International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2018, 8(5), 332-341.

Cluster Analysis of the Eu Countries Which Turkey Has Textile Trade[#]

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Received: 12 July 2018 **Accepted:** 01 September 2018 **DOI:** https://doi.org/10.32479/ijefi.6886

ABSTRACT

Textile and clothing sectors are industries which have formed by the separation of the textile industry, the oldest industry of the industrialization period, in it'self. The branches of this industry have played an important part in the development of the developing countries accelerating the industrialization period during the period. The contribution of the textile and clothing industries which are labor-intensive industries to the economy in terms of labor force, foreign trade and new investments cannot be ignored. On the other hand, the industries in which competition capacity and branding speed are the highest are the textile and clothing industries. In this study, the export and import figures of the EU countries which make an important market in the textile industry with Turkey are analyzed by years. The foreign trade situation analysis in terms of protecting the competition capacity of Turkey is made and the differences and similarities between the member countries are tried to be determined. Hierarchical cluster analysis, which is one of the multivariate statistical methods, is applied to the import and export data of OECD between the years 2005 and 2016 and the countries within the EU market are extricated.

Keywords: Textile Sector, Foreign Trade, Industrialization, Cluster Analysis, Situation Analysis
JEL Classifications: M31, F10

This research was presented as a verbal statement at the 3rd International Social Sciences Symposium organized by Kahramanmaraş Sütçü İmam University on 26th-28th October 2017.

1. INTRODUCTION

The world economy is in a rapid transformation and development process. Keeping pace with this rapidly progressing process and existing within this process is not always easy. The countries have to form their own internal dynamics and keep up with the economic balance in order to reach the world's speed. In this sense, the most important internal dynamics sustaining the countries and enabling them to keep up with the world are the industries which will develop the countries. It is possible to say that the textile and clothing industries are the leading ones among these industries. These industries which start with labor-intensive manufacturing and grow with the support of technology have been the driving powers of development for many countries including Turkey.

The textile industry has been regarded as one of the leading sectors after the Turkish War of Independence, has been very important for the Turkish economy with its contributions to the GNP, employment, and export in Turkey. It has an approximately 5% share within the GNP, 5.5-6% share in the total employment, 28-30% share in export and 21% share in import according to the average of many years (www.tuik.gov.tr). Turkey's hierarchically increasing competitiveness within the industry has started to decline in consequence of the change of the economic balances in the world economy with the millennium and the developments after 2007.

Competition, which is defined as a kind of effort for outmaneuvering, propounds this effort of it's also in terms of economy and trade, thus, it makes sizeable contributions to the development of the countries and the progress of the world economy. It affects the competitive capacity of a country also in foreign trade with branding, quality, product differentiation, and price. Competitive capacity means the increase in the potential and ability of the countries, in addition, it increases the life quality of the individuals living in these countries (Aktan, 2003). The textile and clothing sectors are among the industries which can carry this competitive capacity and achieve success in the competitions between the countries. Protecting and enhancing the competitive capacity of the sector which is placed near the top in the world gradation in export are important because of the common impact of the sector.

Turkey is the 31st in export and 21st in import in the world according to the 2015-2016 data of the World Trade Organization (WTO). Turkey is the 5th in textile export with 11 billion $ and 9th in textile import with 6 billion $ in the world. At the same time, it is the 7th with 15 billion $ in clothing export. The USA, China, and the EU countries generally shape the textile and the clothing industries of the world. The EU is the most important market in Turkey's foreign trade in the industry. Turkey, which is the 3rd most important supplier of the EU in terms of textile and clothing and the 2nd most important supplier in terms of textile and its raw materials, is directly affected by the changing dynamics in the EU countries (İTKİB, 2017). Hence, the competitive advantage of Turkey has changed on behalf of China and Bangladesh in recent years and new actors have started to enter the market. Turkey's protecting its position in the EU market hierarchically becomes more important in this growing competitive environment. Because of this reason, clustering the countries to which Turkey has exports in this competitional area where there are common suppliers will be a source of data for both the decision makers and the enterprises.

The importance of the textile and the clothing sectors for either the country and the region and or the enterprises cause many academic studies to be made in this field. Researches focused on competition are the leading studies (Dilber, 2004; Eraslan et al., 2008; Uzunoğlu, 2008; Yücel, 2010; Çoban and Kök, 2005; Utkulu and İmer, 2009; Altıntaş and Akpolat, 2013; Şahin, 2015; Özçalık, 2013; Özlem and Oduncu, 2016; Bashimov, 2017; Atış, 2014; Şahin and Şahbudak, 2016). Besides the researches propounding Turkey's competitive capacity in terms of the production factors, foreign trade analyses (Şişman and Bağcı, 2015; Elitaş and Şeker, 2017; Aydoğuş and Diler, 2015; Özer, 2014) and the researches specific to the regions where the textile industry is important (Koçoğlu and Sarıtaş, 2016; Öndes and Tosunoğlu, 2015; Akdağ et al., 2014; Akbay and Doğaroğlu, 2017; Çütçü and Çelik, 2016; Hamşıoğlu, 2017; Hatunoğlu and Demir, 2014) are also at a quite important level. Besides these ones, studies about the effectiveness of the industry have also been made (Kaylıdere and Kargın, 2004; Çetin, 2015; Doğan and Ersoy, 2017; Öztürk and Girginer, 2015). The cluster analyses which are instructive about the competitive capacity in the industry in which executive and organizational marketing problems are analyzed and which are used as effective tools in development are the studies where the variables such as distribution and infrastructure are analyzed in analyses in which rather regional condensations are discussed and cluster maps are formed (Erenler et al., 2011; Akdağ, et al., 2014).

2. METHOD

In this study, hierarchical cluster analysis, which is one of the multivariate statistical methods, is applied to the OECD import and export data of 2005-2016 and the countries in the EU market are separated. Squared Euclidean distance function and Ward's technique were used while the cluster analysis was being made. Moreover, a SWOT analysis was made in order to determine the strengths and weaknesses of Turkey and the opportunities and threats it would face. The IBM SPSS 24-Beta (Statistical Package for the Social Sciences) package software was used in the statistical analyses.

2.1. Cluster Analysis

Cluster analysis is a multivariate statistical analysis which consists of methods that gather the different units in different clusters and the similar units in similar clusters in the X data matrix with $n \times p$ dimension which forms with the measurements of the units which no prior knowledge is known about their cluster structure from the point of P variable and reveal the secret clusters in the data set and determine the characteristics of these clusters and enables predictions about the mass. Hierarchical cluster analysis, which is usually a branch of the cluster analysis is used in situations in which the number of the clusters is not certain in the data set in the beginning. The algorithms of the hierarchical cluster analysis contain a consecutive operation process and the cluster results obtained can be displayed graphically with a tree diagram known as a dendrogram (Erişoğlu, 2011, s.23-27).

2.2. Swot Analysis

SWOT analysis is the analysis made by enterprises/industries/countries and even people made for analyzing the situation they are in. It is a kind of situation analysis which enables to determine the strengths and weaknesses from their own point, notice the threats to be faced and take measures and present the chances to use the opportunities. A SWOT analysis allows to define the problems about the analysis field of the related party and serves the formation of a base for the future applications thanks to the findings obtained (Kuşat, 2014, s.311). The analysis enables to propound the present conditions and determine new strategies to adapt to the environmental conditions.

3. TEXTILE TRADE

3.1. World Textile Trade

Competitive capacity hierarchically increases and changes direction in the textile trade of the world. Vietnam and Pakistan have started to play a part with an increasing share among the exporter countries including the EU countries, China, India, South Korea and Turkey. China had the highest share in the textile exports in 2016 (37.2%) although its export decreased at a 3% rate. While the EU countries took a 23% share in the textile export with a 1% increase in 2016, the share of India was reflected as 5.7%. While Pakistan arose to becoming the seventh from becoming the ninth, Vietnam fell into the top 10 with a 9% increase (Table 1).

As for clothing, there were no changes in the top 10 exporter countries, however, Cambodia and Bangladesh had a 6% increase, India rose to become fifth. In addition to this, while there was a decline in Hong Kong and China, however, it keeps its position of being the greatest exporter of the world representing the 36% of its export. In 2016, the EU countries increased its market share to 26.4% with a 4% increase (Table 2) (World Trade Statistical Review, 2017).

Euler Hermes Economic Research Global Textile Report separated the countries which dominate the textile market in the world into two groups. The first group is the developed countries which have a slow or negative sales development and the second group is the developing countries which have a long-term growth opportunity such as China and India. However, there is a common problem for both markets and it is about technology. Not supporting the decreasing sales of their retail stores with the online sales technology and not investing in automatization technologies to enhance the costs will continue to be a problem for especially the small and medium-sized businesses. The report predicts that the per capita expenditures will increase with the increase in the income of the middle classes although the industry has reached a maturity in these countries on the one hand. On the other hand, it predicts that many producers in the developed markets plan to go out of business in 2018. The world textile market has a sensitive risk in the light of these developments. According to the report, while Russia and Brazil have a high risk, China, India, UK, Japan and Italy have a moderate risk. The shortness of the product life curve within the fashion which causes sustainability problems, excessive satisfaction with the digitalization in retailing and the increase in cotton prices are the factors which cause a loss in the industry.

3.2. Textile Industry and Trade of Turkey

The textile industry which was one of the development moves of Turkey in the early years of the Republic of Turkey has protected its importance until today. The changing world markets and balances also affect the textile industry like all industries. Participation of the new countries in the market, international treaties, wars, conflicts and economic crises affect both the domestic markets and foreign trade directly. For example, the expectations of a global deflation and an increase in the FED (Federal Reserve System) interests caused 2015 to be a year when the industry had a decrease in all of its branches in Turkey like many exporter countries (Tables 3 and 4).

It is mandatory for the Turkish textile and clothing industry which makes most of its export to the EU countries (Table 5) with 50% in textile and 71% in clothing according to 2017 data to be able to protect its market obtaining for years in terms of the importance of the industry within the national economy.

Turkey's trading volume to the EU countries has increased in the textile industry at a significant rate like many other industries with the country's entrance to the customs union. The developments in the textile industry affect all of the economies strongly. Especially the continuity of the competitive capacity in the textile industry is quite important for the economy of Turkey. When the dispersion

Table 1: World textile foreign trade

Country/Country Groups	Value	Share in world exports/imports				Annual percentage change			
	2016	2000	2005	2010	2016	2010-2016	2014	2015	2016
Exporters									
China a	106	10.4	20.2	30.5	37.2	5	5	−3	−3
European union (28)	65	36.7	34.8	27.0	23.0	−1	4	−14	1
Extra-EU (28) exports	20	9.9	9.9	8.1	7.1	0	3	−14	0
India	16	3.6	4.1	5.1	5.7	4	5	−6	−6
United States of America	13	7.1	6.1	4.8	4.6	1	3	−4	−6
Turkey	11	2.4	3.5	3.6	3.8	3	3	−12	0
Korea, Republic of	10	8.2	5.1	4.3	3.5	−1	−1	−11	−6
Pakistan b	9	2.9	3.5	3.1	3.2	2	−3	−9	9
Chinese Taipei	9	7.7	4.8	3.9	3.1	−1	0	−6	−8
Hong Kong, China	8	-	-	-	-	−6	−9	−7	−13
Domestic Exports b	0	0.8	0.3	0.1	0.0	−19	−32	−30	−9
Re-exports	8	-	-	-	-	−6	−8	−7	−13
Vietnam b	7	0.2	0.4	1.2	2.4	14	16	16	9
Above 10	246	80.0	82.8	83.6	86.6	-	-	-	-
Importers									
European Union (28)	69	35.2	33.6	27.9	22.9	−1	6	−12	−6
Extra-EU (28) importers	29	9.9	10.0	10.1	9.7	1	9	−9	1
United States of America	29	9.8	10.5	8.8	9.5	4	4	5	−3
China a	17	7.8	7.2	6.6	5.5	−1	−6	−6	−12
Vietnam b	13	0.8	1.6	2.6	4.3	11	14	10	−1
Japan	8	3.0	2.7	2.7	2.8	2	2	−8	2
Hong Kong, China	7	-	-	-	-	−7	−10	−9	−13
Retained imports	-	0.9	0.3	0.1	-	-	-	-	-
Bangladesh b	7	0.8	1.1	1.7	2.4	8	14	4	2
Mexico a, c	6	3.6	2.8	1.9	2.1	3	4	2	−4
Turkey	6	1.3	2.1	2.5	2.0	−1	5	−12	−2
Indonesia b	6	0.8	0.4	1.6	1.9	5	0	−2	1
Above 10	161	64.0	62.3	56.3	53.5	-	-	-	-

Source: (WTO, 2017). a: Include significant shipments through processing zones, b: Secretarial estimates, c: Imports are valued for b

Table 2: World clothing foreign trade

Country/Country Groups	Value	Share in world exports/imports				Annual percentage change			
	2016	2000	2005	2010	2016	2010-2016	2014	2015	2016
Exporters									
China a	161	18.2	26.6	36.7	36.4	4	5	−7	−7
European Union (28)	117	28.6	30.9	28.4	26.4	3	7	−12	4
Extra-EU (28) exports	28	6.4	6.7	6.2	6.3	4	4	−14	1
Bangladesh b	28	2.6	2.5	4.2	6.4	11	5	8	6
Vietnam b	25	0.9	1.7	2.9	5.5	15	18	16	5
India	18	3.0	3.1	3.2	4.0	8	14	3	−2
Hong Kong, China	16	-	-	-	-	−7	−6	−10	−15
Domestic exports b	0	5.0	2.6	0.1	0.0	−26	−16	−37	−38
Re-exports	16	-	-	-	-	−7	−6	−10	−15
Turkey	15	3.3	4.2	3.6	3.4	3	8	−9	0
Indonesia b	7	2.4	1.8	1.9	1.7	1	0	−1	−2
Cambodia b	6	0.5	0.8	0.9	1.4	13	6	11	6
United States of America	6	4.4	1.8	1.3	1.3	3	4	0	−6
Above 10	384	68.9	76.0	83.2	86.4	-	-	-	-
Importers									
European Union (28)	175	41.1	47.3	45.2	37.4	1	9	−10	−3
Extra-EU (28) imports	95	19.6	23.4	24.0	20.4	1	9	−8	0
United States of America	91	33.0	28.7	22.1	19.5	2	2	4	−6
Japan	28	9.7	8.1	7.3	6.1	1	−7	−8	−1
Hong Kong, China	13	-	-	-	-	−4	−2	−8	−11
Retained imports b	-	0.9	-	-	-	-	-	-	-
Canada c	10	1.8	2.1	2.2	2.0	2	1	−2	−3
Korea, Republic of	9	0.6	1.0	1.2	1.8	12	12	0	2
China a	7	0.6	0.6	0.7	1.4	17	15	7	1
Australia c	6	0.9	1.1	1.3	1.4	5	4	1	−3
Switzerland	6	1.6	1.6	1.4	1.3	2	4	−8	6
Russian Federation	6	0.1	0.3	2.0	1.2	−4	−6	−34	3
Above 10	338	90.3	90.8	83.5	72.1	-	-	-	-

Source: (WTO, 2017). a: Include significant shipments through processing zones, b: Secretarial estimates, c: Imports are valued for b

Table 3: Export on the Basis of Product Groups in the Turkish Textile and Raw Materials Industry in January 2016-1000 $ Ranking

Product group	2015 January amount	2016 January amount	Change (%)	2015 january value	2016 January value	Change (%)	2016 january share
Woven fabrics	22.630	22.798	1	229.807	213.665	−7	36
Knitted fabrics	18.001	17.515	−3	116.446	103.550	−11	17
Nonwoven fabrics and goods	32.733	32.412	−1	106.078	101.349	−4	17
Artifical synthetic threads	24.635	26.991	10	92.199	90.180	−2	15
Cotton yarn	13.629	12.475	−8	41.434	35.999	−13	6
Artifical synthetic fiber	14.136	15.993	13	32.158	27.152	−16	5
Raw cotton	17.119	11.331	−34	15.112	11.580	−23	2
Other threads	1.325	1.839	39	8.482	8.014	−6	1
Wool fiber	1.042	1.280	23	3.133	3.252	4	1
Wool yarn	301	309	3	3.197	3.009	−6	1
Other	8.5	3.6	−58	39	13	−67	0
Total	145.555	142.966	−2	648.202	597.955	−8	100

Source: Mediterranean Exporters' Association (2016)

of the export of Turkey according to its geographical regions in the period from the1970s to today is analyzed, three aspects attract attention: (i) The EU has been the largest export destination of Turkey for years, (ii) The Middle East and North Africa region is an alternative for Turkey to the European market. (iii) Turkey cannot reach the Far East. Turkey has actualized almost half of its export to the EU countries for the last 50 years. The Middle East and North Africa are the second regions where Turkey makes most of its export after Europe. Moreover, when Turkey concentrates on one of these two markets in years, it reduces its share in the other one. The region of Far East which demands more than the one-third of the import in the world takes a 5% share from the export of Turkey. Although the EU countries have kept their characteristic of being the main market in both import and export for many years, the role of the Far East increases in the source of Turkey's foreign trade deficit also with the influence

Table 4: Countries which Turkey has the Highest Export in the Textile and Raw Materials Industry - 1000 $ Ranking

Country	2015 January amount	2016 January amount	Change (%)	2015 January value	2016 January value	Change (%)	2016 January share (%)
Italy	15.880	14.925	−6	73.628	64.857	−12	11
The United Kingdom	5.763	7.171	24	26.287	29.063	11	5
Islamic Republic of Iran	8.846	6.880	−22	41.429	29.001	−30	5
Bulgaria	4.336	5.742	32	23.320	28.878	24	5
Germany	6.920	5.887	−15	33.397	28.015	−16	5
Spain	4.481	5.673	27	18.774	23.291	24	4
Poland	9.646	5.279	−45	22.877	22.104	−3	4
The United States of America	5.264	5.168	−2	27.757	21.985	−21	4
Romania	3.914	3.809	−3	23.121	21.709	−6	4
Morocco	2.697	3.350	24	17.876	19.188	7	3
Egypt	4.982	4.521	−9	19.231	16.794	−13	3
Belgium	5.147	6.268	22	14.772	16.670	13	3
Iraq	3.807	6.237	64	13.697	15.704	15	3
The Netherlands	4.404	4.145	−6	16.074	14.972	−7	3
Tunisia	1.734	1.901	10	13.165	13.538	3	2
People's Republic of China	9.695	5.934	−39	14.174	11.466	−19	2
Portugal	3.547	3.281	−8	11.300	11.437	1	2
Greece	1.817	2.719	50	9.434	10.512	11	2
France	2.350	2.406	2	10.414	10.424	0	2
Lithuania	515	1.074	108	4.776	9.343	96	2
Other	39.808	40.599	2	212.699	179.00	−16	30
Total	145.555	142.966	−2	648.202	597.955	−8	100

Source: Mediterranean Exporters' Association (2016)

Table 5: The share (%) and export change rate (%) of the country groups in Turkey's textile and clothing export

Country Groups	2016		2017		Change rate in textile	Change rate in clothing
	Textile	Clothing	Textile	Clothing		
African Countries	10.12	3.94	10.32	3.59	5.04	−8.35
European Union (28)	51.06	70.77	50.29	71.44	1.43	1.47
Commonwealth of Independent States	8.29	5.30	8.79	5.23	9.24	−0.75
Other American Countries	1.43	0.19	1.18	0.20	−15.08	4.81
Other Asian Countries	4.07	0.52	4.17	0.60	5.35	16.19
Other European Countries	3.35	2.59	3.58	2.62	10.21	1.85
North America Free Trade Association	4.58	3.61	4.81	3.76	8.23	4.87
Oceania	0.26	0.24	0.27	0.22	4.55	−8.24
Middle East	12.56	11.78	12.10	11.25	−0.83	−3.98
Free Zone	2.17	0.43	2.56	0.42	21.31	−3.66
Far Eastern Countries	2.11	0.63	1.94	0.67	−5.09	6.62

Source: Turkish Exporters' Assembly (2018). https://www.tim.org.tr/ihracat-rakamlari.html

of the global dynamics. The main reason for this increase is the difficulty experienced by Turkey in reaching far markets, notably the Far East (Düşündere, 2017, p. 1-2).

4. FINDINGS

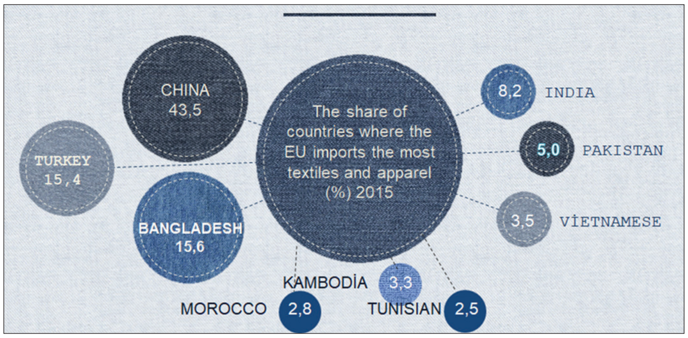
When the situation analysis of the textile and clothing industry was being made for Turkey, the most important competing countries in the foreign trade were considered. China, India, Pakistan, Bangladesh, Vietnam, Cambodia and Morocco are the most important competing rivals of Turkey especially in the EU market (www.trademap.org). Abolishment of the quotas, bilateral and multilateral agreements and the technical obstacles have changed the balances in the textile and clothing industries in the world trade. The market shares of China, Vietnam, Bangladesh, Cambodia and the other Asian countries in export have hierarchically increased beginning from the second half of the 2000s (Figure 1).

In 2015, while Cambodia's textile and clothing export to the EU increased 31.7%, Vietnam's increased 23.9%, Bangladesh's increased 23%, India's increased 8.6% and China's increased 6.8%, a 3.6% increase was experienced in Turkey's export. The mentioned countries' share in export increased also according to the 2016 data (İTKİB, 2017).

Turkey has the skill of gaining the advantage it has lost in terms of production costs with its closeness to the EU market, the customs union, the sufficiency of its logistics infrastructure, high-quality production and the developments in technology and R and D.

Turkey also has the skill of gaining the advantage it has lost in terms of production with the existence of integrated production, skilled labor and the investments it has made in fashion-design and innovation. Increase in import due to the increase in population and income and lack of investments in fashion and design are the opportunities which will strengthen the competitive advantage

Figure 1: The share of the countries which the EU imports most textile and clothing (%) 2015



Source: www.trademap.org

for Turkey. The concentration of the production in certain fields and not having a large range of products in export depending on it are also the opportunities which will strengthen the competitive advantage for Turkey.

However, the free trade agreements (FTA) the EU has with other countries, the conveniences in the entrance of cheap products, tariff and non-tariff barriers, the relations with the EU in economy and politics, the fluctuations in foreign currency and inadequate raw materials are the disadvantages of the sector. The FTA which is planned to be made with Pakistan has recently caused competition concerns for the Turkish producers because of the entrance of low-quality and cheap products into the country in terms of Turkish textile.

Another important topic which is important for the Turkish textile sector is the approximately 97% of the industry's consisting of small businesses. While this situation provides a flexibility for production on the one hand and it can create difficulties in terms of productivity and R and D, on the other hand (www.tetsiad.org).

It is seen that Turkey's share in the textile industry is 3.98% and its share in the clothing industry is 3.41% in the world trade according to the competing countries analysis table (Table 6). It is observed that Turkey falls behind China according to its share in the world trade. When its share in the national trade is regarded, Turkey's export share in the textile industry is 8% and its export share in the clothing industry is 11%. The higher an industry's share in the national export is, the more that country has to continuously keep and develop its markets about those products in that industry. Since Turkey's market diversity is very rich, the share of the textile and clothing industries in the exports is not so high. According to the relative unit value, it is seen that Turkey's export quality is not so high in both textile and clothing fields. It is seen that Turkey has a quite rich market in textile and clothing fields in terms of market and product diversification qualities. The richness in the market and product diversity means facing a situation with less risk in the industry and it is a quite advantageous situation for Turkey. When Turkey's global performance change percentage and adaptation and contribution to the change in the demand in the world percentage are regarded, it is seen that it has a positive direction in the field of textile and it has a negative direction in the field of clothing. It is clear that it holds the whip hand in competitive capacity in the textile industry in terms of competitiveness share.

4.1. SWOT Analysis

One of the strengths of Turkey is indicated as its skill of gaining the advantage it has lost in terms of production costs with its closeness to the EU market and the customs union. It's the sufficiency of its logistics infrastructure, high-quality production and the developments in R and D and technology are its other strengths. The existence of integrated production, skilled labor and its continuing understanding of investment in fashion, design, and innovation are the other advantages. Its other strengths can be sorted as its experience of long years in the industry and its ability to develop its market skills with this experience, international trust in these industries, ability to make boutique production and design and capacity of being original.

Turkey's weaknesses are dependence on the EU in economic politics, differences in the approach to the industrial and commercial politics with the EU and its cost problem and distantness to the new and developing markets such as China and Brazil. They are also high production costs and insufficiency in raw materials (cotton, rawhide and artificial fiber) depending on the production and decrease in the qualified employees. The other weaknesses of Turkey are less diverse markets and countries when compared to the rivals, inadequacy in branding, approximately 97% of the industry consisting of small businesses, and inadequacy of the firms in terms of R and D.

Not being able to produce original products, not being able to develop with high added value and lack of machine production with advanced technology are the other weaknesses of Turkey. Lack of inspection of the under the counter production, unregistered employment, lack of interest in international and local standardization and not being well-known enough about the product quality internationally can be sorted as the other weaknesses.

Threats for Turkey are the conveniences in the entrance of cheap products, relations with the EU in the economy and social politics, fluctuations in foreign currency and insufficient raw materials and the buyers' working without stock. They are also the increase in the preferential trade opportunities on behalf of some countries, efforts for developing the small businesses in the competing countries and purchase of goods without customs with the Mediterranean FTA of the EU. The threats are also the existence of countries exporting without quotas, the decisions of the countries which are important cotton producers to affect the world market and the membership of the competing countries to the WTO. Liberalization of the foreign trade, increase in the direct foreign investments, the FTA made with Pakistan, the entrance of the low-quality and cheap products into Turkey and them causing a competition concern for the domestic producers can be expressed as the other threats for Turkey.

Increase in the imports in countries such as India due to the increase in population and income, lack of investment in infrastructure and fashion and design are the opportunities which will strengthen the competitive advantage for Turkey. They are also the concentration of the production in certain fields and not having a wide range of products in exports due to it. Besides, increase in labor costs in the competing countries, high energy prices, internal disturbances

Table 6: Analysis of the Competing Countries 2016

Some performance indicators	China		India		Pakistan		Vietnam		Bangladesh		Morocco		Tunisia		Cambodia		Turkey	
	Textile	Clothing	Textile	Clothing	Textile	Clothing	Textile	Clothing	Textile	Clothing	Textile	Clothing	Textile	Clothing	Textile	Clothing	Textile	Clothing
Share in world trade (%)	36.4	34.6	5.54	3.89	2.64	1.11	2.08	5.52	0.54	7.32	0.16	0.66	0.13	0.66	0.06	1.44	3.98	3.41
Share in national export (%)	5	7	6	6	37	24	2	11	4	87	2	13	2	22	1	66	8	11
Relative unit value world=1	1	1.4	0.9	1.1	0.7	1	1	1.1	0.7	0.8	1	1.2	1	1.6	1	0.8	0.9	0.8
Market diversity	26	14	14	9	13	7	7	4	14	12	2	3	3	6	6	9	30	14
Product diversity	79	54	48	36	18	19	25	41	10	14	3	33	11	14	14	14	31	24
Global performance change (%)	2.2600	−1.7200	1.2300	3.8100	−2.1500	2.2600	11.0500	12.2700	−2.8200	12.0500	5.5100	−2.8000	−5.0800	0.0400	58.3700	10.4000	0.0700	−0.6000
Adaptation and contribution to thr change in demand in the world (%)	0.8000	0.9600	0.0822	−0.4100	0.1300	−0.7800	2.9200	1.7700	4.6700	2.6400	8.9200	0.7100	3.3400	3.5300	−27.5800	−0.9600	0.5100	−2.2000
Competitiveness effect (%)	1.0900	−1.6000	1.0400	2.0200	−1.9200	2.3000	7.9600	9.2200	−3.9500	10.6900	−1.9100	−4.5200	−6.3200	0.3500	86.5700	10.4600	0.1200	−1.2800
Operation cost per hour ($) 2014*	2.65		1.12		0.62		0.74		0.62		3.12		3.18				5.48	

Source: Compiled from the ITC data by the authors, (https://www.intracen.org/itc), *www.wernerinternational.com in the countries in the Mediterranean region, low educational levels, insufficient entrepreneurship, and unemployment are the other opportunities. Limited markets in the Mediterranean countries and the EU taking high shares and the transatlantic trade and investment partnership between the EU and the USA can be sorted as the other opportunities. The influence of the financial crisis between 2007 and 2008 in countries where Turkey has export also caused its export share to regress. Although the rival countries in the EU market have advantages in terms of especially labor and raw materials, the increase in the labor costs like the one experienced by China can restrict the sustainability of this advantage in the long run.

As it is seen in the dendrogram graphic in Figure 2 based on Turkey's export data, according to the cluster analysis results, the EU countries Turkey has export can be assessed as 3 different clusters, considering Germany as a cluster alone and making a cluster with the Netherlands, Italy, Spain, and France and forming another cluster including the other countries. Germany plays an important part especially in the disintegration of the citizens of Turkish descent. Germany takes a 26% share in the total export of 2016. The share of the countries of the second group is 38% and their export shares change between 7% and 14%. However, when the 6% shares of Bulgaria and Poland are considered, an option of assessing these two countries as a subgroup can be thought.

As it is seen in the dendrogram graphic in Figure 3 based on Turkey's import data, according to the cluster analysis results, Italy disintegrates from the other countries as the country which has the largest import volume among the EU countries where Turkey imports textile and textile products. While Germany which follows Italy is assessed as another cluster, it is possible to assess the other remaining 25 EU countries as a separate cluster because their trade volumes are close to each other. Spain and Italy which are important in terms of design and production ability in clothing have not disintegrated. The results of this cluster play an important part in disintegrating the other countries which are the most important textile and clothing importers of the world for Turkey which experiences a concentration in the market in the EU.

Figure 2: Dendrogram according to the export data

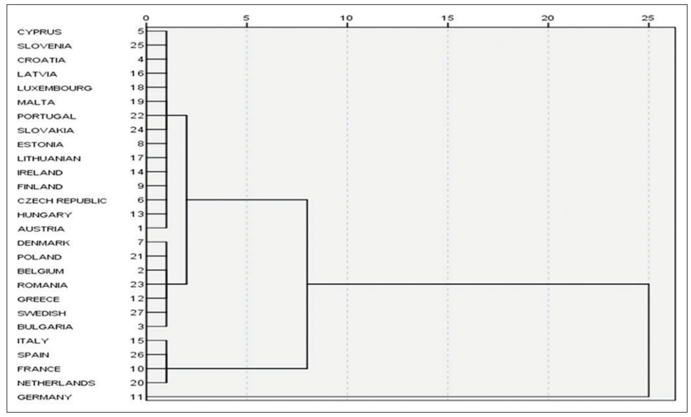
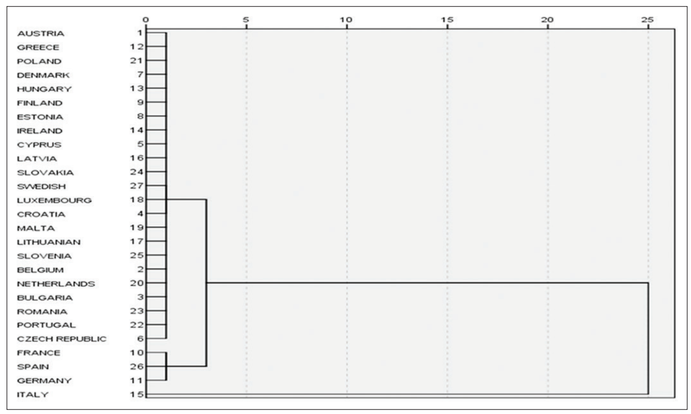


Figure 3: Dendrogram according to the import data



5. CONCLUSION AND RECOMMENDATIONS

The world trade increased 2, 8 between 2010 and 2016 according to the WTO data in spite of internal conflicts, wars, economic and political crises. In 2016, the world export was 15.464 billion $ and the world import was 15.799 billion $. The EU is the greatest buyer and seller in foreign trade. 38.4% of the world export and 37.4% of the world import is actualized by the EU. This domination of the EU shows itself in all industries. One of the most important product groups imported by the EU is textile and clothing. The world textile and clothing export which was 747.6 billion dollars in 2016 is the 5% of the total world trade. The EU takes a 24% share from this export and takes approximately a 40% share from the clothing world import. More than the 1/3 of the textile and clothing products produced in the world is sold in the EU market (World Trade Statistical Review, 2017). Turkey is one of the largest textile and clothing suppliers of the EU. It is the 3rd among the countries the EU has import in the total of textile and clothing industry. It is the 2nd in the EU in the textile and raw materials industry (İTKİB, 2017). From the point of Turkey, it is important because of both the participation of new countries to the countries considered as the traditional market and the entrance of the new exporters to the market. China, India, Pakistan, Bangladesh, Vietnam, Tunisia, Cambodia, and Morocco are the most important competing countries for Turkey in the EU market. The share of these countries hierarchically increased beginning from the second half of the 2000s. The influence of the financial crisis in the same period caused the export share to regress in the countries where Turkey had an export. Although the competing countries have advantages in the EU market especially in terms of labor and raw materials, the increase in the labor costs like it is experienced in China restrict the sustainability of this advantage. However, it is clear that the high cost of raw materials, energy, and labor cost progressing at these levels in Turkey will make it difficult to take advantage of this opportunity. Turkey reduces its cost disadvantage with the advantage it has especially in the market and product diversification when compared to the competing countries. Turkey should keep its strategies for keeping the advantage it has in countries which purchase the 65 % of the export such as Germany, Holland, Spain, Italy, and France with quality and product diversification. Besides, it should develop strategies which will provide a price advantage for the EU countries with lower per capita income. Growing the market of Germany which is the largest textile and clothing importer of the EU is one of the weaknesses to be developed. Considering the demands which have regional disparities and the reasons for the decrease in the textile export which has had a decline in recent years should be discussed. The advantage of transportation should be supported by providing the raw materials domestically because of the closeness to the market. Cotton unseed production which has fluctuated and inclined to decrease in many years has increased to 2450 tons in 2017 according to the Turkish Statistical Institute data. It is a development which has emerged because the production decreased because of the international developments in 2015 inclined to increase in 2016 and 2017 again but it should be continued. Hence, the rate of capacity use in the industry has increased to over 80%.

Turkish textile and clothing sectors have a value in terms of quality, diversity and design either in the EU countries or in Turkey's other markets such as Russia. Protection of this value and presenting steady products to new markets and consumers within this frame will provide a sustainable advantage against the rivals. One of the most important risks in the industry is the employment of unregistered workers by the small firms in order to eliminate the low productivity, unregistered production, and the increasing labor costs. Especially the refugees coming from Syria working in this industry for low wages cause important problems in terms of quality and productivity. This practice is inevitable in Turkey which is more disadvantageous than its rivals in terms of the share of the labor in the costs. However, taking encouraging measures such as making insurance for the registered labor and exemption from tax etc. will provide stability in the production with permanent and qualified labor. In addition, cost advantages will be provided for the companies. At the same time, the economic loss caused by the unregistered economy will be prevented.

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