Received: 01.12.2017 Dokuz Eylül University
Accepted: 30.04.2018 Maritime Faculty Journal
Published Online: 24.06.2018 Vol:10 Issue:1 Year:2018 pp:109-125
DOI: 10.18613/deudfd.428189 ISSN:1309-4246
Research Article E-ISSN: 2458-9942

# ANALYSING THE TRADE BETWEEN TURKEY AND THE AEGEAN ISLANDS: THE HIDDEN OPPORTUNITIES

Onur AKDAŞ<sup>1</sup> İlke Sezin AYAZ<sup>2</sup> Didem ÖZER ÇAYLAN<sup>3</sup>

### **ABSTRACT**

Aegean Islands and Turkey have strict historical and geographical ties. These ties make social, cultural and commercial interaction inevitable. The trade between Aegean Islands and Turkey has great potential. Despite high demands from the Aegean Islands, according to the relevant statistics no sufficient trade interaction has been established. The aim of this paper is to analyze the trade potential and reveal the barriers of trade between Aegean Islands and Turkey. To reach this aim, trade statistics have been compiled from various sources and interviews have been carried out with the relevant professionals. The findings supported by the related literature indicate that as trade barriers range from infrastructural and procedural process at port and port-centric areas, and underdevelopment of small-sized ports, to lack of a collaborative culture among the various service providers involved in the trade and transportation interactions. The solutions proposed for the related problems are listed in the recommendation section of this study.

**Keywords**: Aegean Islands, Turkey, trade, trade barriers.

.

<sup>&</sup>lt;sup>1</sup> Res. Asst., Dokuz Eylül University, Maritime Faculty, İzmir, onur.akdas@deu.edu.tr

<sup>&</sup>lt;sup>2</sup> Res. Asst., Dokuz Eylül University, Maritime Faculty, İzmir, ilkesezinayaz@gmail.com

<sup>&</sup>lt;sup>3</sup> Assoc. Prof. Dr., Dokuz Eylül University, Maritime Faculty, İzmir, didem.ozer@deu.edu.tr

# TÜRKİYE İLE EGE ADALARI ARASINDAKİ TİCARETİN ANALİZİ: DEĞERLENDİRİLMEYİ BEKLEYEN **FIRSATLAR**

## ÖZET

Ege Adaları ve Türkiye sıkı tarihî ve coğrafi bağlara sahiptir. Bu bağlar, sosyal, kültürel ve ticari etkileşimi kaçınılmaz kılar. Ege Adaları ve Türkiye arasındaki ticaret büyük potansiyele sahiptir. Ancak, Ege Adaları'ndan gelen yüksek talebe rağmen, istatistiklerden de anlaşıldığı üzere yeterli ticaret etkileşimi henüz kurulmamıştır. Bu çalışmanın amacı, Ege Adaları ile Türkiye arasındaki ticaret potansiyelini analiz etmek ve ticaret engellerini ortaya koymaktır. Belirtilen amaca ulaşmak için ticaret istatistikleri çeşitli kaynaklardan derlenmiş ve profesyonellerle görüşmeler yapılmıştır. Çalışmanın bulgularına göre ticari engeller; ticaret limanlarındaki altyapı ve operasyonlara, limanlardaki az gelişmişliğe, ticaret ve ulaşımda yer alan işletmeler arasında işbirliğine dayalı bir kültür birliğinin olmamasına dayanmaktadır. Bu bulgular literatürce de desteklenmektedir. İlgili sorunlar için önerilen çözümler öneriler başlığı altında listelenmiştir.

Anahtar Kelimeler: Ege Adaları, Türkiye, ticaret, ticaret engelleri.

### 1. INTRODUCTION

Maritime transport has historically been a major triggering effect on the development of trade and exchange of different cultures. For instance, Polónia (2016) investigated the maritime expansion of Villa de Conde, a Portuguese maritime town, between the years of 1500 and 1640. Polónia (2016) found that the expansion of town through maritime activities had significant effects on political, economic, social, and demographic development of the town. The current literature also well explains how shipping positively influences the trade and economic development of regions (Clark et al., 2004; Radelet and Sachs, 1998). Since maritime transportation does not only contribute to economic development, but also produce less Co2 per ton transported, governments promote policies such as short sea shipping.

Islands in Aegean Sea have been considered to be important for economic activities for centuries (Sherratt and Sherratt, 1993; Gertwagen, 2014). In recent years, tourism and cultural activities have increased a lot between Turkey and Aegean Islands that are close to Turkey. The increase has been achieved thanks to the initiatives of governmental and civil organizations such as bilateral cultural events and easiness in travel visa requirements. Accordingly, many tour operators carry out ferry services between the Aegean Islands such as Chios, Lesbos, and Kos and Turkish Towns such as Çeşme, Kuşadası, and Ayvalık. Besides passenger transportation and tourism, the trade opportunities between the islands and Turkey have also risen. Yet, the trade activity has not reached to its potential or at least expected level. Turkey and Greece have considerable amount of trade, but only few amount of cargo is directly carried from Turkey to Aegean Islands. The cargoes are usually transported to Piraeus and Thessaloniki ports first, and then distributed to the islands by Greek companies.

Considering the rising tourism and trade activities between Turkey and Aegean Islands and the importance of Aegean Islands as a potential export market, Özer et al. (2011) analyzed the short sea shipping potential of the region and made significant implications regarding the cargo transport between Turkey and Aegean Islands. The purpose of this study is to investigate Aegean Islands as a potential direct export market and reexamine the current situation. The paper analyses the barriers of direct transport between Turkey and Aegean Islands and trade statistics between Turkey and Greece.

# 2. SHORT SEA SHIPPING

Short sea shipping is defined in the European Comissionion paper as "Short sea shipping means the movement of cargo and passengers by sea between ports situated in geographical Europe or between those ports and ports situated in non-European countries having a coastline on the enclosed seas bordering Europe. Short sea shipping includes domestic and international maritime transport, including feeder services, along the coast and to and from the islands, rivers and lakes. The concept of short sea shipping also extends to maritime transport between the Member States of the Union and Norway and Iceland and other States on the Baltic Sea, the Black Sea and the Mediterranean" (EC, 1999). Therefore, short sea shipping includes national and international traffic all along the coast and to and from the islands, rivers and lakes. In another definition Beškovnik (2006) puts another dimension to the short sea shipping terms by adding "door-to-door intermodal movement" to the definition as strategic element.

Besides definitions, the benefits of using short sea shipping should be noted here. Medda and Trujillo (2010) stated that short sea shipping is more environmentally friendly than the roadway and produces less congestion and risk of accident. Especially for two and a half decades European Union accelerates the support of short sea shipping with the motivation of environmentally sensitive point of view. Projects like Marco

Polo I and II, Trans-European Transport Network (TEN-T) and Pilot Action for Combined Transport (PACT) have issued and designed by the result of this wiewpoint. Suárez-Alemán (2016) states that "External costs to the society" generated by the other modes of transports is the main motivation of supporting short sea shipping. He also underlined that geographical allocation of Europe population is another reason of supporting short sea shipping since around 205 million people live in the EU coastal regions.

As can be understood from above mentioned definitions and benefits, the trade between Aegean Islands and Turkey should be be evaluated within the context and dynamics of short sea shipping which are very intensively discussed by the researchers. Venkatesh et. al. (2017) keynoted that short sea shipping has prominent barriers such as legislation (especially cabotage rules), infrastructure and procedures at port and portcentric areas, underdevelopment of small ports, and lack of a collaborative culture among the various service providers involved in the logistics supply chain. All these barriers especially the last one can be regarded as one of the main barriers of short sea shipping between the Greek Aegean Islands and Turkey.

## 3. TRADE RELATIONSHIP BETWEEN TURKEY-GREECE

Commercial relationships between Turkey and Greece have increased approximately 15 times over the past decade. The trade volume between the two countries was \$ 273 million in 1994 and it reached \$ 2 billion in 2005. Trade relations between Turkey and Greece have shown a significant increase since 2000. The trade volume between the two countries was 868 million dollars in 2000, which was 2 billion 640 million dollars in 2006. In 2012, trade volume between the two countries rose by \$ 5 billion (\$ 4.92 billion). Greece's imports to Turkey amounted to \$ 3.5 billion, while Turkey's exports to Greece amounted to \$ 1.4 billion. In 2017, Turkey exported \$1.7 billion to Greece and imported \$1.8 billion which accumulated as \$3.5 billion and %6 of foreign trade volume of Greece (TÜİK, 2018). According to the data of 2012, Turkey became the second import partner of Greece after Italy. In 2013 and 2014, Turkey became Greece's number one import partner. Table 1 and Table 2 show the main export and import countries of Greece in 2017 respectively (Karayılanoğlu, 2017).

**Table 1:** Main Export Countries of Greece in 2017

Country	Share
Italy	11.2%
Germany	7.3%
Turkey	6.6%
South Cypriot	5.9%
Bulgaria	5.2%
US	4.8%

Source: Compiled from Karayılanoğlu, 2017 & Ministry of Economy, 2018

**Table 2:** Main Import Countries of Greece in 2017

Country	Share
Germany	10,7%
Italy	8.4%
Russia	7.9%
China	5.9%
Netherlands	5.5%
France	4.5%

Source: Compiled from Karayılanoğlu, 2017 Ministry of Economy, 2018

Major export commodities of Greece in 2016 are as follows; fresh and processed fruits and vegetables, tobacco, cotton, refined petroleum products, vegetable oils, textile yarns, textile products, clothing articles and accessories, aluminum, iron and steel products and cement. Greece is a country that especially imports some 80% of the total demand because of the limited production capacity in industrial products major import commodities of Greece are food (mostly protein products), transportation equipment and electrical equipments (Karayılanoğlu, 2017). Automotive spare parts and ship spare parts are the main items of Greece import that those total amount almost reach \$2.5 biilion (www.ekonomi.gov.tr, 2018) Compared with the import and export figures, it is observed that the import export ratio has increased from 34% to 38% in 2016 (Karayılanoğlu, 2017).

Turkey's Exports Products to Greece in 2017 can be counted as follows; Iron and Steel Boiler, Machinery and equipment, tools and parts, Electrical Machinery and Equipment, Parts and Accessories, Articles made of iron or steel, Motor vehicles, parts and accessories, Unclassified clothing accessories and accessories, Furniture; Lighting, advertising lamps, prefabricated structures, Cotton, Ceramic products, Floor coverings for carpets and other textiles (Karayılanoğlu, 2017; TÜİK, 2018).

Turkey's Import Products from Greece in 2017 can be countred as follows; Mineral fuels, mineral oils and preparations, candles, Cotton, Articles made of plastic and plastic, Boilers, machinery and equipment,

tools and parts, Iron and steel, Aluminum and aluminum articles, Paper and cardboard; Paper pulp, paper and articles made of cardboard, Wood and wood products, charcoal, Organic chemical products, Electrical machinery and equipment, parts and accessories, Oilseeds and fruits, industrial plants, straw, animal feed (Karayılanoğlu, 2017; TÜİK, 2018).

In 2014, while 88 million dollars were exported from Izmir to Greece, an import of 114 million dollars was made from Greece to Izmir. In 2016, İzmir exports to Greece amounted to 103 million dollars and imports amounted to 173 million dollars (Karayılanoğlu, 2017; TÜİK, 2018).

# 3.1. Turkey and Greece Mutual Investments

Turkey and Greece has geographical ties in deep. Some academic studies investigated the mutual investments of each country. Papadopoulos (2008) declared that Greek-Turkish economic activities and future development of the bilateral economic relationships between two countries.

Greek direct investments in Turkey were being a main subject of the study on Chatzoudes et al. (2009). Empirical evidence from 17 Greek investors is provided through a questionnaire survey carried in summer 2004. Bastian (2004) also analyzed the reasons of possible trade barriers between Turkey and Greece. In short, academic researches are limitedly analyzing the trade potential of both country and they are not updated.

Turkish Chamber of Commerce prepared a country report for Greece and this report includes key statistics about the mutual investments of Turkey and Greece. In recent years, businessmen from both countries have made great strides in mutual investment and cooperation. However, the number of Greek investments and companies in Turkey is much higher. As of 30.06.2017, there are 745 companies with Greek capital in Turkey. 87 of these companies are in Izmir (Karayılanoğlu, 2017; TÜİK, 2018).

At the beginning of the recent investments in Greece, The Doğuş Group is a 50% partner in Flisvos Marina, operated by Greece's Lamda Development. Another important investment in Greece is Pak Holding's acquisition of 99.92% of the Greek cardboard company MEL (Macedonian Paper Mills) S.A. and the operation of the factory in Thessaloniki (Karayılanoğlu, 2017; TÜİK, 2018).

Another important investment that took place in 2013 is the Greek aluminum company ALUMIL, which took place in Turkey, reached an agreement with Has Metal to establish a company on aluminum processing in Turkey. Significant increases are recorded in the number of Greek companies investing in Turkey and investments made by them. Today, there are 600 Greek companies and 5 liaison offices in Turkey. The total investment amount is close to 6 billion Euros. Greek investors in Turkey are usually interested in the field of information technology (IT). They also operate in agricultural applications, packaging, plastics, pharmaceuticals, cosmetics, fishing, tourism and construction (Karayılanoğlu, 2017; TÜİK, 2018).

On the other hand, there are 20 Turkish companies and businesses operating in Greece. Among the large Turkish investors operating in Greece are T.C. Ziraat Bank, Koton Giyim, Tümel Elektronik, Murat Metal, Setur Servis Turistik A.Ş., Arkas Denizcilik (Karayılanoğlu, 2017).

# 3.2. Aegean Islands Trade Potential

There are numerous routes between Turkey and Greek Islands. These are Çeşme-Chios, Ayvalık-Mitilini (Lesvos), Kuşadası-Samos, Bodrum-Kos, Turgutreis-Kos, Marmaris-Rhodes, Bodrum-Rhodes, Fethiye-Rhodes Bodrum-Symi, Bodrum-Kalymnos, Bodrum-Leros. Mainly Çeşme-Chios route is about the subject of commodity trade but the other routes can be classified as touristics.

Therefore, the shiptypes appointed for the commodity trade between Turkey and Greek Islands are containerships and ferry boats. The flag and ownership of these ships can vary by operator of the ship. Nevertheless, the ones allocated for the touristic tours are mainly have Turkish registry in order to take advantages of incentives given by Turkish Government. For instance, Ulusoy Sea Lines who carries out regular voyages from Çeşme to Chios has four Ro-ro cargo ships and all of them have been registered in Turkish ship registry and have Turkish flag. These cargo ships have carrying capacity ranging from 19.689 Gross tones to 31.540 Gross tones (Ulusoy Çeşme Port, 2018).

The trade statistics are compiled from a number of different sources since there is not unique and reliable statistic source for Greece. Table 3 shows the number of Twenty-foot equivilant Container Transportation from Izmir to Piraeus and Thessaloniki from 2011 to 2016.

**Table 3:** Number of Twenty-foot equivilant Container Transportation from Izmir to Piraeus and Thessaloniki

Port Name	2016	2015	2014	2013	2012	2011
Piraeus	2347	2614	2947	3750	3838	2340
Thessaloniki	425	643	836	777	482	531
Total	2772	3257	3783	4527	4320	2871

Source: Compiled from the Deniz Nakliyecileri Derneği, 2018; TÜİK, 2018 and Ministry of Transport Maritime Affairs and Communication, 2018.

Table 4 shows three years (2014, 2015, 2016) average cargo discharge of Aegean Islands by cargo type (tons). These cargoes are mainly departed from the countries in European Union with regard to easiness of customs procedures. Aegean Islands do not prefer to import from Turkey directly. Instead of importing from Turkey directly, Italy and Greece have been used as a transit ways of importing (Karayılanoğlu, 2017).

**Table 4:** Three years (2014, 2015, 2016) Average Cargo Discharge of Aegean Islands by Cargo Type (tons)

Liquid Bulk	Dry Bulk	Container	Ro-ro	Other General Cargo	Total
1.240.271	570.178	0	2.141.998	131.148	4.082.135

Source: Drawn by authors based on statistics from various sources

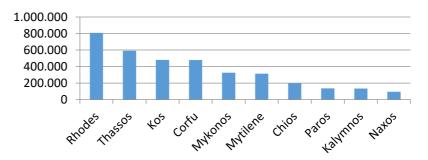
Table 5 shows the population of some Aegean Islands therefore the islands which have great trade potential.

**Table 5:** The Population of Some Aegean Islands in 2016

ISLAND	POPULATION
Rhodes	115.490
Samos	32.977
Cretan	622.913
Chios	52.674
Lesbos	97.000
Corfu	102.071
Amorgos	1.973
Astypalaia	1.334
Ios	2.024
Kalymnos	16.179
Karpathos	6.226
Kea	2.455
Cos	33.388
Kythnos	1.456
Milos	4.977
Mykonos	10.134
Naxos	18.904
Paros	13.715
Samothraki	2.859
Skyros	2.994
Thassos	13.770
Tinos	8.636

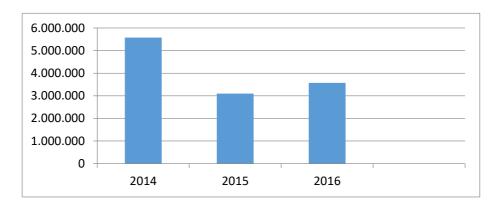
Source: Drawn by authors based on statistics from various sources

Figure 1 shows the top ten Aegean Islands in terms of cargo discharge. Since Cretan and Samos statistics are not available the figure does not include these islands' statistics.



**Figure 1:** Top Ten Aegean Islands in terms of Cargo Discharge in Tons Source: Drawn by authors based on statistics from various sources

Figure 2 shows the total cargo discharge of Greek Ports by years in tons. information of Samos and Crete and some minor islands are not included due to lack of statistics.



**Figure 2:** Total Cargo Discharge of Greek Ports by Years in Tons Source: Hellenic Statistical Authority, 2017

Table 6 shows the number of voyages, vehicles and passenger arrived and departed from Chios to Çeşme, from Çeşme to Chios. Table 7 and Table 8 shows the trade from Turkey and Aegean Region of Turkey and Greece respectively.

In 2016, 945.568 TEU have been carried to/from Greece which 416.534 TEU were export and 529.035 TEU were import. Greece was the second largest foreign trade partner of Turkey in TEU following Egypt. The transit transportation was 88.776 TEU in 2006 so the total TEU handled to/from Greece was 1.034.345 TEU (DTO, 2017).

**Table 6:** Arrived and Departed Number of Vehicles and Passengers to and from Chios

	***************************************						
Year	Number of voyages	Arrival passengers	Departing passengers	Arrival vehicles	Departing vehicles		
2013	1.484	92.859	98.405	2.236	1.928		
2014	1.456	111.858	114.813	2.241	2.411		
2015	1.391	117.767	129.194	2.287	2.277		
2016	1.222	87.143	90.197	1.863	1.767		

Source: Drawn by authors based on Ulusoy Port statistics

 Table 7: Trade between Turkey and Greece (million USD)

Year	Turkey's	Turkey's	Balance	Volume
	Export	Import		
1994	168,7	105,1	63,6	273,8
1995	209,9	200,7	9,2	410,6
1996	236,5	285	-48,5	521,5
1997	298,2	430,8	-1326	729
1998	369,2	319,7	49,5	688,9
1999	406,8	303	108,8	709,8
2000	573,8	323,6	250,2	897,4
2001	476,1	266,2	209,9	742,3
2002	573,8	323,6	250,2	897,4
2003	910,6	424,3	486,3	1.334,9
2004	1.116	592	574	1.758
2005	1.122	721	401	1.843
2006	1.600,7	1.040,9	559,8	2.641,6
2007	2.262	950	1.312	3.212
2008	2.430	1.151	1.279	3.581
2009	1.634	1.131	503	2.765
2010	1.456	1.542	-86	2.998
2011	1.553	2.568,8	-1.015	4.122
2012	1.402	3.539	-2.137	4.942
2013	1.108	3.210	-2.101	4.318
2014	1.536,7	4.043	-2.507	5.580
2015	1.400	1.860	-459	3.260
2016	1.427	1.187	240	2.614

Source: Drawn by authors based on statistics from various sources

**Table 8:** Trade between Aegean Region of Turkey and Greece (million USD)

		,		
Year	Export	Import	Balance	Volume
2005	126,3	47,5	78,7	173,7
2006	179,2	69,8	109,3	249
2007	234,3	88,8	145,5	323,2
2008	278,7	86,5	192,2	365,2
2009	187,1	60,4	126,7	247,6
2010	208,5	158,4	50,1	366,9
2011	211,3	272,1	-60,7	483,5
2012	186,2	208,9	-22.7	395,1
2013	17733	155,9	21,9	333,3
2014	155,5	141,8	13,7	297,3
2015	162,728	127,8	34,8	290,5
2016	167	187,9	-20,9	355

Source: Drawn by authors based on statistics from various sources

## 4. AIM OF THE STUDY

The aim of the study is to assess the trade potential and barriers between Turkey and Aegean Islands. As stated in the Introduction, the paper is to generate possible solutions to cope up with the trade barriers between Turkey and Aegean Islands by showing and underlying the hidden trade potential between Aegean Islands and Turkey.

## 5. METHODOLOGY

In order to reach the stated aim, 7 interviews (2 port authorities at Aegean region of Turkey, 2 chambers of commerce in Aegean region of Turkey, 2 ferry operating companies, 1 with Greek manager of trade firm which are located in Chios) were carried out with the shareholders involved in the related trade activities. The names are kept hidden due to the interviewed parties requests. Table 9 shows the details of the interviews.

**Table 9:** Interviews Carried out with Professionals

Duty/position	Date of	Way of
	Interview	Interview
Ferry Operator Public Relations	23.08.2017	E-mail and phone
Department		
Harbor Master	23.08.2017	E-mail and phone
Ferry Operator Public Relations	23.08.2017	E-mail and phone
Department		
Commercial Representative Chamber	24.08.2017	Face-to-face
of Commerce		
Commercial Representative of	24.08.2017	Phone
Chamber of Commerce		
Manager of Trade Firm in Chios	24.08.2017	Phone
Harbor Master	23.08.2017	Phone

Source: Drawn by authors based on interviews held with professionals

The above mentioned interviews indicate that cargo transportation between Turkey and Aegean Islands is not very satisfactory. Despite the high demand from the Aegean Islands, no sufficient trade interaction has been established yet as it has been assumpted from the statistics given in Table 7.

## 6. FINDINGS

The underlined subjects in the interviews can be summarized as follows:

- There is a great potential of trade between Turkey and Greece. Professionals and state authorities declared the potential trade volume can reach 10 billion USD.
- Furniture, construction materials, hotel accommodation consumables, fresh food and water are the products most requested or most needed from Turkey.
- The Aegean Islands have limited port facilities to handle the cargo transportation from Turkey. Economies of scale principles can not be applied to the transportation activities between Turkey and Islands since the demand is distributed and depends on seasonality.
  - No bonded warehouses are available in Aegean Islands.
- For the biological control of the food commodities, no labratory is available. In Rhodos there is one laboratory but no one has been employed.
- Despite the efforts of politicians, no sufficient business enterprenurship activities are created in order to accelerate the trade between Turkey and Aegean Islands. In 2016, prime ministers of both countries met in İzmir and signed an agreement for trade activities between İzmir and Theseloniki. Even this agreement, shipowners are not very willing to take part due to the high port prices and double taxation.
- No special custom regulation is adopted for short sea shipping activities.
  - High port charges for the ships calling from Turkey.
- Even selling real estates in Aegean Islands to the foreign citizensis forbidden by law.
- Just one type of food –fish- could be exported directly to the Chios from Turkey. But it is not allowed to be allocated to the other Islands (The reason of this permission is that one of the biggest fish aquaculture company in Turkey is a Greek Company).
- Due to the high transportation costs for the route Izmir-Pireus-Chios, Turkish exporters are not able to sell their product since high transportation costs repress the cost effectiveness and competitive power.
- Disputes on continental shelf and FIR (Flight Information Region) line problems restrain the business relations of the countries.

- Greece government gives state incentives for the Greek producers those selling the goods to the Aegean Islands. It directly harms the competitive power of Turkish exporters.
- Effective marketing strategies should be implemented in order to take the attention of Greek importers even they are located in Islands or not.
- Historical and cultural ties are very strong. The social interactions are needed.
- Passengers are carrying their own shopping nearby. Thats the almost all direct trade made between Islands and Turkey. Bilateral political, international and intranational conditions are not very appropriate for trade.
- Decrease in the tourism in Turkey led the tourism to the Aegean Island increase.
- The trade interactions between Turkey and Islands first started in Ayvalık-Lesbos route. Bazaar of Ayvalık was visited by the Greek from Lesbos for daily consumption shopping.
- The prejudice -be rooted in history- between Greek and Turkish citizens is not strong comparing the previous years.
- The summits have been organized in cooperation with the Izmir Chamber of Commerce and the Greek Chambers of Commerce for the aim of the development of political, economic and social relations between Turkey and Greece since 1998. In 2018 tenth of the summits is planned accompanying with the cultural event.
- The Cyprus problem is not causing a weakness in commercial relations. This problem is not reflected to the public. It is used only by media tools as a daily means of politics.

## 7. CONCLUSIONS

The trade and tourism opportunities between Turkey and the Aegean Islands in Aegean Sea have shown a dramatic increase in the last two decades. The passenger transportation has risen significantly due to mostly Turkish tourists visiting the islands; however, the bilateral trade has not made such progress although government and civil bodies have made several attempts to increase the trade. Özer et al. (2011) highlighted the importance of potential trade and cargo flow. This study aims to reexamine the current situation by investigating the cargo amount of the islands, revealing the trade statistics between the two countries, and conducting interviews with related bodies.

The cargo statistics of islands reveal that the islands are dependent on the import cargo and potential of some islands such as Rhodes, Kos, and Mytilene cannot be underestimated. Yet, the interviews suggest that the trade has not reached to a desired level in last ten years. The barriers that existed 10 years ago still exist according to interviews. This paper reveals the problems that hinder the trade towards islands. One of the most important problems seems to be economies of scale, which is required for a regular transportation and trade to be more economic. This problem can be overcome by increasing the demand of Aegean Islands towards products in Turkey. One of the most important options to increase the demand is marketing facilities.

The barriers can also be evaluated under short sea shipping perspective. The barriers that hinder the trade between Turkey and the Islands seem to be very similar to barriers of short sea shipping in the literature. The literature indicates the barriers as legislation (cabotage), infrastructure and superstructure problems, underdevelopment of small ports, and lack of collaborative culture. These are important problems that the interviewees in our study also underlined.

## 8. RECOMMENDATIONS

- Mutual transportation investments should be carried out to handle the potential trade between Turkey and Aegean Islands.
- Bonded warehouses and controlling labrotaries should be established in order to accelerate the food trade.
- The regional trade agreements should be signed between governmental bodies.
- Regulatory barriers should be omitted both by two countries.
- Watersport interactions should be established such as sailing races, surfing races and yatching clubs.
- Marketing activities and investments can be held in both countries.
- Collaborative academic studies should be prepared in both countries.
- Center of gravity methods should be used in order to assess the hub port of the Islands in order to shape the trade interactions between Turkey and Aegean Islands.

#### REFERENCES

Bastian, J. (2004). "Knowing your way in the Balkans: Greek foreign direct investment in Southeast Europe", *Southeast European and Black Sea Studies*, 4:3, 458-490.

Beškovnik, B. (2006). Importance of short sea shipping and sea motorways in the European and Slovenian transport policy. *Pomorstvo*, 20(1), 23-35.

Chatzoudes, D., Karasawoglou, A., Dimitriades, E., NikoIaidis, M. (2009). Greek Direct Investment (FDI) in Turkey: an empirical survey. *International Journal of Business Policy and Economic*. Vol.2, No. 1, 69-85.

Clark, X., Dollar, D. and Micco, A. (2004). Port efficiency, maritime transport costs, and bilateral trade. *Journal of development economics*, 75(2), 417-450.

DTO, (2017), Deniz Ticareti Dergisi Rakamlarla Denizcilik Sektörü ve İstatistikler Eki, Şubat Sayısı.

EC (European Commission) (1999). The development of short sea shipping in europe: a dynamic alternative in a sustainable transport chain. Second two-yearly Progress Report, Brussels.

Gertwagen, R. (2014). Venice's policy towards the Ionian and Aegean islands, c. 1204–1423. *International Journal of Maritime History*, 26(3), 529-548.

Karayılanoğlu, P. (2017). İzmir Ticaret Odası Yunanistan Ülke Raporu.

Medda, F. and Trujillo, L. (2010). Short-sea shipping: an analysis of its determinants. *Maritime Policy and Management*, 37(3), 285–303.

Özer, D., Nikitakos, N., Cerit, A. G., Oral, E. Z. and Stratakos, E. G. (2011). Analysis of the short sea shipping potential between Turkey and the Greek islands. *Journal of Transport and Shipping*, 3, 47-68.

Polónia, A. (2016). The sea and its impact on a maritime community: Vila do Conde, Portugal, 1500–1640. *International Journal of Maritime History*, 18(1), 199-222.

Radelet, S. and Sachs, J. (1998). Shipping costs, manufactured exports, and economic growth. In: *Annual Meeting of the American Economics Association January 3-5*, Chicago.

Sherratt, S. and Sherratt, A. (1993). The growth of Mediterranean economy in the early first millennium BC. *World Archaeology*, 24(3), 361-378.

Suárez-Alemán, A. (2016). Short sea shipping in today's Europe: A critical review of maritime transport policy. *Maritime Economics & Logistics*, 18(3), 331-351.

Venkatesh, V. G., Zhang, A., Luthra, S., Dubey, R., Subramanian, N., and Mangla, S. (2017). Barriers to coastal shipping development: An Indian perspective. *Transportation Research Part D: Transport and Environment*, 52, 362-378.

## **Internet References:**

Deniz Nakliyecileri Derneği (2017), İzmir Deniz Nakliyecileri Derneği Official Web Site, http://www.izmdeniznakliyecileridernegi.com, Access Date: 21.08.2017.

Hellenic Statistical Authority. (2017). *Statistics*. http://www.statistics.gr/en/statistics/-/publication/SMA06/-, Access Date: 12.08.2017.

Ministry of Economy (2018), *Ministry of Economy Official Web Site*, https://www.ekonomi.gov.tr/portal/faces/home/disIliskiler/ulkeler/ulkedetay/Yunanistan, Access Date: 11.05.2018.

Ministry of Transport Maritime Affairs and Communication (2018), *Official Web Site*, http://www.udhb.gov.tr/images/istatistik/2003-2016.pdf, Access Date: 10.05.2018

TÜİK (2018). *Turkish Statistical Institute Official Web Site*. http://www.tuik.gov.tr/PreIstatistikTablo.do?istab\_id=621, Access Date: 11.05.2018.

Ulusoy Çeşme Port (2018), *Ulusoy Çeşme Port Official Web Site*, http://www.ulusoycesmeport.com/profil.html, Access Date: 11.05.2018