INTERNATIONAL COMPETITIVENESS OF AGRICULTURAL EXPORT: COMPARATIVE ANALYSIS OF THE EU COUNTRIES AND TURKEY

Derya İlkay Abdikoğlu, Gökhan Unakitan

Tekirdağ Namık Kemal University, Faculty of Agriculture, Department of Agricultural Economics, Turkey

Abstract: Food and agriculture are essential for people to survive and the contribution of them to national income is of great importance. It is strategically important for countries both to decrease external dependence by increasing domestic production and to earn income by exporting agricultural products. In addition, export value, which is the most important item of foreign trade, is one of the most important macroeconomic concepts in terms of economic growth, development and welfare increases of countries.

Revealed Comparative Advantage (RCA) coefficients are calculated as the ratio of the country's total product/sector exports to total exports divided by the ratio of exports of the same product/sector to total exports in the reference area. RCA coefficients which can also be expressed as Balassa Index; compares the country's specialization in one product/sector with the specialization of the other country or the reference field. According to Balassa Index, if the export of a particular product / product group of a country is higher than the average export of the reference area in that product / sector, that country is defined as specialized in the export of that product / sector.

In this study it is aimed that to compare Turkey and the EU countries' export values in agricultural products basis. Comparative advantage and competitiveness of agricultural products of Turkey and the EU between 2008 and 2017 were discussed by using Balassa Revealed Comparative Advantages Index (RCA). EU-28 was taken as the reference area in the study.

According to results, there is no major changes or fluctuations in the competitiveness of Austria, Belgium, Cyprus, Germany, Sweden and UK in the last ten years. While there is a reduction in Denmark, Estonia, France and Ireland's competitiveness, Italy and Turkey have increased their competitiveness. There are great fluctuations in Bulgaria's competitiveness in the last 10 years.

In 2017, there is a competitive disadvantage in Austria, Cyprus, Czech, Estonia, Finland, Germany, Ireland, Luxembourg, Malta, Slovakia, Slovenia, Sweden and the UK. Belgium, Bulgaria, Croatia, Denmark, France, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Spain and Turkey have a competitive advantage.

Keywords: Balassa Index, Revealed Comparative Advantages Index, Competitiveness, Agricultural Export.

Introduction

Intensified competition in rapidly globalizing world economy is very important for countries. One of the ways countries can increase their income levels is to increase their competitiveness in the international market and make this increase sustainable (Karaarslan and Tuncer, 2010).

Competitiveness can be defined as the ability to sell a product produced by a country in world markets, to have an effective export share in the international market and to maintain this position. In order to ensure continuity in exports, it is necessary to compete with foreign markets.

Competitiveness is a very important concept for companies and countries. In the globalizing world, employment opportunities, national income per capita and total tax revenues of countries that do not increase their competitiveness are decreasing, budget deficits are increasing and the living standards of the society are decreasing. Also, in these countries budget deficits increase and the living

standards of the society decrease. Therefore, there is a close relationship between competitiveness, economic growth and prosperity (Aktan, 1998).

As the international competitiveness of an economy increases; profitability, investments and employment increase (Adıgüzel, 2011). Moreover, increase in competition in almost all areas in recent years has forced the countries to compete with each other in order to maintain their current status rather than increase their welfare (Porter, 2008).

There are many studies in the literature that measure competitiveness using the Revealed Comparative Advantage Index (RCA) presented by Balassa (1965). Bojnec (2001) analyzed the competitiveness of the agricultural sector between EU-15, NAFTA, Asian countries, Africa, South America and Eastern Europe, Fertö and Hubbard (2003) analyzed the competitiveness of Hungary's agricultural products against the EU, Cao et al. (2011) analyzed the competitiveness of agricultural products between China and Central Asian countries.

RCA index were used in many studies such as Miral (2006) in fresh fruit and vegetable industry, Yazmacıoğlu (2006) in shoe industry, Altay and Gürpınar (2008) in furniture industry, Coban et al. (2010) in Turkish agricultural sector on the basis of product groups, Engin (2013) in corrugated cardboard industry, Erkan et al. (2015) in Turkey's vegetable exports, Peker (2015) in Turkey's cereal-legume industry, Abdikoğlu and Unakıtan (2016) in nuts, Kaya and Oduncu (2016) in textile industry, Şahin (2016) in Turkey's agri-food products.

The aims of this study are to determine the comparative advantage of Turkey, EU and Balkan countries in terms of agricultural products' foreign trade, to determine the competitiveness of Turkey, to compare the current situation of Turkey with other countries and to determine the policies that protect or increase competitiveness.

In this study, by calculating Balassa Revealed Comparative Advantage Index, the changes in comparative advantages and competitiveness of agricultural products of Turkey in both EU and Balkan markets in the last 10 years are discussed.

Material and Method

In order to determine the comparative advantage and the competitiveness level of agricultural products in international markets, Balassa's Revealed Comparative Advantage Index is calculated for countries. In this study, total export data of countries are obtained from World Bank and agricultural export data are obtained from FAO between 2008 and 2017. The Balkan countries are Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Montenegro, North Macedonia, Romania, Serbia and Slovenia. Since the export values of agricultural products are not available for Kosovo, it is excluded from the study.

Revealed Comparative Advantage (RCA)

The revealed comparative advantage (RCA) index is widely used to determine a country's international competitiveness. Balassa is based on the relative export performance criterion in the calculation of comparative advantages (Balassa,1965).

$RCA_{ij} = (X_{ij} / X_{it}) / (X_{wj} / X_{wt})$

where X represents export value, j is a commodity, i is a country, w is a set of countries.

If RCA>1, the share of j commodity/sector exports of country i is greater than its share in total world or country group exports. In other words, the country has the revealed comparative advantage in the commodity /sector and it is specialized,

If RCA<1, the share of j commodity/sector exports of country i is less than its share in total world or country group exports. The country has revealed comparative disadvantage in the commodity/sector and it has no specialization,

If RCA=1, the share of j commodity/sector exports of country i is equal to its share in total world or country group exports. The specialization level of the country for commodity/sector is at the same specialization of the world (Peker, 2014).

In other words, if the RCA value is greater than 1, the commodity or sector may compete. If the RCA is less than 1, the competitiveness of the commodity or sector is low.

Agricultural GDP in EU and Balkan Countries

Turkey has 78 million hectares of land. 23 million hectares of land is agricultural land (TURKSTAT, 2019a). Agricultural sector constitutes 6.2% of GDP (Ministry of Agriculture and Forestry, 2019) and 17.6% of employment (TURKSTAT, 2019b) in 2018. The share of agriculture in GDP is decreasing in Turkey within years (Table 1).

Table 1. The share of agricultural sector in GDP between 2009 and 2018 in Turkey (2009=100)

Years	Agriculture (Million TL)	Development rate (%)	Total (Million TL)	Development rate (%)	Share of Agriculture (%)
2009	81 234	4.1	999 192	-4.7	8.1
2010	87 465	7.7	1 083 997	8.5	8.1
2011	90 473	3.4	1 204 467	11.1	7.5
2012	92 460	2.2	1 262 160	4.8	7.3
2013	94 604	2.3	1 369 334	8.5	6.9
2014	95 165	0.6	1 440 083	5.2	6.6
2015	104 085	9.4	1 527 725	6.1	6.8
2016	101 400	-2.6	1 576 365	3.2	6.4
2017	106 383	4.9	1 694 134	7.5	6.3
2018	108 409	1.9	1 742 023	2.8	6.2

Source: Ministry of Agriculture and Forestry, 2019

The share of the agricultural sector in GDP in EU countries is shown in Table 2. Although fluctuations in the shares of the agricultural sector in GDP over the years, rates have not changed much in the last 10 years. Shares tend to decrease in Bulgaria, Croatia, Malta and Sweden, while shares in Finland, France and Greece tend to increase over the years.

Table 2. Share of agricultural sector in GDP between 2009 and 2018 in EU countries

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Austria	1.15	1.27	1.40	1.35	1.25	1.20	1.13	1.11	1.20	1.17
Belgium	0.65	0.76	0.64	0.78	0.69	0.65	0.70	0.63	0.66	0.69
Bulgaria	4.24	4.16	4.60	4.56	4.61	4.56	4.14	4.05	4.07	3.65
Croatia	4.04	3.71	3.61	3.31	3.42	2.95	3.02	3.14	3.01	2.93
Cyprus	1.99	2.10	2.19	1.98	2.01	1.83	1.85	1.93	1.75	1.72
Czech Republic	1.64	1.52	2.15	2.35	2.40	2.47	2.23	2.06	2.06	1.97
Denmark	0.83	1.20	1.31	1.65	1.30	1.38	0.96	1.00	1.43	1.02
Estonia	2.12	2.79	3.40	3.19	2.99	3.02	2.68	2.09	2.32	2.23
Finland	2.23	2.39	2.36	2.36	2.57	2.40	2.22	2.38	2.34	2.45
France	1.32	1.60	1.65	1.63	1.46	1.56	1.61	1.44	1.55	1.62
Germany	0.66	0.65	0.74	0.70	0.88	0.87	0.65	0.67	0.78	0.68
Greece	2.80	2.88	2.95	3.24	3.21	3.40	3.80	3.58	3.70	3.72
Hungary	2.97	2.99	3.91	3.85	3.85	3.97	3.74	3.87	3.75	3.60
Ireland	0.55	0.95	1.21	0.98	1.09	1.24	0.89	0.94	1.17	0.92

Italy	1.79	1.77	1.89	1.96	2.09	1.94	2.02	1.88	1.92	1.88
Latvia	3.31	3.94	3.45	3.27	3.28	3.34	3.64	3.21	3.19	3.30
Lithuania	2.53	2.99	3.47	4.02	3.58	3.42	3.44	3.08	3.12	2.69
Luxembourg	0.25	0.25	0.25	0.36	0.28	0.29	0.23	0.22	0.26	0.28
Malta	1.48	1.46	1.37	1.33	1.19	1.14	1.08	1.22	0.79	0.91
Netherlands	1.55	1.78	1.58	1.66	1.79	1.74	1.72	1.77	1.86	1.63
Poland	2.49	2.57	2.83	2.66	2.87	2.61	2.20	2.38	*	*
Portugal	1.94	1.92	1.82	1.91	2.08	2.03	2.05	1.95	1.98	1.96
Romania	6.12	5.00	6.25	4.67	5.38	4.72	4.19	4.06	4.32	4.34
Slovak Republic	3.02	2.55	3.06	3.23	3.62	4.04	3.38	3.36	3.10	3.01
Slovenia	1.66	1.73	1.99	1.79	1.80	2.02	2.05	1.95	1.71	1.92
Spain	2.18	2.34	2.28	2.31	2.51	2.43	2.60	2.69	2.69	2.62
Sweden	1.29	1.43	1.44	1.31	1.22	1.19	1.20	1.12	1.07	1.05
United Kingdom	0.55	0.66	0.61	0.60	0.66	0.64	0.59	0.58	0.59	0.57

Not available
Source: World Bank, 2019

The share of the agricultural sector in GDP in the Balkan countries is shown in Table 3. Fluctuations in the shares of the agricultural sector in GDP have been observed over the years. In the last 10 years, the shares in Albania and Greece increase. But in Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, North Macedonia and Romania the shares generally decrease.

Table 3. Share of the agricultural sector in GDP between 2009 and 2018 in Balkan countries

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Albania	16.79	17.96	18.23	18.77	19.57	19.99	19.78	19.85	19.01	18.39
Bosnia and Herzegovina	7.08	6.80	6.76	6.14	6.84	5.95	6.24	6.37	5.60	6.00
Bulgaria	4.24	4.16	4.60	4.56	4.61	4.56	4.14	4.05	4.07	3.65
Croatia	4.04	3.71	3.61	3.31	3.42	2.95	3.02	3.14	3.01	2.93
Greece	2.80	2.88	2.95	3.24	3.21	3.40	3.80	3.58	3.70	3.72
Montenegro	8.27	7.68	8.07	7.45	8.03	8.10	8.06	7.47	6.85	*
North Macedonia	10.37	10.12	9.35	9.10	10.03	10.18	9.73	9.17	7.89	7.24
Romania	6.12	5.00	6.25	4.67	5.38	4.72	4.19	4.06	4.32	4.34
Serbia	7.20	6.60	7.45	6.43	7.41	7.07	6.71	6.80	6.02	6.20
Slovenia	1.66	1.73	1.99	1.79	1.80	2.02	2.05	1.95	1.71	1.92

Not available
Source: World Bank, 2019

Results

The changes in comparative advantage and competitiveness of agricultural products of Turkey and EU countries in 10 years are calculated with Balassa's Revealed Comparative Advantage Index and given in Table 4.

According to results, there are no major changes or fluctuations in the competitiveness of Austria, Belgium, Cyprus, Germany, Sweden and UK in the last ten years. While Denmark, Estonia, France and Ireland have decreased their competitiveness, Italy and Turkey have increased their competitiveness. There are great fluctuations in Bulgaria's competitiveness in the last 10 years.

In the last 10 years, Croatia, Hungary, Italy, Portugal, Romania and Turkey have revealed comparative advantage and specialized in agricultural products sector, while Estonia has a disadvantage.

Table 4. Revealed Comparative Advantage (RCA) Index of EU countries and Turkey in EU markets

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	0.87	0.84	0.81	0.80	0.79	0.79	0.82	0.84	0.84	0.82
Belgium	1.59	1.54	1.47	1.45	1.45	1.44	1.48	1.58	1.52	1.46
Bulgaria	1.58	1.79	2.05	1.89	1.80	2.02	1.88	1.85	1.85	1.61
Croatia	0.75	0.80	0.81	0.81	0.88	0.78	0.90	1.01	1.11	1.06
Cyprus	0.33	0.29	0.30	0.31	0.31	0.35	0.35	0.35	0.39	0.39
Czech Republic	0.67	0.63	0.59	0.60	0.67	0.69	0.72	0.79	0.76	0.68
Denmark	1.56	1.55	1.53	1.51	1.50	1.49	1.42	1.42	1.36	1.35
Estonia	1.04	0.97	0.96	0.91	0.95	0.88	0.87	0.83	0.78	0.77
Finland	0.29	0.29	0.36	0.39	0.39	0.42	0.38	0.39	0.32	0.31
France	1.33	1.24	1.29	1.32	1.27	1.26	1.23	1.24	1.18	1.14
Germany	0.70	0.71	0.68	0.69	0.69	0.69	0.69	0.68	0.67	0.65
Greece	1.00	1.12	1.14	1.07	1.19	1.21	1.14	1.36	1.51	1.30
Hungary	0.97	0.93	1.01	1.09	1.23	1.16	1.13	1.10	1.05	1.07
Ireland	0.80	0.63	0.65	0.70	0.70	0.72	0.69	0.50	0.50	0.50
Italy	0.92	0.97	0.99	0.97	0.96	0.98	1.02	1.08	1.09	1.06
Latvia	1.63	1.56	1.73	1.59	2.11	1.97	1.93	1.86	1.88	2.05
Lithuania	2.02	2.09	2.00	1.85	2.02	1.98	2.03	2.04	1.91	1.72
Luxembourg	0.18	0.19	0.22	0.23	0.18	0.17	0.17	0.17	0.14	0.14
Malta	0.11	0.09	0.10	0.10	0.13	0.12	0.12	0.12	0.10	0.09
Netherlands	1.91	1.97	1.93	1.90	1.84	1.81	1.73	1.73	1.86	1.98
Poland	1.23	1.31	1.26	1.25	1.39	1.43	1.50	1.56	1.48	1.46
Portugal	0.94	0.96	1.00	0.97	1.00	0.99	1.08	1.10	1.08	1.00
Romania	0.90	0.97	1.11	1.17	1.12	1.24	1.27	1.30	1.24	1.14
Slovakia	0.51	0.63	0.62	0.67	0.76	0.64	0.56	0.55	0.54	0.48
Slovenia	0.69	0.74	0.81	0.75	0.86	0.76	0.72	0.78	0.78	0.72
Spain	1.41	1.37	1.42	1.38	1.47	1.45	1.54	1.62	1.63	1.55
Sweden	0.35	0.34	0.32	0.31	0.33	0.34	0.36	0.35	0.34	0.33
Turkey	0.97	1.03	1.10	1.11	1.02	1.09	1.14	1.20	1.20	1.09
UK	0.51	0.50	0.52	0.52	0.51	0.50	0.51	0.51	0.51	0.48

In 2017, Austria, Cyprus, Czech, Estonia, Finland, Germany, Ireland, Luxembourg, Malta, Slovakia, Slovenia, Sweden and the UK have competitive disadvantage. Belgium, Bulgaria, Croatia, Denmark, France, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Spain and Turkey have a competitive advantage.

According to the RCA index results, Turkey has competitiveness in agricultural products in 2017 but there are periodic fluctuations in Turkey over the years. Croatia in 2015, Italy in 2014 and Turkey in 2009 gained competitive advantage compared to the EU countries.

The changes in comparative advantage and competitiveness of agricultural products of Turkey and Balkan countries in 10 years are calculated with Balassa's Revealed Comparative Advantage Index and given in Table 5.

Table 5. Revealed Comparative Advantage (RCA) Index of Balkan countries and Turkey in Balkan countries market

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Albania	0.32	0.23	0.23	0.28	0.32	0.35	0.22	0.39	0.45	0.38
Bosnia and Herzegovina	1.02	0.95	0.97	0.95	0.99	0.93	0.89	0.98	1.00	0.99
Bulgaria	1.56	1.64	1.73	1.62	1.56	1.69	1.55	1.44	1.42	1.38
Croatia	0.74	0.73	0.69	0.69	0.77	0.65	0.74	0.79	0.85	0.90
Greece	0.98	1.02	0.97	0.91	1.04	1.01	0.94	1.06	1.15	1.11
Montenegro	0.56	0.54	0.54	0.51	0.57	0.52	0.85	0.43	0.38	0.36
North Macedonia	2.01	1.86	1.83	1.61	1.69	1.64	1.42	1.27	1.21	1.08
Romania	0.89	0.88	0.94	1.00	0.97	1.04	1.05	1.01	0.95	0.98
Serbia	2.08	2.14	2.08	2.06	2.16	1.69	1.85	1.84	1.80	1.72
Slovenia	0.68	0.67	0.69	0.64	0.75	0.63	0.59	0.61	0.59	0.62
Turkey	0.96	0.94	0.93	0.95	0.89	0.91	0.94	0.93	0.92	0.93

In the last 10 years, Albania, Croatia, Montenegro, Slovenia and Turkey have comparative disadvantages in agricultural products in the Balkan countries market and have not achieved specialization. In other words, these countries have a disadvantage in agricultural products sector in international competition.

Bulgaria, North Macedonia and Serbia have a revealed comparative advantage and specialize. Fluctuations are observed by years in the revealed comparative advantage of Bosnia and Herzegovina, Greece and Romania. Turkey has a competitive disadvantage in the Balkan countries market in agricultural products in the last 10 years.

According to RCA index, Bulgaria, Greece, North Macedonia and Serbia have comparative advantage in the Balkan countries in 2017.

Discussion

In this study, Turkey's competitiveness in the agricultural sector are calculated separately for the EU market and the Balkans markets. While Turkey has revealed comparative advantage in the EU market since 2009, it has revealed comparative disadvantage in Balkan countries market.

Turkey ranks first in the export of agricultural products in Balkan countries. Also, Turkey's total exports are higher than the total exports of Balkan countries. Nevertheless, Turkey has revealed comparative disadvantage in the Balkan countries market. Because the share of agricultural products in total exports of Balkan countries is higher than in Turkey.

In terms of the revealed comparative advantage index in the EU markets in 2017, Latvia (2.05) has the highest value and Malta (0.09) has the lowest value. In Balkan countries market in 2017, Serbia (1.72) has the highest value and Montenegro (0.36) has the lowest value.

Due to the contraction in the international agricultural product market and the rapid increase in agricultural product prices in recent years, the agricultural sector in the country's economies needs to reach a structure that can compete in domestic and foreign markets. Production costs directly affect the international competitiveness in terms of price-cost relationship. Reducing production costs will have an advantage in product price and will contribute to the competitiveness of countries.

In order to increase the competitiveness of the countries and ensure the continuity of the competitiveness, first of all, macroeconomic stability should be ensured, the restrictions on foreign trade should be reviewed and policies supporting and facilitating foreign trade should be developed. While agricultural sector is significantly supported by governments in developed countries, the supports remain insufficient in Turkey. For this reason, the supports and tax subsidies should be increased and a mechanism for effective audits of supports should be established to provide and maintain Turkey's competitive advantage on international markets.

In order to have a sustainable competitive power in the agricultural sector, it should be aimed to combine cost, quality and diversity in the most effective way. In addition, production, marketing and logistics strategies should be improved.

References

1. Abdikoğlu D., Unakıtan G. 2016. International Competitiveness Analysis of Hazelnut Export in Turkey. *IBANESS Conference Series*, 12-13 March 2016, Plovdiv, Bulgaria.

2. Adıgüzel M. 2011. Uluslararası Rekabet Gücü, Belirleyici Faktörler ve Ölçülmesi, Türkiye Bağlamında Bir Değerlendirme, Nobel Akademik Yayıncılık, 1. Basım, Nisan, 1-3.

3. Aktan CC. 1998. Uluslararası Rekabet Gücü İçinde Türkiye Dünya'nın Neresinde? EGİAD Yayını, İzmir, s.118.

4. Altay B., Gürpınar, K. 2008. Açıklanmış Karşılaştırmalı Üstünlükler ve Bazı Rekabet Gücü Endeksleri: Türk Mobilya Sektörü Üzerine Bir Uygulama. *Afyon Kocatepe Üniversitesi, İ.İ.B.F. Dergisi*, 10(1):257-274.

5. Ballassa B. 1965. Trade Liberalization and Revealed Comparative Advantage, Manchester School of Economic and Social Studies, 33

6. Bojnec S. 2001. Trade and Revealed Comparative Advantage Measures (Regional and Central and East European Agricultural Trade). *Eastern European Economics.* 29. March-April 2001. 72-98.

7. Cao S., Li F., Zhang J. 2011. Export Competitiveness of Agri-Products Between China And Central Asian Countries: A Comparative Analysis. *Canadian Social Science*, 7(5): 129-134.

8. Çoban O., Peker A.E., Kubar Y. 2010. Türk Tarımının Avrupa Birliği Ülkeleri Karşısındaki Sektörel Rekabet Gücü. *S.Ü. İİBF Sosyal ve Ekonomik Araştırmalar Dergisi*, 20: 247-266.

9. Engin E. 2013. Açıklanmış Karşılaştırmalı Üstünlükler Yaklaşımına Göre Türkiye Oluklu Mukavva Ambalaj Sektörünün Rekabet Gücü. İstanbul Kültür Üniversitesi Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı, Yüksek Lisans Tezi, İstanbul.

10. Erkan B., Arpacı B., Yaralı F., Güvenç İ. 2015. Türkiye'nin Sebze İhracatında Karşılaştırmalı Üstünlükleri. *KSÜ Doğa Bilimleri Dergisi*, 18(4): 70-76

11. Fertö I., Hubbard LJ. (2003). Revealed Comparative Advantage and Competitiveness in Hungarian Agri-Food Sectors. *The World Economy*, 26(2). 247-259.

12. Karaaslan A., Tuncer G. 2010. Uluslararası Rekabet Gücünün Artırılmasında Temel Devlet Politikaları. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 26:23-45

13. Kaya Ö., Oduncu A. 2016. Türk Tekstil Sektörünün Uluslararası Rekabet Gücü Değerlendirmesi. *Akademik Bakış Dergisi,* 54:418-428.

14. Ministry of Agriculture and Forestry, 2019. https://www.tarimorman.gov.tr/Konular/Makro-Ekonomik-Gostergeler (Erişim Tarihi: 04.11.2019)

15. Miral, ZC. 2006. Açıklanmış Karşılaştırmalı Üstünlükler ve Türkiye'nin Avrupa Birliği'ne Karşı Rekabet Gücü: Seçilmiş Tarımsal Ürünler İçin Bir Uygulama, Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü, Yayınlanmamış Yüksek Lisans Tezi, İzmir.

16. Peker AE. 2014. Türkiye Ekonomisinde Tarım Sektörünün Üretim Yapısı ve Karşılaştırmalı Rekabet Gücü. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Doktora Tezi, Konya.

17. Peker AE. 2015. Türkiye Hububat ve Baklagil Alt Sektörünün Avrupa Birliği Pazarı Karşısındaki Rekabet Gücü. *Kahramanmaraş Sütçü İmam Üniversitesi İ.İ.B.F. Dergisi*, 5(2): 1-20.

18. Porter ME., (1998). Competitive Advantage of Nations, (2nd Ed.), New York: Free Press

19. Şahin D. 2016. Tarımsal Gıda Ürünlerinde Karşılaştırmalı Üstünlüğün Ölçümü: Türkiye Örneği. *Uluslararası Sosyal Araştırmalar Dergisi*, 9(43): 2177-2184.

20. TURKSTAT, 2019a. (https://biruni.tuik.gov.tr/medas/?kn=92&locale=tr) (Erişim Tarihi: 04.11.2019)

21. TURKSTAT, 2019b. (https://biruni.tuik.gov.tr/medas/?kn=72&locale=tr) (Erişim Tarihi: 04.11.2019)

22. World Bank, 2019. https://databank.worldbank.org/source/world-development-indicators (Erişim Tarihi:04.11.2019)

23. Yazmacıoğlu S. 2006. Türk Ayakkabı Sektörünün Avrupa Birliği Karşısında Rekabet Gücü. Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüs, Yüksek Lisans Tezi, İzmir.