,1	100,0	
Missing	System	1	1,9		
Total		53	100,0		
				Valid	Cumulative
Working	conditions	Frequency	Percent	Percent	Percent
Valid	Unimportant	1	1,9	2,0	2,0
	Neutral	5	9,4	10,2	12,2
	Important	24	45,3	49,0	61,2
	Completely Important	19	35,8	38,8	100,0
	Total	49	92,5	100,0	
Missing	System	4	7,5		
Total		53	100,0		
				Valid	Cumulative
Environn	nent	Frequency	Percent	Percent	Percent
Valid	Completely unimportant	2	3,8	4,1	4,1
	Unimportant	3	5,7	6,1	10,2
	Neutral	6	11,3	12,2	2 22,4
	Important	21	39,6	42,9	65,3
	Completely Important	17	32,1	34,7	
	Total	49	92,5		

Table 33 (continued)

Missing System	4	7,5	
Total	53	100,0	

Table 34: Descriptive Statistics: Focus of R&D activities

					Std.
	N	Minimum	Maximum	Mean	Deviation
Quality	51	2	5	4,51	,644
Costs	52	2	5	4,69	,612
Productivity	51	2	5	4,65	,627
Product differentiation	52	2	5	4,52	,727
Working conditions	49	2	5	4,24	,723
Environment	49	1	5	3,98	1,051
Valid N (listwise)	48				

Although competitiveness is a popular concept in today's business literature, there is little agreement on how to measure it. Best measure for competitiveness is costs according to the firms participated in the survey. It is followed respectively by profitability, market share and sales revenue. Export quantity and number of export markets is not as important as others.

**Table 35: Frequencies: Best Measure for Competitiveness** 

Market	share	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completely unimportant	1	1,9	2,0	2,0
	Unimportant	3	5,7	5,9	7,8
	Important	18	34,0	35,3	43,1
	Completely Important	29	54,7	56,9	100,0
	Total	51	96,2	100,0	
Missing	System	2	3,8		
Total		53	100,0		
				Valid	Cumulative
Profitable	ility	Frequency	Percent	Percent	Percent
Valid	Unimportant	1	1,9	2,0	2,0
	Neutral	3	5,7	5,9	7,8
	Important	18	34,0	35,3	43,1
	Completely Important	29	54,7	56,9	100,0
	Total	51	96,2	100,0	

Table 35 (continued)

<u> Table 35</u>	(continued)				
Missing	System	2	3,8		
Total		53	100,0		
				Valid	Cumulative
Sales rev	venues	Frequency	Percent	Percent	Percent
Valid	Neutral	6	11,3	12,5	12,5
	Important	25	47,2	52,1	64,6
	Completely Important	17	32,1	35,4	100,0
	Total	48	90,6	100,0	ŕ
Missing	System	5	9,4	,	
Total	•	53	100,0		
			,	Valid	Cumulative
Producti	vity	Frequency	Percent	Percent	Percent
Valid	Completely		1.0	2.0	2.0
	unimportant	1	1,9	2,0	2,0
	Unimportant	1	1,9	2,0	4,0
	Neutral	2	3,8	4,0	8,0
	Important	20	37,7	40,0	48,0
	Completely Important	26	49,1	52,0	100,0
	Total	50	94,3	100,0	
Missing	System	3	5,7		
Total	•	53	100,0		
				Valid	Cumulative
Costs		Frequency	Percent	Percent	Percent
Valid	Neutral	1	1,9	1,9	1,9
	Important	17	32,1	32,7	34,6
	Completely Important	34	64,2	65,4	100,0
	Total	52	98,1	100,0	
Missing	System	1	1,9		
Total	•	53	100,0		
				Valid	Cumulative
Export q	quantity	Frequency	Percent	Percent	Percent
Valid	Completely	1	1,9	2,1	2,1
	unimportant	1	1,9	2,1	۷,1
	Unimportant	1	1,9	2,1	4,2
	Neutral	8	15,1	16,7	20,8
	Important	25	47,2	52,1	72,9
	Completely Important	13	24,5	27,1	100,0
	Total	48	90,6	100,0	
Missing	System	5	9,4		
Total		53	100,0		
				Valid	Cumulative
Number	of export markets	Frequency	Percent	Percent	Percent
		Ī			
Valid	Completely	1	1 0	2.0	2.0
	unimportant	1	1,9	2,0	2,0
		3 8	1,9 5,7 15,1	2,0 6,1 16,3	2,0 8,2 24,5

Table 35 (continued)

	Important	21	39,6	42,9	67,3
	Completely Important	16	30,2	32,7	100,0
	Total	49	92,5	100,0	
Missing	System	4	7,5		
Total		53	100,0		

**Table 36: Descriptive Statistics: Best Measure for Competitiveness** 

	N	Minimum	Maximum	Mean	Std. Deviation
Market share	51	1	5	4,39	,918
Profitability	51	2	5	4,47	,703
Sales revenues	48	3	5	4,23	,660
Productivity	50	1	5	4,38	,830
Costs	52	3	5	4,63	,525
Export quantity	48	1	5	4,00	,851
Number of export markets	49	1	5	3,98	,968
Valid N (listwise)	46				

In order to see the general situation of Turkish textile and clothing industry, firms are asked to indicate their overall performance change compared to last year in terms of market share, profitability, sales revenue, productivity and costs. According to the results, market share of the firms increased slightly whereas profitability decreased slightly. Profitability of the firms decreased because their costs increased while their sales revenues remain the same. Also, firms indicated that their productivity increased slightly compared to last year.

**Table 37: Frequencies: Performance Change** 

Market	Share	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rapid decrease	4	7,5	8,2	8,2
	Decrease	7	13,2	14,3	22,4
	No change	19	35,8	38,8	61,2
	Increase	14	26,4	28,6	89,8
	Rapid Increase	5	9,4	10,2	100,0
	Total	49	92,5	100,0	
Missing	System	4	7,5		
Total		53	100,0		

**Table 37 (continued)** 

	(continued)			Valid	Cumulative
Profitab	ility	Frequency	Percent	Percent	Percent
Valid	Rapid decrease	5	9,4	10,2	10,2
	Decrease	15	28,3	30,6	40,8
	No change	13	24,5	26,5	67,3
	Increase	15	28,3	30,6	98,0
	Rapid Increase	1	1,9	2,0	100,0
	Total	49	92,5	100,0	
Missing	System	4	7,5		
Total		53	100,0		
				Valid	Cumulative
Sales Re	venues	Frequency	Percent	Percent	Percent
Valid	Rapid decrease	6	11,3	12,2	12,2
	Decrease	12	22,6	24,5	36,7
	No change	9	17,0	18,4	55,1
	Increase	19	35,8	38,8	93,9
	Rapid Increase	3	5,7	6,1	100,0
	Total	49	92,5	100,0	
Missing	System	4	7,5		
Total		53	100,0		
1 Otal		33	100,0		
Total		33	100,0	Valid	Cumulative
Producti	vity	Frequency	Percent	Valid Percent	Cumulative Percent
	vity Rapid decrease			Percent 4,2	
Producti	Rapid decrease Decrease	Frequency	Percent 3,8 11,3	Percent	Percent 4,2 16,7
Producti	Rapid decrease	Frequency 2	Percent 3,8 11,3 43,4	Percent 4,2	Percent 4,2 16,7 64,6
Producti	Rapid decrease Decrease	Frequency 2 6	Percent 3,8 11,3	Percent 4,2 12,5	Percent 4,2 16,7
Producti	Rapid decrease Decrease No change Increase Rapid Increase	Frequency  2  6  23  16  1	Percent 3,8 11,3 43,4 30,2 1,9	Percent  4,2 12,5 47,9 33,3 2,1	Percent 4,2 16,7 64,6
<b>Producti</b> Valid	Rapid decrease Decrease No change Increase	Frequency  2 6 23 16 1 48	Percent  3,8 11,3 43,4 30,2 1,9 90,6	Percent  4,2 12,5 47,9 33,3	Percent 4,2 16,7 64,6 97,9
Producti Valid Missing	Rapid decrease Decrease No change Increase Rapid Increase	Frequency  2  6 23 16 1 48 5	Percent 3,8 11,3 43,4 30,2 1,9	Percent  4,2 12,5 47,9 33,3 2,1	Percent 4,2 16,7 64,6 97,9
<b>Producti</b> Valid	Rapid decrease Decrease No change Increase Rapid Increase Total	Frequency  2 6 23 16 1 48	Percent  3,8 11,3 43,4 30,2 1,9 90,6	Percent  4,2 12,5 47,9 33,3 2,1 100,0	Percent 4,2 16,7 64,6 97,9
Producti Valid  Missing Total	Rapid decrease Decrease No change Increase Rapid Increase Total	Frequency  2 6 23 16 1 48 5 53	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative
Producti Valid  Missing Total  Costs	Rapid decrease Decrease No change Increase Rapid Increase Total System	Frequency  2  6 23 16 1 48 5	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0  Percent	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid Percent	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative Percent
Producti Valid  Missing Total	Rapid decrease Decrease No change Increase Rapid Increase Total System Rapid decrease	Frequency  2 6 23 16 1 48 5 53  Frequency	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0  Percent 1,9	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid Percent 2,0	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative Percent 2,0
Producti Valid  Missing Total  Costs	Rapid decrease Decrease No change Increase Rapid Increase Total System  Rapid decrease Decrease	Frequency  2 6 23 16 1 48 5 53  Frequency  1 9	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0  Percent  1,9 17,0	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid Percent  2,0 18,4	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative Percent  2,0 20,4
Producti Valid  Missing Total  Costs	Rapid decrease Decrease No change Increase Rapid Increase Total System  Rapid decrease Decrease No change	Frequency  2  6 23 16 1 48 5 53  Frequency  1 9 11	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0  Percent  1,9 17,0 20,8	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid Percent  2,0 18,4 22,4	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative Percent  2,0 20,4 42,9
Producti Valid  Missing Total  Costs	Rapid decrease Decrease No change Increase Rapid Increase Total System  Rapid decrease Decrease No change Increase	Frequency  2 6 23 16 1 48 5 53  Frequency  1 9 11 16	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0  Percent  1,9 17,0 20,8 30,2	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid Percent  2,0 18,4 22,4 32,7	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative Percent  2,0 20,4 42,9 75,5
Producti Valid  Missing Total  Costs	Rapid decrease Decrease No change Increase Rapid Increase Total System  Rapid decrease Decrease No change Increase Rapid Increase	Frequency  2 6 23 16 1 48 5 53  Frequency  1 9 11 16 12	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0  Percent  1,9 17,0 20,8 30,2 22,6	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid Percent  2,0 18,4 22,4 32,7 24,5	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative Percent  2,0 20,4 42,9
Producti Valid  Missing Total  Costs  Valid	Rapid decrease Decrease No change Increase Rapid Increase Total System  Rapid decrease Decrease No change Increase Total Rapid decrease Total Total	Frequency  2 6 23 16 1 48 5 53  Frequency  1 9 11 16 12 49	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0  Percent  1,9 17,0 20,8 30,2 22,6 92,5	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid Percent  2,0 18,4 22,4 32,7	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative Percent  2,0 20,4 42,9 75,5
Producti Valid  Missing Total  Costs	Rapid decrease Decrease No change Increase Rapid Increase Total System  Rapid decrease Decrease No change Increase Rapid Increase	Frequency  2 6 23 16 1 48 5 53  Frequency  1 9 11 16 12	Percent  3,8 11,3 43,4 30,2 1,9 90,6 9,4 100,0  Percent  1,9 17,0 20,8 30,2 22,6	Percent  4,2 12,5 47,9 33,3 2,1 100,0  Valid Percent  2,0 18,4 22,4 32,7 24,5	Percent  4,2 16,7 64,6 97,9 100,0  Cumulative Percent  2,0 20,4 42,9 75,5

**Table 38: Descriptive Statistics: Performance Change** 

	N	Minimum	Maximum	Mean	Std. Deviation
Market share	49	1	5	3,18	1,074
Profitability	49	1	5	2,84	1,048
Sales revenues	49	1	5	3,02	1,181
Productivity	48	1	5	3,17	,834
Costs	49	1	5	3,59	1,117
Valid N (listwise)	48				

There are a lot of factors affecting firms' competitiveness. According to the results of the survey, factor conditions and, development abilities and government support are the most important determinants of competitiveness of textile and clothing industry. This indicates that the improvement of factor conditions can enhance industry performance. Governments should support businesses in terms of decreasing firms' production costs and providing qualified labor. Furthermore, coordination and cooperation between enterprises should be reinforced by government policies. Results also indicate that Turkish textile and apparel firms are aware of the importance of product quality and product differentiation, and innovation for gaining competitive advantage.

**Table 39: Descriptive Statistics: Determinants of Competitiveness** 

				Std.		
Determinants	Valid	Missing	Mean	Deviation	Minimum	Maximum
Good management of firm	48	5	4.69	0.552	3	5
Qualified labor	50	3	4.64	0.525	3	5
Labor costs	51	2	4.59	0.698	2	5
Raw material costs	51	2	4.57	0.855	1	5
Product quality	49	4	4.53	0.649	3	5
Government support	49	4	4.53	0.649	3	5
Access to info	49	4	4.47	0.616	3	5
Product differentiation	50	3	4.46	0.676	3	5
Firm culture	48	5	4.46	0.651	3	5
Technical development	49	4	4.45	0.580	3	5
Energy costs	50	3	4.42	0.758	2	5
Quality of local suppliers	48	5	4.42	0.498	4	5
Innovation	49	4	4.41	0.674	3	5

Table 39 (continued)

	1	1	1	T	1	1
Access to capital	51	2	4.33	0.739	3	5
Buyer sophistication	50	3	4.3	0.839	2	5
Intensity of domestic						
competition	48	5	4.23	0.805	1	5
Capital costs	51	2	4.14	0.800	2	5
Domestic rivals	47	6	4.09	0.830	1	5
Number of local suppliers	48	5	4.08	0.679	2	5
Local demand	50	3	4.06	0.843	1	5
Physical infrastructure	49	4	4.02	0.750	2	5
Administrative						
infrastructure	49	4	3.96	0.865	2	5
Clustering	48	5	3.96	0.849	2	5
Vertical&horizontal						
linkages	47	6	3.91	0.830	2	5
Local availability of inputs	49	4	3.9	0.984	1	5
Institutes	48	5	3.79	0.922	1	5
Local availability of						
machines	49	4	3.49	1.102	1	5
FDI	49	4	3.45	0.818	2	5

The question asked for specifying of determinants of competitiveness includes 28 items as seen in the above table. Following the reliability analysis which was estimated through SPSS program, Cronbach's Alpha is calculated as 0.879 which suggest that items are consistent.

**Table 40: Reliability Statistics: Determinants of Competitiveness** 

Cronbach's Alpha	N of Items
,879	28

**Table 41: Item-Total Statistics: Determinants of Competitiveness** 

		Scale	Corrected	Cronbach's
	Scale Mean if	Variance if	Item-Total	Alpha if
	Item Deleted	Item Deleted	Correlation	Item Deleted
Rawmaterial costs	114,12	107,260	,175	,881
Labor costs	114,20	102,961	,460	,874
Capital costs	114,63	104,838	,306	,878
Energy costs	114,37	105,388	,265	,879
Local availibility of inputs	114,85	100,228	,483	,874
Local availibility of machines	115,20	98,911	,486	,874
Qualified labor	114,07	104,670	,524	,874
Access to capital	114,37	103,438	,406	,875
Physical infrastructure	114,73	102,051	,498	,873
Administrative infrastructure	114,80	99,561	,554	,871
Institutes	114,95	97,398	,630	,869
Local demand	114,78	104,426	,297	,879
Buyer sophistication	114,49	100,806	,487	,873
Product quality	114,27	102,201	,569	,872
Product differentiation	114,27	104,451	,427	,875
Innovation	114,37	102,488	,520	,873
FDI	115,37	102,488	,447	,874
Number of local suppliers	114,71	103,012	,471	,874
Quality of local suppliers	114,37	106,488	,358	,877
Clustering	114,80	100,611	,532	,872
Vertical&horizontal linkages	114,83	101,995	,458	,874
Domestic rivals	114,71	102,462	,405	,876
Intensity of domestic competition	114,56	105,252	,254	,880,
Good management of firm	114,07	106,070	,351	,877
Firm culture	114,27	106,301	,283	,878
Technical development	114,39	103,394	,561	,873
Access to info	114,29	103,662	,490	,874
Government support	114,24	105,089	,353	,877

Results further indicate that tax support is seen as the most important government service for increasing firms' competitive advantage. Firms think that export tax rebate should continue. Elimination of entry barriers to foreign markets is the other important government service according to results. As the Turkish textile and

clothing industry is an export oriented industry, entry barriers to foreign markets are very important for the success of the industry.

**Table 42: Frequencies: Government Services** 

				Valid	Cumulative
Logistic	infrastructure	Frequency	Percent	Percent	Percent
Valid	Neutral	4	7,5	7,8	7,8
	Important	27	50,9	52,9	60,8
	Completely Important	20	37,7	39,2	100,0
	Total	51	96,2	100,0	
Missing	System	2	3,8		
Total		53	100,0		
				Valid	Cumulative
	al infrastructure	Frequency	Percent	Percent	Percent
Valid	Completely	1	1,9	2,0	2,0
	unimportant			•	·
	Neutral	4	7,5	7,8	9,8
	Important	20	37,7	39,2	49,0
	Completely Important	26	49,1	51,0	100,0
	Total	51	96,2	100,0	
Missing	System	2	3,8		
Total		53	100,0		
				Valid	Cumulative
Property		Frequency	Percent	Percent	Percent
Valid	Unimportant	1	1,9	2,0	2,0
	Neutral	6	11,3	12,0	14,0
	Important	24	45,3	48,0	62,0
	Completely Important	19	35,8	38,0	100,0
	Total	50	94,3	100,0	
Missing	System	3	5,7		
Total		53	100,0		
				Valid	Cumulative
Educatio		Frequency	Percent	Percent	Percent
Valid	Neutral	2	3,8	4,0	4,0
	Important	24	45,3	48,0	52,0
	Completely Important	24	45,3	48,0	100,0
	Total	50	94,3	100,0	
Missing	System	3	5,7		
Total		53	100,0		
				Valid	Cumulative
Tax supp		Frequency	Percent	Percent	Percent
	Completely unimportant	1	1,9	1,9	1,9
	mportant	9	17,0	17,0	18,9
	Completely Important	43	81,1	81,1	100,0
Τ	Cotal	53	100,0	100,0	

**Table 42 (continued)** 

E	41	F	Danaant	Valid	Cumulative
Foreign	entry barriers	Frequency	Percent	Percent	Percent
Valid	Unimportant	1	1,9	1,9	1,9
	Neutral	3	5,7	5,8	7,7
	Important	9	17,0	17,3	25,0
	Completely Important	39	73,6	75,0	100,0
	Total	52	98,1	100,0	
Missing	System	1	1,9		
Total		53	100,0		

**Table 43: Descriptive Statistics: Government Services** 

	N	Minimum	Maximum	Mean	Std. Deviation
Logistic infrastructure	51	3	5	4,31	,616
Technical infrastructure	51	1	5	4,37	,799
Property rights	50	2	5	4,22	,737
Education	50	3	5	4,44	,577
Tax support	53	1	5	4,75	,648
Foreign entry barriers	52	2	5	4,65	,683
Valid N (listwise)	49				

Firms also indicate that procedures of exporting and inward processing should be simplified by government. Furthermore, payment of government subsidies should be speeded up, and new government subsidies should be created in terms of decreasing energy costs and labor costs.

Firms indicate that there are no government policies that restrict the entries to the market, and access to distribution networks is not difficult. Therefore, there are no entry barriers in the Turkish textile and clothing market.

**Table 44: Descriptive Statistics: Entry Barriers** 

	N	Minimum	Maximum	Mean	Std. Deviation
Capital requirements	51	1	5	3,04	1,326
Economies of scale	49	1	5	3,45	,891
Distribution network	50	1	5	3,00	,904
Brand loyalty	51	1	5	3,43	1,063
Product differentiation	51	1	5	4,27	,827
Government policies	50	1	5	2,84	1,251
Valid N (listwise)	48				

Results indicate that there are numerous substitute products in the market, and switching cost of buyers to substitutes is not very high. Therefore, power of substitutes is relatively high and that seem to be a threat for the firms.

**Table 45: Descriptive Statistics: Power of Substitutes** 

	N	Minimum	Maximum	Mean	Std. Deviation
Number of substitutes	46	2	5	3,76	,947
CoS to substitutes	47	1	5	3,70	,998
Valid N (listwise)	45				

Power of buyers is also perceived to be high as buyers are very sensitive to price and request differentiated products.

**Table 46: Descriptive Statistics: Power of Buyers** 

			Maximu		Std.
	N	Minimum	m	Mean	Deviation
Number of buyers	51	1	5	2,29	1,137
CoS to another product	51	1	5	3,59	,963
Demand for differentiated product	51	1	5	3,94	,968
Price sensitivity	52	3	5	4,71	,498
Brand loyalty	51	1	5	2,98	1,010
Valid N (listwise)	50				

According to the results there are numerous suppliers, and switching cost to other suppliers is not high. Hence, power of suppliers is relatively low in Turkish textile and clothing industry. however, probability of forward integration of suppliers is seen as a threat by firms.

**Table 47: Descriptive Statistics: Power of Suppliers** 

					Std.
	N	Minimum	Maximum	Mean	Deviation
Number of suppliers	51	1	5	2,22	1,154
CoS to another supplier	50	1	5	2,68	1,220
Substitute inputs	49	1	5	2,57	1,000
Forward integration	49	1	5	3,29	1,061
Valid N (listwise)	47				

Results indicate that there is a strong rivalry in the industry. There are numerous firms competing in the industry. However, there are dominant rivals in the market. Fixed costs are high in the industry, therefore it seems to be an exit barrier and it makes the industry more competitive.

**Table 48: Descriptive Statistics: Rivalry** 

	N	Minimum	Maximum	Mean	Std. Deviation
Number of rivals	52	2	5	4,25	,764
Dominant rivals	50	2	5	4,32	,653
Similar products	51	2	5	4,06	,785
İndustry growth	50	1	5	3,34	1,118
Excess capacity	49	1	5	3,53	1,023
Fixed costs	52	1	5	4,15	,978
Exit barriers	50	1	5	3,46	1,281
Brand loyalty	49	1	5	3,04	1,040
Valid N (listwise)	47				

Results indicate that Turkish textile and clothing companies perceive themselves more competitive than their domestic rivals. Almost all of the firms in this study described themselves as being more competitive especially on product quality. Management skills, operating skills, and design & fashion capacity are the other dimensions on which firms are more competitive than their domestic rivals. On the other hand, firms perceive themselves less competitive on public relations and branding.

**Table 49: Descriptive Statistics: Perceived Competitive Advantage of Firms** 

					Std.
	N	Minimum	Maximum	Mean	Deviation
Labor costs	51	1	5	3,78	1,119
Operating skills	51	1	5	4,00	1,000
Management skills	51	2	5	4,04	,937
Technical knowledge	51	1	5	3,33	1,108
Rawmaterial costs	50	1	5	3,34	1,154
Machines	49	1	5	3,41	1,135
Capital costs	47	1	5	3,15	1,197
Access to capital	50	1	5	3,00	1,050
Energy costs	50	1	5	3,06	,935
Transportation costs	51	1	5	3,49	1,120
Delivery speed	52	1	5	3,42	1,073
Distribution network	50	1	5	3,68	1,220
Design&fashion capacity	51	1	5	4,00	1,095
Product quality	52	1	5	4,23	,962
Product variety	51	1	5	3,86	1,114
New product Turkey	50	1	5	3,54	1,281
New product world	50	1	5	3,30	1,216
Price	52	1	5	3,77	1,022
Product differentiation	50	1	5	3,40	1,309
Branding	48	1	5	2,92	1,334
Advertising	49	1	5	3,16	1,280
PR	47	1	5	2,45	1,348
Valid N (listwise)	43				

The question asked for determining perceived competitive advantage includes 22 items as seen in the above table. Following the reliability analysis which was estimated through SPSS program, Cronbach's Alpha is calculated as 0.911 which suggest that items are consistent.

**Table 50: Reliability Statistics: Perceived Competitive Advantage of Firms** 

Cronbach's Alpha	N of Items
,911	22

**Table 51: Item-Total Statistics: Perceived Competitive Advantage of Firms** 

		Scale	Corrected	Cronbach's
	Scale Mean if	Variance if	Item-Total	Alpha if Item
	Item Deleted	Item Deleted	Correlation	Deleted
Labor costs	72,23	208,564	,352	,911
Operating skills	72,12	205,391	,491	,909
Management skills	72,07	201,781	,671	,905
Technical knowledge	72,79	202,408	,539	,908
Rawmaterial costs	72,63	204,715	,464	,909
Machines	72,72	206,301	,399	,911
Capital costs	72,91	198,848	,578	,907
Access to capital	73,02	203,642	,568	,907
Energy costs	72,91	205,467	,548	,908
Transportation costs	72,58	203,440	,528	,908
Delivery speed	72,70	205,216	,472	,909
Distribution network	72,40	199,435	,595	,906
Design&fashion capacity	72,16	199,282	,635	,905
Product quality	71,95	204,998	,515	,908
Product variety	72,33	200,511	,592	,906
New product Turkey	72,58	196,487	,644	,905
New product world	72,81	198,250	,627	,906
Price	72,26	203,576	,551	,907
Product differentiation	72,60	198,388	,587	,906
Branding	73,14	198,361	,542	,908
Advertising	72,93	195,924	,627	,906
PR	73,63	204,287	,388	,912

Results indicate that firms perceive Turkish textile and clothing industry's competitiveness same as its rivals. Product quality is the competitive goal where the managers feel the Turkish industry is most competitive. Closeness to markets, operating skills, management skills, labor availability and design&fashion capacity are the other dimensions on which managers perceive the industry more competitive. On the other hand, Turkish textile and clothing industry is perceived to be less competitive on energy costs, access to capital and capital costs, respectively.

Table 52: Descriptive Statistics: Perceived Competitive Advantage of Turkish T&C Industry

					Std.
	N	Minimum	Maximum	Mean	Deviation
Labor costs	49	1	5	2,65	1,362
Labor availability	50	1	5	3,74	1,291
Operating skills	50	1	5	3,88	1,136
Management skills	49	1	5	3,82	1,149
Technical knowledge	50	1	5	2,82	1,494
Rawmaterial costs	50	1	5	2,58	1,386
Machines	47	1	5	2,66	1,203
Capital costs	47	1	5	2,60	1,192
Access to capital	46	1	5	2,20	1,276
Energy costs	49	1	5	2,08	1,134
Transportation costs	48	1	5	3,17	1,404
Delivery speed	49	1	5	3,33	1,162
Distribution network	46	1	5	3,37	1,236
İnfrastructure	46	1	5	3,50	1,261
Design&fashion capacity	48	1	5	3,73	1,162
Closeness to markets	48	1	5	3,94	1,080
Product quality	47	1	5	4,02	,944
Product variety	47	1	5	3,70	1,102
New product Turkey	47	1	5	3,57	1,118
New product world	46	1	5	2,76	1,336
Price	49	1	5	3,06	1,232
Product differentiation	47	1	5	2,98	1,310
Branding	46	1	5	2,91	1,262
Advertising	47	1	5	2,96	1,215
PR	33	1	5	3,03	1,262
Valid N (listwise)	27				

Firms are generally positive about current economic conditions of Turkey. However, there are firms which are negative too.

**Table 53: Descriptive Statistics: Perceived General Economic Conditions** 

	N	Minimum	Maximum	Mean	Std. Deviation
General economic conditions	53	2	5	3,45	,867
Valid N (listwise)	53				

Managers are neutral about the effect of Turkey's general economic situation on their firms' competitiveness. Some of the managers indicate that the general economy affect their firms' competitiveness negatively, while others indicate as positively.

Table 54: Descriptive Statistics: Effects of Turkey's General Economic Situation on Competitiveness of Firms

	N	Minimum	Maximum	Mean	Std. Deviation
Effect on competitiveness	53	1	5	3,06	1,008
Valid N (listwise)	53				

Results indicate that managers are generally positive about their future expectations. Managers expect the general Turkish economy to develop in 10 years time. Managers think that both GDP and GDP per head will increase. On the other hand, inflation and unemployment rates are supposed to be at the same levels.

**Table 55: Descriptive Statistics: Managers's Expectations on General Economic Situation** 

					Std.
	N	Minimum	Maximum	Mean	Deviation
GDP will increase	52	2	5	3,63	1,010
Inflation will decrease	52	2	5	3,10	,799
Unemployement will desrease	52	1	5	3,23	1,002
GDP per head will increase	51	1	5	3,45	1,064
Valid N (listwise)	51				

The question asked for determining managers' general economic expectations includes 4 items as seen in the above table. Following the reliability analysis which was estimated through SPSS program, Cronbach's Alpha is calculated as 0.870 which suggest that items are consistent.

**Table 56: Reliability Statistics: Managers's Expectations on General Economic Situation** 

Cronbach's Alpha	N of Items
,870	4

**Table 57: Item-Total Statistics: Managers's Expectations on General Economic Situation** 

	Scale	Scale		Cronbach's
	Mean if	Variance if	Corrected	Alpha if
	Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
GDP will increase	9,82	6,068	,757	,820
Inflation will decrease	10,35	7,673	,592	,882
Unemployement will desrease	10,22	6,253	,732	,830
GDP per head will increase	10,02	5,580	,832	,787

Results indicate that managers are positive about their industrial expectations too. Managers indicate that industry's technology will develop and productivity of the industry will increase. Furthermore, the industry will be more competitive worldwide. However, managers are neutral about costs of the industry, and do not expect costs to decrease.

Table 58: Descriptive Statistics: Managers's Expectations on T&C Industry

					Std.
	N	Minimum	Maximum	Mean	Deviation
Production will increase	52	1	5	3,38	,993
Costs will decrease	52	1	5	2,88	1,182
Domestic sales will increase	53	1	5	3,49	,724
International sales will increase	52	1	5	3,54	,828
Productivity will increase	52	1	5	3,67	,879
Technology will increase	53	1	5	4,04	,784
Profitability will increase	53	1	5	3,15	1,026
Competitive advantage will increase	53	2	5	3,57	,910
Valid N (listwise)	52				

The question asked for determining managers' industrial expectations includes 8 items as seen in the above table. Following the reliability analysis which was

estimated through SPSS program, Cronbach's Alpha is calculated as 0.752 which suggest that items are consistent.

Table 59: Reliability Statistics: Managers's Expectations on T&C Industry

Cronbach's Alpha	N of Items
,752	8

Table 60: Item-Total Statistics: Managers's Expectations on T&C Industry

	Scale	Scale		Cronbach's
	Mean if	Variance if	Corrected	Alpha if
	Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
Production will increase	24,37	14,589	,572	,700
Costs will decrease	24,87	15,491	,325	,758
Domestic sales will increase	24,27	17,926	,237	,757
International sales will increase	24,21	15,543	,565	,706
Productivity will increase	24,08	14,661	,666	,686
Technology will increase	23,71	16,288	,470	,723
Profitability will increase	24,56	16,055	,363	,742
Competitive advantage will increase	24,19	15,766	,455	,724

## **CHAPTER VII**

## **RESULTS**

In this part, the results of factor analysis will be presented to explore key determinants of competitiveness in Turkey's textile and clothing industry. Also, the results of linear regression analysis will be presented to analyze the effects of firm characteristics, future expectations and industry structure on perceived competitive advantage of firms. Furthermore, Five Forces analysis that determines the intense of the competition of the industry will be presented.

To find out the key determinants of competitiveness of Turkish textiles and clothing industry, 28 elements were developed in terms of Porter's Diamond Model, and participants were asked to indicate the importance of each element on a 1 to 5 scale (1=completely unimportant, 5=completely important). Using the exploratory factor analysis with the rotation method of varimax and extraction method of principal component analysis, 9 factors are generalized.

Barlett's test is used to examine significance and it is found to be significant. Kaiser-Meyer-Olkin (KMO) test was used to measure sampling adequacy. The KMO value, which is equal to 0.428 is lower than the accepted level. However, it can be accepted as satisfying as values bigger than 0.4 are accepted as satisfying in social sciences.

Table 61: KMO and Bartlett's Test

Kaiser-Meyer-Olkin	,428	
Bartlett's Test of Sphericity	Approx. Chi-Square	827,253
	df	378
	Sig.	,000

Factor 1 explains the 25.6 percent of variation in determinants of competitiveness. Factor 2 and factor 3 explains 13 percent and 8.6 percent of the variation in determinants of competitiveness, respectively. Also, these 9 factors totally explain the 78.3 percent of the determinants of competitiveness.

Factor 1 is firm structure and local suppliers' quality, and is characterized by easy access to capital, quality of local suppliers, management of the firm and firm culture. Factor 2 is labeled as development abilities and government support, and is characterized by qualified labor, innovation and government support. Factor 3 is labeled as infrastructure, and characterized by physical infrastructure, administrative infrastructure and industrial research institutes. Factor 4 is related and supporting industries, and characterized by clustering, vertical & horizontal linkages, technical development and easy access to information. Factor 5 is local availability of inputs and machines. Factor 6 is labeled as product characteristics and local production. It is characterized by product quality, product differentiation, foreign direct investments to the industry, and number of local suppliers. Factor 7 is labeled as domestic rivalry, and characterized by presence of domestic rivals and intensity of domestic rivalry. Factor 8 is labeled as demand conditions and capital costs. It is characterized by local demand, buyer sophistication and capital costs. Factor 9 is labeled as factor conditions, and characterized by raw material costs, labor costs and energy costs.

These 9 factors' arithmetic averages are calculated based on the ratings in the survey. Firm structure and local suppliers' quality (factor 1) has a rating of 4.5. R&D has a rating of 4.5347. Other factors' ratings are 3.9305, 4.1968, 3.6875, 4.1277, 4.1489, 4.18 and 4.5466, respectively.

**Table 62: Mean of Rating on Each Factor** 

Factors	Mean
Firm structure and local suppliers' quality	4.5000
Development abilities and government support	4.5347
Infrastructure	3.9305
Related and supporting industries	4.1968
Local availibility of inputs and machines	3.6875
Product characteristics and local production	4.1277
Rivalry	4.1489
Demand conditions and capital costs	4.1800
Factor conditions	4.5466

Results indicate that the most important determinants of competitiveness of Turkish textile and clothing industry are factor conditions and, development abilities and government support. So, governments should implement policies to develop factor conditions. As the clothing industry is a labor intensive industry, availability of qualified labor and the cost of labor has vital importance. Furthermore, industry's other cost elements, raw material costs and energy costs are seen to be very important. Governments should support businesses in terms of decreasing firms' production costs and providing qualified labor. Furthermore, coordination and cooperation between enterprises should be reinforced by government policies. Results also indicate that Turkish textile and apparel firms are aware of the importance of product quality, product differentiation, and innovation for gaining competitive advantage.

**Table 63: Total Variance Explained** 

Component	Iı	nitial Eigenv	alues	Extraction	Sums of Squa	red Loadings	Rotation Sums of Squared Loadings		
		% of	Cumulative		% of	Cumulative		% of	Cumulative
	Total	Variance	%	Total	Variance	%	Total	Variance	%
1	7,157	25,562	25,562	7,157	25,562	25,562	2,929	10,460	10,460
2	3,633	12,974	38,535	3,633	12,974	38,535	2,880	10,287	20,746
3	2,410	8,607	47,142	2,410	8,607	47,142	2,631	9,396	30,142
4	1,802	6,437	53,580	1,802	6,437	53,580	2,613	9,331	39,473
5	1,749	6,247	59,827	1,749	6,247	59,827	2,378	8,492	47,965
6	1,455	5,196	65,023	1,455	5,196	65,023	2,323	8,297	56,261
7	1,414	5,049	70,072	1,414	5,049	70,072	2,172	7,759	64,020
8	1,214	4,335	74,407	1,214	4,335	74,407	2,155	7,696	71,717
9	1,097	3,916	78,323	1,097	3,916	78,323	1,850	6,607	78,323
10	,963	3,439	81,763						
11	,811	2,895	84,658						
12	,776	2,773	87,431						
13	,636	2,270	89,701						
14	,518	1,849	91,550						
15	,493	1,761	93,312						
16	,394	1,408	94,719						
17	,379	1,355	96,074						
18	,231	,823	96,897						
19	,225	,803	97,701						
20	,170	,607	98,308						
21	,125	,447	98,755						
22	,094	,335	99,089						
23	,091	,324	99,413						

Table 63 (continued)

24	,067	,239	99,652			
25	,047	,168	99,820			
26	,025	,089	99,909			
27	,015	,055	99,964			
28	,010	,036	100,000			

Extraction Method: Principal Component Analysis.

**Table 64: Rotated Component Matrix(a)** 

					Component				
	1	2	3	4	5	6	7	8	9
Rawmaterial costs	-,032	,004	-,003	,034	,108	-,072	,208	-,056	,839
Labor costs	-,001	,394	,437	,119	-,136	,160	,148	-,074	,567
Capital costs	-,057	-,071	,330	-,385	,188	,207	,334	,480	,127
Energy costs	-,276	-,057	,109	-,028	,438	,092	,021	,246	,594
Local inputs	,006	,099	,136	,005	,818	,150	-,018	,260	,144
Local machines	,003	,052	,307	,054	,875	,095	,094	,028	,046
Qualified labor	,467	,511	,298	-,095	,001	,071	,216	,005	,270
Access to capital	,541	,342	,111	,070	,287	-,092	,190	,107	-,265
Physical infrastructure	,159	,157	,775	,191	,162	-,040	,028	,032	-,049
Administrative	,091	-,026	,785	,153	,376	,185	-,004	-,064	,178
infrastructure	,		ŕ	·		ŕ	·		
Institutes	,015	,343	,673	,085	,155	,114	,165	,292	,085
Local demand	-,003	,006	,020	,026	,247	-,014	,040	,895	-,114
Buyer sophistication	,250	,135	,073	,381	-,034	,219	-,205	,693	,194
Product quality	,035	,314	,281	,312	-,109	,650	,076	,111	,074
Product differentiation	,418	,340	-,065	,068	-,105	,569	-,092	,313	-,008
Innovation	,136	,846	,045	,061	,104	,083	,040	,310	,010
FDI	-,220	,152	,094	,141	,349	,641	,007	,353	-,203
Number of local suppliers	,183	-,082	,079	,082	,317	,802	,198	-,113	,066
Quality of local suppliers	,634	,207	-,294	,055	,159	,443	,009	-,092	,187
Clustering	,174	-,016	,237	,726	,145	,155	,222	,079	-,004
Vertical&horizontal linkages	,144	,000	,163	,881	-,010	,141	,058	,092	,035

**Table 64 (continued)** 

Domestic rivals	-,019	,218	,093	,116	,068	,045	,882	,022	,143
Intensity of domestic	-,009	-,077	,031	,125	-,001	,090	,934	-,032	,121
competition	,	Ź	,	,	,	ŕ	,	,	
Good management of firm	,790	,012	,259	,200	-,099	,009	-,001	,104	-,084
Firm culture	,748	,093	,091	,374	-,121	,095	-,197	-,015	-,125
Technical development	,300	,490	,104	,547	-,037	,063	,183	-,004	,207
Access to info	,486	,522	-,151	,522	,129	,107	,036	-,010	-,094
Government support	,052	,766	,205	,008	,039	,128	-,030	-,159	-,013

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 10 iterations.

One of the aims of our study is to analyze the effect of firm characteristics, future expectations and industry structure on perceived competitive advantage in the context of textiles and clothing firms operating in Turkey. Linear regression analysis is used to identify relationship between perceived competitive advantage and firm characteristics, future expectations and industry structure.

While making the analysis, 12 variables were used at first. These variables were firm size, firm age, market share, CUR, export, threat of substitutes, rivalry, power of buyers, power of suppliers, entry barriers, general expectations, and industrial expectations. Although this regression model's R square was equal to 0.272, the adjusted R Square was negative and the model was meaningless. Also, correlation coefficients of many of the variables were high. It was obvious that some of the variables should have been removed from the model. After trying a lot of regression analysis with different variable combinations, the best model was chosen<sup>7</sup>. In that model, firm size, general expectations and industrial expectations are used as independent variables to explain perceived competitive advantage of firms.

#### Model

**Table 65: Model Summary** 

I	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	1	,522(a)	,272	-,108	15,498

a Predictors: (Constant), industrial\_expectations, CUR, export, firm\_size, general\_expectations, threat\_of\_substitutes, rivalry, power\_of\_buyer, power\_of\_suppliers, firm\_age, market\_share, entry\_barriers

Table 66: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2063,549	12	171,962	,716	,722(a)
	Residual	5524,007	23	240,174		
	Total	7587,556	35			

<sup>7</sup> Stepwise regression analysis is also used to determine variables that explains perceived competitive advantage best. According to the results (see Appendix II) firm size is the best predictor of perceived competitive advantage.

**Table 67: Coefficients(a)** 

		Unstand	lardized	Standardized		-
Model		Coeffi	icients	Coefficients	t	Sig.
			Std.			Std.
		В	Error	Beta	В	Error
1	(Constant)	67,150	40,607		1,654	,112
	Firm age	,143	,250	,136	,573	,572
	Firm size	,009	,006	,373	1,560	,132
	Market share	-,098	,963	-,028	-,102	,920
	Export	2,479	19,127	,028	,130	,898
	CUR	,635	2,254	,061	,282	,781
	Entry barriers	,189	1,019	,051	,185	,855
	Threat of substitutes	-,058	1,677	-,007	-,035	,972
	Power of buyers	-1,577	1,162	-,297	-1,358	,188
	Power of suppliers	1,475	1,300	,269	1,134	,268
	Rivalry	,229	,714	,077	,321	,751
	General expectations	1,033	1,078	,226	,959	,348
	Industrial expectations	-,508	,737	-,157	-,689	,498

a Dependent Variable: Perceived\_competitiveness

a Predictors: (Constant), industrial\_expectations, CUR, export, firm\_size, general\_expectations, threat\_of\_substitutes, rivalry, power\_of\_buyer, power\_of\_suppliers, firm\_age, market\_share0, entry\_barriers

b Dependent Variable: Perceived\_competitiveness

90

**Table 68: Correlations** 

									Power				
		Firm	Firm	Market			Entry	Threat of	of	Power of		General	Industrial
		age	size	share	Export	CUR	barriers	substitutes	buyers	suppliers	Rivalry	expectations	expectations
Firm age	Pearson Correlation	1	,409(**)	,037	,043	,289(*)	-,095	,059	,073	-,253	-,204	-,147	,095
	Sig. (2-tailed)		,002	,795	,758	,042	,519	,700	,615	,087	,169	,302	,503
	N	53	53	52	53	50	48	45	50	47	47	51	52
Firm size	Pearson Correlation	,409(**)	1	,336(*)	-,047	,099	-,049	,143	,067	-,102	-,151	,011	,061
	Sig. (2-tailed)	,002		,015	,737	,495	,743	,348	,644	,494	,309	,936	,665
	N	53	53	52	53	50	48	45	50	47	47	51	52
Market share	Pearson Correlation	,037	,336(*)	1	-,132	-,311(*)	-,292(*)	,065	-,198	,145	-,152	-,023	,245
	Sig. (2-tailed)	,795	,015		,349	,030	,046	,673	,172	,338	,314	,874	,084
	N	52	52	52	52	49	47	44	49	46	46	50	51
Export	Pearson Correlation	,043	-,047	-,132	1	,051	-,195	,045	,145	-,081	,145	,109	-,087
	Sig. (2-tailed)	,758	,737	,349		,726	,184	,769	,316	,588	,330	,445	,539
	N	53	53	52	53	50	48	45	50	47	47	51	52
CUR	Pearson Correlation	,289(*)	,099	-,311(*)	,051	1	,167	-,042	,121	,055	-,174	-,034	-,076
	Sig. (2-tailed)	,042	,495	,030	,726		,267	,785	,414	,717	,246	,818,	,599
	N	50	50	49	50	50	46	44	48	46	46	49	50
Entry barriers	Pearson Correlation	-,095	-,049	-,292(*)	-,195	,167	1	-,047	,194	,030	,224	,272	-,040
	Sig. (2-tailed)	,519	,743	,046	,184	,267		,763	,195	,842	,138	,065	,789
	N	48	48	47	48	46	48	43	46	46	45	47	48
Threat of substitutes	Pearson Correlation	,059	,143	,065	,045	-,042	-,047	1	,138	-,213	-,193	,041	-,240
	Sig. (2-tailed)	,700	,348	,673	,769	,785	,763		,372	,169	,215	,790	,113
	N	45	45	44	45	44	43	45	44	43	43	44	45

Table 68 (continued)

Power of buyers	Pearson Correlation	,073	,067	-,198	,145	,121	,194	,138	1	,174	,167	,133	,125
·	Sig. (2-tailed)	,615	,644	,172	,316	,414	,195	,372		,246	,268	,361	,387
	N	50	50	49	50	48	46	44	50	46	46	49	50
Power of suppliers	Pearson Correlation	-,253	-,102	,145	-,081	,055	,030	-,213	,174	1	,172	-,197	,003
	Sig. (2-tailed)	,087	,494	,338	,588	,717	,842	,169	,246		,259	,189	,984
	N	47	47	46	47	46	46	43	46	47	45	46	47
Rivalry	Pearson Correlation	-,204	-,151	-,152	,145	-,174	,224	-,193	,167	,172	1	-,169	-,090
	Sig. (2-tailed)	,169	,309	,314	,330	,246	,138	,215	,268	,259		,261	,547
	N	47	47	46	47	46	45	43	46	45	47	46	47
General expectations	Pearson Correlation	-,147	,011	-,023	,109	-,034	,272	,041	,133	-,197	-,169	1	,261
	Sig. (2-tailed)	,302	,936	,874	,445	,818	,065	,790	,361	,189	,261		,064
	N	51	51	50	51	49	47	44	49	46	46	51	51
İndustrial expectations	Pearson Correlation	,095	,061	,245	-,087	-,076	-,040	-,240	,125	,003	-,090	,261	1
	Sig. (2-tailed)	,503	,665	,084	,539	,599	,789	,113	,387	,984	,547	,064	
	N	52	52	51	52	50	48	45	50	47	47	51	52

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

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

**Later Model** 

Firm size, general expectations and industrial expectations are used as independent

variables to explain perceived competitive advantage of firms. These variables

explain 19.5 percent of the perceived competitive advantage in 95 percent

significance level.

Firm size has a positive relationship with perceived competitive advantage and it is

statistically significant in 95 percent confidence level. The positive effect of the firm

size on firms' perceived competitiveness, provide evidence on the assumption that

larger firms have more competitive advantages than their rivals. The result further

suggests that the economies of scale affect competitive positions of firms.

Managers' general expectations on Turkish economy have a positive relationship

with perceived competitive advantage. This means that optimistic managers perceive

themselves more competitive. However, the analysis concludes no statistically

significant effects of general expectations on perceived competitiveness of textiles

and clothing firms.

Managers' expectations on Turkish textiles and clothing industry have a negative

relationship with perceived competitive advantage. That is surprising that managers

perceive a competitive Turkish textiles and clothing industry as a threat for their

company. However the analysis concludes no statistically significant effects of

industrial expectations on perceived competitiveness of textiles and clothing firms.

On the other hand, it is thought that further analysis with wider samples would

probably provide significant results about the effects of general expectations and

industrial expectations on perceived competitiveness.

According to the analysis, the model is in the following form;

PERCEIVED COMP. ADV. =  $\alpha + \beta_1$ FIRM SIZE +  $\beta_2$ GENERAL EXP

+ β<sub>3</sub>INDUSTRIAL EXP

101

Where  $\alpha = 81.088$ ,

 $\beta_1\!=0.010$ 

 $\beta_2 = 0.838$ 

 $\beta_3 = -0.691$ 

**Table 69: Model Summary of Later Model** 

	_		Adjusted	
Model	R	R Square	R Square	the Estimate
1	,442(a)	,195	,133	13,836

a Predictors: (Constant), industrial\_expectations, firm\_size, general\_expectations

Table 70: ANOVA(b) of Later Model

		Sum of		Mean		
Model		Squares	df	Square	F	Sig.
1	Regression	1808,879	3	602,960	3,150	,036(a)
	Residual	7465,912	39	191,434		
	Total	9274,791	42			

a Predictors: (Constant), industrial\_expectations, firm\_size, general\_expectations

b Dependent Variable: Perceived\_competitiveness

Table 71: Coefficients(a) of Later Model

Model			dardized ficients	Standardized Coefficients	t	Sig.
	<del>.</del>		Std.			Std.
		В	Error	Beta	В	Error
1	(Constant)	81,088	14,333		5,657	,000
	Firm size	,010	,004	,375	2,605	,013
	General expectations	,838	,684	,180	1,225	,228
	Industrial expectations	-,691	,473	-,215	-1,462	,152

a Dependent Variable: Perceived\_competitiveness

**Table 72: Correlations of Later Model** 

	•	Firm	General	Industrial
		size	expectations	expectations
Firm size	Pearson Correlation	1	,011	,061
	Sig. (2-tailed)		,936	,665
	N	53	51	52
General expectations	Pearson Correlation	,011	1	,261
	Sig. (2-tailed)	,936		,064
	N	51	51	51
Industrial expectations	Pearson Correlation	,061	,261	1
	Sig. (2-tailed)	,665	,064	
	N	52	51	52

As seen in the above table, correlation coefficients of independent variables are low. That means that the independent variables are not highly related with each other. Because correlations are low, these variables are convenient for regression analysis.

One of the purposes of the study is also analyzing Turkish textiles and clothing industry's structure and giving an understanding of the industry competitiveness. In this context, similar characteristics are grouped into 5 questions when asking about factors that determine industry structure.

The ratings of five forces are calculated by arithmetic average, for example force 1 (entry barriers) composed of six items, so its rating is the sum of six items' ratings divided by six.

**Table 73: Mean of Rating on Five Forces** 

	Entry	Power of	Power of	Power of	
5 Forces	barriers	substitutes	buyers	suppliers	Rivalry
Mean	3.3298	3.7333	3.5000	2.6436	3.7793

According to the results, there is a strong rivalry in the industry. There are numerous firms competing in the industry. However, there are dominant rivals in the market.

Fixed costs are high in the industry, therefore it seems to be an exit barrier and it makes the industry more competitive.

Results indicate that there are a number of substitutes in the market. Also, switching cost of buyers to substitutes is low. Therefore, power of substitutes is high in the Turkish textile and clothing market.

Results further indicate that buyers are very sensitive to price and they request differentiated products. Moreover, switching cost of buyers to other products is low. Hence, power of buyers seems to be high in the Turkish textile and clothing market.

Results also indicate that there is a strong need of product differentiation in Turkish textile and clothing market. Also there are economies of scale. However, respondents are almost neutral about the brand loyalty of customers. Furthermore, they think that there are no government policies that restrict the entries to the market, and access to distribution networks is not difficult. Therefore, it seems not to be entry barriers in the Turkish textile and clothing market.

Results indicate that there are a lot of suppliers in the Turkish textile and clothing market, and switching cost to other suppliers is not high. Furthermore, there are substitute inputs for manufacturers. However, there is a probability of forward integration of suppliers, and that probability is seen as the most threatening aspect of suppliers. Therefore, power of suppliers is low in the Turkish textile and clothing market.

**Table 74: Descriptive Statistics: Five Forces** 

		Std.	
	Mean	Deviation	N
Entry barriers	19,9792	3,76145	48
Threat of substitutes	7,4667	1,80404	45
Power of buyers	17,5000	2,49285	50
Power of suppliers	10,5745	2,89486	47
Rivalry	30,2340	4,89104	47

**Table 75: Correlations: Five Forces** 

	•	Entry barriers	Threat of substitutes	Power of buyers	Power of suppliers	Rivalry
Entry barriers	Pearson Correlation	1	-,047	,194	,030	,224
	Sig. (2-tailed)		,763	,195	,842	,138
	N	48	43	46	46	45
Threat of substitutes	Pearson Correlation	-,047	1	,138	-,213	-,193
	Sig. (2-tailed)	,763		,372	,169	,215
	N	43	45	44	43	43
Power of buyers	Pearson Correlation	,194	,138	1	,174	,167
	Sig. (2-tailed)	,195	,372		,246	,268
	N	46	44	50	46	46
Power of suppliers	Pearson Correlation	,030	-,213	,174	1	,172
	Sig. (2-tailed)	,842	,169	,246		,259
	N	46	43	46	47	45
Rivalry	Pearson Correlation	,224	-,193	,167	,172	1
	Sig. (2-tailed)	,138	,215	,268	,259	
	N	45	43	46	45	47

## **CHAPTER VIII**

### **CONCLUSION**

As the textiles and clothing industry has unique position in Turkish economy and have linkages with many other industries, developments emerged in the industry eventually affect the overall economy of Turkey. Hence, analysis of the competitiveness of the enterprises operating in the textiles and clothing industry of Turkey is very important for a more competitive country.

The purpose of this thesis is to analyze the competitiveness of the Turkish textiles and clothing industry. For this purpose, a survey was carried out with firms operating in textile and clothing industry. Of the 1945 surveys delivered, 53 were returned, and the return rate is 2.7 percent. The responses given in the survey were examined by using SPSS program.

In the analysis, the factor analysis is used to explore the key determinants of competitiveness of Turkish textiles and clothing industry, and the linear regression analysis is used to analyze effect of firm characteristics and future expectations on perceived competitive advantage in the context of textiles and clothing firms operating in Turkey. Moreover, industry structure is analyzed in the study.

The thesis has several contributions in many viewpoints. First of all, literature regarding the perceived competitiveness is very scarce and this study is the first one that investigates the perceived competitive advantage of Turkish textiles and clothing firms.

The thesis models the firms' perceived competitiveness as a function of firm characteristics and future expectations. Firm characteristics include firm size, and future expectations include general economic expectations and industrial expectations in ten years time. The model is estimated by the linear regression analysis according to the survey data came from 53 textile and clothing firms.

Results indicate that Turkish textile and clothing companies perceive themselves more competitive than their domestic rivals. Almost all of the firms in this study described themselves as being more competitive especially on product quality. Management skills, operating skills, and design & fashion capacity are the other dimensions on which firms are more competitive than their domestic rivals. On the other hand, firms perceive themselves less competitive on public relations and branding.

The results of the regression analysis provide evidence that perceived competitiveness is significantly positively related to firm size. The analysis concludes no statistically significant effects of general expectations and industrial expectations on perceived competitiveness of textile and clothing firms. However, this is most probably because of the sample size. Further analysis with wider samples would probably provide significant results about the effects of general expectations and industrial expectations on perceived competitiveness.

The positive effect of the firm size on firms' perceived competitiveness, provide evidence on the assumption that larger firms have more competitive advantages than their rivals. The result further suggests that the economies of scale affect competitive positions of firms.

Secondly, there are a few studies regarding the determinants of competitiveness of Turkish textiles and clothing industry. In this study, exploratory factor analysis is used to explore the key determinants of competitiveness of Turkish textiles and clothing industry. Results indicate that factor conditions is the most important determinant of competitiveness of the industry, followed by development abilities

and government support. Results suggest that governments should use its policy tools in order to develop factor conditions. As the clothing industry is a labor intensive industry, availability of qualified labor and the cost of labor has vital importance. Furthermore, industry's other cost elements, raw material costs and energy costs are seen to be very important. Governments should support businesses in terms of decreasing firms' production costs and providing qualified labor. Furthermore, coordination and cooperation between enterprises should be reinforced by government policies. Results also indicate that Turkish textile and clothing firms are aware of the importance of product quality, product differentiation, and innovation for gaining competitive advantage.

In order to give a comprehensive view of competitiveness of Turkish textile and clothing industry and to understand industry competition better, the industry's structure is analyzed in terms of Five Forces Model. Results indicate that there is a strong rivalry in the industry. Also, power of substitutes is high and that seem to be a threat for the firms. Power of buyers is also perceived to be high as buyers are very sensitive to price and request differentiated products. Results further indicate that there are no government policies that restrict the entries to the market, and access to distribution networks is not difficult. Therefore, it seems not to be entry barriers in the Turkish textile and clothing market. Also, according to the results there are numerous suppliers, and switching cost to other suppliers is not high. Hence, power of suppliers is relatively low in Turkish textile and clothing industry.

Sample size is the main restriction in the thesis. Because 53 firms returned the survey, analysis are done according to 53 firms' data. However, a wider sample size would give more accurate and significant results. For further studies, more extensive field researches which will provide reaching more firms operating in textiles and clothing industry, would increase the accuracy of the results.

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### **APPENDICES**

#### APPENDIX I

### Questionnaire

Sayın Yetkili,

Türkiye tekstil ve hazır giyim sektörünün rekabetçiliğine yönelik bir çalışma yürütülmekte olup, bu çerçevede hazırlanan anket çalışmasına katılımınız çalışmamızın başarısını artıracaktır. Anket sorularına verilecek cevaplara dayanılarak ortaya çıkarılacak sonuçların, politika yapıcıları yönlendirerek tekstil sektöründe faaliyet gösteren firmalarımız için olumlu sonuçlar doğurması beklenmektedir. Katılımınız için teşekkürlerimizi sunarız.

Zeynep TAŞTEPE BİLGİ

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### **ANKET FORMU**

	Grubunu	

- a) Hazır giyim
- b) Ayakkabı
- c) Ev tekstili
- d) İplik & Kumaş
- e) Diğer (Belirtiniz: \_\_\_\_\_)

2.	Firmanızın kuruluş yılı:	
3.	Çalışan sayınız:	
4.	Üretim şekliniz:	
a) ]	Fason üretim	
b)	Kendi markanız için üretim	
<b>c)</b> ]	Diğer (Belirtiniz:)	
5.	Firmanızın yurtiçi pazar payı:	
	%0-%5	
	%6-%10	
	%11-%15	
	%16-%20	
	%21-%25	
f)	%26-%30	
g)	%31-%35	
	%36-%40	
i)	%41-%45	
j)	%46-%50	
k)	%51 ve üzeri	
6.	Çalışanlarınıza ödediğiniz aylık ortalam	ıa ücret:
a) (	0-700 TL	
b)	701-1000 TL	
	1001-1500 TL	
d)	1501-2000 TL	
e) 2	2001 TL ve üzeri	
7.	İhracat yapıyor musunuz?	
a) ]	Evet	
b)	Havir	

İhracat yapmıyorsanız 10. soruya geçiniz.

## 8. Geçen seneye göre ihracat miktarınızdaki değişim: a) Hızlı artıyor (%10'dan büyük) b) Orta derecede artıyor (%5 ila %10 arasında) c) Yavaş artıyor (0 ila %5 arasında) d) Değişmiyor e) Yavaş azalıyor (0 ila -%5 arasında) f) Orta derecede azalıyor (-%5 ila -%10 arasında) g) Hızlı azalıyor (-%10'dan büyük) 9. İhracat toplam satışlarınızın ne kadarını oluşturuyor? a) %0-%10 b) %11-%30 c) %31-%50 d) %51-%100 **10.** İhraç pazarlarınız: a) AB b) Diğer Avrupa ülkeleri c) ABD d) Ortadoğu ve Körfez e) Afrika f) Asya & Pasifik g) Diğer (Belirtiniz: \_\_\_\_\_) 11. Firmanızın kapasite kullanım oranı ne kadardır? a) %0-%10 b) %11-%30 c) %31-%50 d) %51-%60 e) %61-%70 f) %71-%80 g) %81-%90 h) %91-%100 Üretimde kullandığınız makinelerin ne kadarı ithal makinelerdir? a) %0-%10 b) %11-%30 c) %31-%50 d) %51-%100 **13.** Üretimde kullandığınız hammaddelerin ne kadarı ithal edilmektedir? a) %0-%10 b) %11-%30

c) %31-%50 d) %51-%100

14.	Firmanızdaki	AR-GE	faaliyetlerinin	odak noktası:
-----	--------------	-------	-----------------	---------------

	Hiç ör	ıemli				Çok
	de	ğil		Nötr	Ö	nemli
		1	2	3	4	5
Ürünün kalitesini arttırma	ſ					
Maliyetleri azaltma	[	=	П			
Verimliliği artırma	ſ	Ħ	H		H	H
Ürün farklılaştırma	ĺ		П		$\Box$	П
İşyerindeki çalışma koşullarını iyileştirme	[	$\exists$	П		П	
Çevreci yaklaşım geliştirme	ſ		П	$\Box$	П	$\Box$
şevicer yanıaşını genşimme						
15. Rekabetin <u>ölçümünde</u> aşağıdaki :	faktörleri	öner	n ciraci	na göre		
sıralayınız:	iaktoricri	UIICI	11 311 431	na gorc	,	
	Hiç ö	neml	i			Çok
	-	gil	1	Nötr		çok nemli
		/ <b>5</b> 11	2	3	4	5
Pazar payı	[				$\Box$	
Karlılık	[	$\exists$	H		H	H
Satış gelirleri	[	Ħ	H		H	H
Verimlilik	[	Ħ	H		H	H
Maliyetlerde düşüklük	[	$\exists$	H		H	$\Box$
İhracat miktarı	[	=	H			
İhracat yapılan pazar sayısı	[	=	H			H
Diğer (Belirtiniz:)	[	$\exists$	Ħ		H	
j	L					
16. Firmanızın yurt içindeki perforn	ıansı geçe	en yıla	a kıyas	la ne yö	nde	
değişmiştir?		•	•			
	Çok				Çok	
	azaldı		Aynı	_	arttı	
		2	Aynı 3	4	-	
Pazar payınız	azaldı	2	-	4	arttı	
Pazar payınız Karlılığınız	azaldı	2	-	4	arttı	
Pazar payınız	azaldı	2	-	4	arttı	

## 17. Tekstil ve hazır giyim sektöründeki rekabette aşağıdaki faktörlerin önem derecesini belirtiniz:

	Hiç önen	nli			Çok
	değil		Nötr	Ċ	inemli
Hammadde maliyeti İşgücü maliyeti Sermaye maliyeti Enerji maliyeti Girdilerin yerel pazardan tedarik edilebilm Makine ve teçhizatın yerel pazardan tedar edilebilmesi			3	4	5
Uzmanlaşmış/eğitimli işgücü Finansman kolaylığı Fiziki altyapı İdari altyapı (bürokratik zorlukların derecesi vb.)					
Sektörel araştırma ve eğitim kurumları Yurtiçi talebin büyüklüğü Alıcı sofistikasyonu (alıcıların yeni ürünle talep etmesi vb)	er				
Ürün kalitesi Ürün farklılaştırma İnovasyon Yerel pazardaki doğrudan yabancı yatırım Yerel tedarikçi sayısı Yerel tedarikçi kalitesi Sektörün kümelenme durumu Sektördeki yatay ve dikey bağlantılar Yerel rakiplerin varlığı Yerel rekabetin yoğunluğu Firmanın iyi bir şekilde yönetilmesi Firma kültürü Teknik gelişim Bilgiye kolay ulaşım	alar				
Devlet desteği					

18. Devlet tarafından sağlanan a gücünü artırması açısından, önem der	- 0		firmanızın	rekabet
	Hiç önen	ıli		Çok
	değil	N	lötr	önemli
Lojistik altyapı Teknolojik altyapı (telekomünikasyon v Fikri mülkiyet haklarının geliştirilmesi Eğitim Vergi desteği Diğer ülkelere giriş bariyerlerinin kaldır			3 4	5 
19. Devlet tarafından sağlanması varsa belirtiniz.	gerektiğin	ni düşündüği	ünüz diğer	hususlar
a)				
b)				
20. Türkiye tekstil ve hazır giyim s	sektöründe	e aşağıdaki p	oazara giriş	engelleri
Kesinlik	kle		K	Cesinlikle
katılmıyo		Ortadayır		ılıyorum
Pazara giriş yüksek sermay gerektirmektedir	$\Box$ $\Box$	3	4	5
Ölçek ekonomisi vardır [ Dağıtım kanallarına ulaşım zordur [ Pazarda, mevcut markalara bağımlılık [				
vardır Ürünü farklılaştırmak gerekmektedir Pazara girişi engelleyici devlet politikaları bulunmaktadır				

21. Türkiye tekstil ve hazır var mıdır?	r giyim sektörü	nde aşağıdaki ikar	ne mal tehditleri			
	Kesinlikle atılmıyorum	Ortadayım	Kesinlikle katılıyorum			
İkame mallar çoktur Alıcıların ikame mallara geçmes kolaydır	1	2 3 □ □ □ □	4 5			
22. Türkiye tekstil ve haz kriterlere göre değerlendiriniz		ründe alıcıların g	ücünü aşağıdaki			
	esinlikle tılmıyorum	Ortadayım	Kesinlikle katılıyorum			
Az sayıda alıcı vardır Alıcıların farklı bir ürüne	1 2 	2 3	4 5			
geçmesi kolaydır Alıcılar farklılaştırılmış ürün talep etmektedir						
Alıcılar fiyata duyarlıdır Alıcılarda marka bağımlılığı yol	ktur					
23. Türkiye tekstil ve hazır giyim sektöründe tedarikçilerin gücünü aşağıdaki kriterlere göre değerlendiriniz:						
	Kesinlikle katılmıyorum	Ortadayım 2 3	Kesinlikle katılıyorum 4 5			
Az sayıda tedarikçi vardır Başka tedarikçiye geçmek maliy İkame girdiler yoktur Tedarikçiler ileri entegrasyon ya (Ürününüzü üretmeye başlayabi	yetlidir  apabilir					

# 24. Türkiye tekstil ve hazır giyim sektöründe rakiplerin gücünü aşağıdaki kriterlere göre değerlendiriniz:

	Kesinlikle			K	esinlikle
k	atılmıyorum		Ortadayım	katıl	lıyorum
	1	2	3	4	5
Çok sayıda rakip vardır					
Pazarda dominant rakip/rakipler					
bulunmaktadır					
Pazardaki ürünler benzer ürünler	dir 🗌				
Sektörün büyüme hızı yavaştır					
Sektörde aşırı kapasite vardır					
Sabit maliyetler yüksektir					
Sektörden çıkış zordur					
Müşterilerde marka bağımlılığı y	oktur				

## 25. Firmanız Türkiye'deki rakiplerine kıyasla ne kadar rekabetçidir?

	aha az kabetçi	Aynı	rek	na çok abetçi
İşçi ücretleri Üretim becerisi (operating skills) Yönetim becerisi (management skills) Teknik bilgi (iplik eğirme bilgisi, terbiye bilgisi vb)		3	4 	5
Hammadde maliyeti Üretimde kullanılan makine/teçhizat Sermaye maliyeti Sermayeye erişim (Access to capital) Enerji maliyeti Taşıma maliyeti Teslimat hızı Dağıtım ağı Tasarım ve moda kapasitesi Ürün kalitesi Ürün çeşitliliği Türkiye'de yeni ürün Dünyada yeni ürün Fiyat				

Ürün farklılaştırma(Rakiplerden farklı ürün sunma)					
Markalaşma					
Reklam					
Halkla ilişkiler		H			
Traikia mşkner					
26. Türkiye tekstil ve hazır giyim rekabetçidir?	sektörü, dü	inya tek	astil sektör	ründe ne	kadar
	Daha az			Dal	ha çok
	rekabetçi		Aynı	rek	abetçi
	1	2	3	4	5
İşçi ücretleri					
İşgücü varlığı (labor availability)					
Üretim becerisi (operating skills)					
Yönetim becerisi (management skills)					
Teknik bilgi (iplik eğirme bilgisi, terbi	ye 🗌				
bilgisi vb)					
Hammadde maliyeti					
Üretimde kullanılan makine/teçhizat					
Sermaye maliyeti					
Sermayeye erişim (Access to capital)					
Enerji maliyeti					
Taşıma maliyeti					
Teslimat hızı					
Dağıtım ağı					
Altyapı					
Tasarım ve moda kapasitesi					
Pazarlara yakınlık					
Ürün kalitesi					
Ürün çeşitliliği					
Türkiye'de yeni ürün					
Dünyada yeni ürün					
Fiyat					
Ürün farklılaştırma(Rakiplerden farklı					
ürün sunma)					
Markalaşma					
Reklam					
Halkla ilişkiler					

<ul><li>a) Çok olumlu</li><li>b) Olumlu</li><li>c) Nötr</li><li>d) Olumsuz</li><li>e) Çok olumsuz</li></ul>			
28. Türkiye'nin şu anki sizce nasıl etkiliyor? a) Çok olumlu b) Olumlu c) Nötr d) Olumsuz e) Çok olumsuz	i genel ekonomik o	durumu firmanızır	ı rekabet gücünü
29. <u>Türkiye'nin genel e</u> yönde değişecektir?	ekonomik gösterg Kesinlikle	<u>eleri</u> önümüzdeki	10 yılda sizce ne Kesinlikle
	katılmıyorum	Ortadayım	katılıyorum
GSYİH artacaktır Enflasyon oranı azalacaktır İşsizlik azalacaktır Kişi başı gelir artacaktır			4 5
30. <u>Türkiye tekstil ve h</u> sizce ne yönde değişecektir		<u>ünün durumu</u> önü	müzdeki 10 yılda
sizee ne yonde degişecekin	Kesinlikle		Kesinlikle
	katılmıyorum	Ortadayım	katılıyorum
Üretim artacaktır Maliyetler azalacaktır Yurtiçi satışlar artacaktır Yurtdışı satışlar artacaktır Verimlilik artacaktır Teknoloji gelişecektir Karlılık artacaktır Daha rekabetçi olacaktır			4 5

Türkiye'nin şu anki genel ekonomik durumunu nasıl görüyorsunuz?

27.

## **APPENDIX II**

## **Results of the Stepwise Regression Analysis**

**Table 76: Variables Entered/Removed(a)** 

	Variables	Variables	
Model	Entered	Removed	Method
1	Firm size		Stepwise (Criteria: Probability-of-F- to-enter <= ,050, Probability-of-F- to-remove >= ,100).

a Dependent Variable: Perceived\_competitiveness

**Table 77: Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,377(a)	,142	,117	13,836

a Predictors: (Constant), firm size

Table 78: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1079,037	1	1079,037	5,637	,023(a)
	Residual	6508,518	34	191,427		
	Total	7587,556	35			

a Predictors: (Constant), firm\_sizeb Dependent Variable: Perceived\_competitiveness

**Table 79: Coefficients(a)** 

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta	В	Std. Error
	_	Ъ	EHOI	Deta	ъ	Littoi
1	(Constant)	74,029	2,646		27,976	,000
	Firm size	,009	,004	,377	2,374	,023

a Dependent Variable: Perceived\_competitiveness

Table 80: Excluded Variables(b)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Firm age	-,029(a)	-0,158	0,875	-0,028	0,765
1	Market share	-,005(a)	-0,031	0,975	-0,005	0,938
	Export	,024(a)	0,151	0,881	0,026	0,995
	CUR	,056(a)	0,340	0,736	0,059	0,964
	Entry	, , , , ,	3,2 .3	0,700	3,323	3,201
	barriers	,121(a)	0,758	0,454	0,131	1,000
	Threat of					
	substitutes	-,078(a)	-0,484	0,632	-0,084	0,995
	Power of buyers	-,174(a)	-1,101	0,279	-0,188	1,000
	Power of suppliers	,106(a)	0,652	0,519	0,113	0,976
	Rivalry	-,016(a)	-0,097	0,924	-0,017	0,965
	General	, ()	,	,	,	,
	expectations	,138(a)	0,868	0,392	0,149	1,000
	Industrial	079(-)	0.404	0.622	0.004	0.007
~	expectations	-,078(a)	-0,484	0,632	-0,084	0,997

a Predictors in the Model: (Constant), firm\_size

b Dependent Variable: Perceived\_competitiveness

## APPENDIX III

## TEZ FOTOKOPİSİ İZİN FORMU

<u>ENSTİTÜ</u>			
Fen Bilimleri Enstitüsü			
Sosyal Bilimler Enstitüsü			
Uygulamalı Matematik Enstitüsü			
Enformatik Enstitüsü			
Deniz Bilimleri Enstitüsü			
YAZARIN			
Soyadı : TAŞTEPE BİLGİ Adı : Zeynep Bölümü : İşletme			
TEZİN ADI (İngilizce) : Competitiveness o	of Turkish Tex	tiles and Clothing In	dustry
TEZİN TÜRÜ : Yüksek Lisans		Doktora	
Tezimin tamamından kaynak gösteri	ilmek şartıyla f	otokopi alınabilir.	
2. Tezimin içindekiler sayfası, özet, ind bölümünden kaynak gösterilmek şartıyla fo	•	-	
3. Tezimden bir (1) yıl süreyle fotokop	oi alınamaz.		

## TEZİN KÜTÜPHANEYE TESLİM TARİHİ: