ENLARGEMENT OF EUROPEAN UNION AND ITS TRADE EFFECTS ON THE MEDITERRANEAN PARTNER ECONOMIES

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ABSTRACT

As a melting pot of various cultures, of values, of three great religions and heritages of great civilizations the Mediterranean is now facing another big challenge. The continuing expansion of the European Union affects both Mediterranean countries and the Euro-Mediterranean Partnership. On the other hand, as the Barcelona Process approaches its tenth anniversary, the gap between EU and Mediterranean non-member countries has become wide during the 1990s. In other words, economic development of both sides has displayed diverging trends. Therefore, geographic proximity is the only factor which still brings EU and Mediterranean countries together. Today, EU is concentrating on its new neighborhood policies what they called the Wider Europe Initiative.

This paper first sketches out the experiences of the Mediterranean Partner Countries and of the European Union concerning economic relations within/and without the context of Barcelona Process. In this sense, the study briefly reviews some recent literature about this experience. Then the paper analyzes especially the trade flows between the "new" European Union and Mediterranean non-member countries, with the help of three different indexes: Trade intensity index, Revealed Comparative Advantage index and Intra-Industry Trade index. Therefore the study tries to obtain some conclusion on the economic and other benefits one expects from this cooperation.

Introduction

In the framework of the widening of the European Union (EU) in May 2004, this study has two purposes. The first purpose is to question the importance of the trade relations between the members of Euro-Mediterranean Partnership (Mediterranean Partner Countries-MPCs)

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(Mediterranean Partner Countries-MPCs) and EU with the new members (EU-10); it seemed likely that this last enlargement would force a significant shift in EU's Mediterranean policy. In this context, the trade relations between EU-10 and MPCs are also analyzed. In fact, the foreign direct investment can be another important channel to the future of MPCs. However, it is not within the scope of this paper to make an assessment of foreign investment that I think it should be analyze separately in another study. The second purpose is to conclude some clues for Turkey, the important country for both sides.

The study has been organized in four parts. After this introduction, in the second part, the paper gives some brief explanation about MPCs and EU-10 countries and the trade relations between EU and her trade partners, the MPCs and EU-10 separately. The analyzable year is 2003 because after 2004 EU trade data is primarily collected as EU-25 data. Then, the third part is to analyze the trade flows of these two regions with EU within the context of some indices such as intra-industry trade index, trade intensity index and the measure of export similarity. This part, after explaining the concept of intra-industry trade, trade intensity and export similarity, is concerned with the calculations of these indices. Then it is obtained some conclusions on the prospects for integration between the MPCs and EU-10 with the help of these calculations, then formulate some policy recommendations for Turkey. The last part summarizes the findings.

I) The General Outlook and the Trade Patterns of MPCs and EU-10

After the cold war, the EU has focused upon its competitiveness as a possible threat to its welfare society; its social-welfare arrangements have not been financially robust to shocks and these arrangements have poorly adapted to changes in socio-economic and technological conditions and preferences. Therefore, to manage the competitiveness and social-welfare society together have become difficult for EU. This motive is one of the main factors that explain why EU has developed such a specific policy towards the Mediterranean and Central and Eastern European Countries (CEECs).

At the same time, that means, EU has a priority to continue a very close cooperation with these regions in order to establish a political and economic stability of the region.[1] As a matter of fact, the Charter for Peace and Stability, the major product Barcelona Conference, was the main objective of Barcelona process.

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[1] Doc.2000/458/CFSP, OJ L 183, 22.07.2000, p. 5.

Despite of the fragmented/heterogeneous view of the Mediterranean region, there are some similarities between the Mediterranean Partner Countries. First of all, except Israel, they have low income per capita ranging between $1000 and $4000. They have weak growth performances so their growth rates have been insufficient to raise living standards. Their unemployment rates are quite high such as 15-20%. For the solutions of their economic problems, all of them have begun to follow the same policies make them to integrate with the world market. However, these countries are still on the way to complete their transition to market economy.

Contrary to the above picture, EU-10 shows another picture. EU-10 countries present wide disparities among themselves in terms of their economic sizes, strength and socio-economic development (Table 1).

Table1. Comparison of Basic Economic Indicators, 2005

	Population (million)	Income Per Capita,$	Unemployment Rate,%
Cyprus	0,8	18,430	4,9
Czech Rep.	10,2	11,220	8,4
Estonia	1,3	9,060	9,4
Hungary	10,1	10,070	5,8
Latvia	2,3	6,770	11,0
Lithuania	3,4	7,210	9,8
Malta	0,4	13,610	7,4
Poland	38,2	7,160	18,9
Slovakia	5,4	7,950	18,2
Slovenia	2,0	17,440	6,0
Turkey	72,1	4,750	10,3
Algeria	32,9	2,730	30,0
Egypt	74,0	1,260	7,6
Israel	6,9	18,580	8,8
Jordan	5,5	2,460	15,0
Lebanon	3,6	6,320	8,5
Morocco	30,2	1,740	21,7
Palestinian Terr.	3	n.a.	n.a.
Syria	19,0	1,380	20,0
Tunisia	10,0	2,880	15,6

n.a.: not available

Source:http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,
,contentMDK:20535285~menuPK:1192694~pagePK:64133150~piPK:6413317
5~theSitePK:239419,00.html

Three of them (Czech Republic, Hungary and Poland) together account for more than two thirds of the region's (EU-10 countries) GDP and nearly 75 per cent of its export. When we look at the latest export figure (2005), we notice that these shares remain same (Table 3). These countries have relatively high levels of industrialization, infrastructure, and human capital due to their well education system. Finally they have become the second most important trade partner of EU in terms of 2003 trade figures (Table 2).

Table 2 EU Trade with Regions and Selected Countries, 2003 (billion $)

	EU Exports	EU Imports
World	2900,7	2919,6
EU-15 (Intra-EU)	1795,4	1800,6
USA	247,1	169,5
Switzerland	77,1	107,8
China	44,9	64,4
Japan	44,4	75,2
EU-10	147,7	131,7
Turkey	31,7	24,5

Source: http://www.wto.org/english/res_e/statis_e/its2004_e/section3_e/iii37.xls

Table 3. Trade Figures of EU-10 and MPCs, 2005 (billion $)

EU-10	Exports	Imports	MPCs	Exports	Imports
Cyprus	1,459	6,305	Algeria	46,001	20,357
Czech Rep.	78,246	76,707	Egypt	10,654	19,819
Estonia	7,667	10,033	Israel	42,659	47,142
Hungary	62,109	66,045	Jordan	4,302	10,506
Latvia	5,161	8,696	Lebanon	2,337	9,633
Lithuania	11,813	15,453	Morocco	10,641	20,332
Malta	2,276	3,597	Syria	5,760	8,106
Poland	89,288	100,951	Tunisia	10,494	13,177
Slovakia	31,956	35,337	Total MPCs	132,848	149,072
Slovenia	18,633	20,090	Turkey	73,414	116,553
Total EU-10	308,608	343,214			

Source: : http://www.wto.org/english/res_e/statis_e/its2006_e/its06_byregion_e.pdf

In this part, trade relations of MPCs and EU-10 with European Union will be presented. Table 4 and 5 show the export and import figures of MPCs and EU-10 countries respectively and their share in their own and EU's total trade.

Table 4 MPCs Trade Relation with EU, 2003 (bn Euro)

	Exports to EU		Imports from EU		Exports to MPCs	Imports from MPCs
	Value	% of total	Value	% of total	% of extra-EU exports	% of extra-EU imports
Algeria	11.3	41	7.8	52	0,62	0,89
Egypt	3.4	40	5.9	41	0,48	0,27
Israel	7.5	22	11.4	32	0,91	0,59
Jordan	0.186	03	1.8	54	0,15	0,01
Lebanon	0.182	10	3.3	41	0,26	0,01
Morocco	6.3	63	8.1	54	0,64	0,50
Syria	2.9	34	2.2	32	0,17	0,23
Tunisia	6.2	32	7.2	43	0,57	0,48
Total	37.8	33	47.7	41	2,98	3,8

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Table 5 EU-10 Trade Relation with EU, 2003 (bn Euro)

	Exports to EU		Imports from EU		Exports to MPCs	Imports from MPCs
	Value	% of total	Value	% of total	% of extra-EU exports	% of extra-EU imports
Cyprus	0.9	87	2.9	82	0,23	0,07
Czech Rep.	29.8	69	30.4	67	0,44	2,35
Estonia	3.1	77	3.6	62	0,28	0,24
Hungary	26.0	69	26.2	62	2,09	2,05
Latvia	2.9	48	4.3	50	0,34	0,23
Lithuania	1.9	77	2.7	58	0,22	0,15
Malta	0.9	46	2.5	89	0,20	0,07
Poland	31.5	66	38.4	63	3,07	2,50
Slovakia	12.3	64	10.0	50	0,80	0,97
Slovenia	7.2	64	9.0	74	0,72	0,57
Total	116.7	66	130.1	63	10,42	9,23

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Table 4 and 5 show us some similarities and differences between these two regions' trade relations with EU. First of all, it is obvious that both partners' relations with EU are asymmetric; with respect to countries' trade figures with EU, the share of EU in their total trade is higher than their shares in EU's total trade. In other words, both regions are heavily dependent on trade with EU. In contrast, EU is less dependent on trade with its southern and eastern neighbors. For example, in 2003, the shares of EU in MPCs' exports and imports were 33 per cent and 41 per cent, respectively. In a similar way, the same figures were 66 per cent and 63 per cent for EU-10 countries. On the other hand, with respect to extra-EU trade, the share of EU-10 in the total exports of the EU was only around 10 per cent whereas the share of the MPCs was around 3 per cent. The latter figures also represent the differences between the MPCs and EU-10. When both partners' trade flows are considered in value terms, the EU-10 countries emerge as the EU's second biggest trade partner. Among them, Poland, Hungary and Czech Republic are ranked among the EU top ten trade partners since 1997. Therefore, it seems within the EU-25 or in Barcelona process, the center-periphery approach is still valid that means, EU exports capital goods and imports agricultural, raw material, primary energy goods.

Finally, intra-regional trade in both regions is at very low level, especially when compared with other regions. Despite the EU's attention to finding a way of encouraging trade among MPCs, intra-regional trade still accounts for no more than 5% of the total. In contrast to this figure, intra-regional trade for EU-15 is around 60 per cent. It is expected with the entrance of the new members, the EU's intra-regional trade share will increase 66.60 per cent. As a matter of fact, the 2004 intra-industry trade figure is very close to this such as 65.7 per cent.

II) Assessing Some Magnitudes: Differences and Similarities between MPCs and EU-10

A) Significance and measures of Intra-Industry Trade in MPCs and EU-10

Trade in different products, or inter-industry trade, dominated international trade between countries prior to the Second World War. However, the direction of post-war trade between industrialized countries, has increasingly

taken the form of intra-industry trade (IIT) involving the exchange of different varieties of the same product.[2]

In recent years, many studies have found that IIT has indeed growing rapidly and they have shown that the more advanced and developed an economy, the more specialized its trade structure will be. For example on reasonable levels of aggregation, it is possible that at least half of world trade consists of IIT, and this share is even higher in trade between OECD-countries.[3] Thus, industrialized countries tend to have greater levels of IIT than developing countries. However it doesn't mean that developing countries should not be included in such studies and that IIT is limited only in the developed-industrialized world.[4] As a matter of fact, successful exporters of developing world exhibit a speedy and substantial increase in the levels of IIT.

The trade literature on intra-industry trade presents several alternative indices that can be used to measure this type of trade. Although there is no exact definition as to which is best, the Grubel–Lloyd (1975) index is the one that has been most widely used in empirical studies. This relies on total imports and exports data within a particular product category. The Grubel-Lloyd (G-L) ITT indexes in trade of industry i with country j is computed:

$$IIT_{GL} = [\ (X_{ij} + M_{ij}) - \mid X_{ij}\text{-}M_{ij} \mid \ ] / (X_{ij} + M_{ij})$$

Where X_{ij} and M_{ij} are home country's exports of industry *i* goods to country j, and imports of industry *i* goods from country j, respectively. To obtain the average level of IIT for a country, an index of IIT of the total trade in all products with country j can be obtained as a weighted average of the IITijs and can be written as:

$$IIT_j = [\ 1\text{-} (\Sigma \mid X_{ij} - M_{ij} \mid \ ) / \Sigma \ (X_{ij} + M_{ij})$$

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[2] The reasons for this expansion in IIT are the convergence of main economic indicators (such as per capita incomes) among industrialized countries, increased importance of scale economies and imperfect market structure.

[3] D. Greenaway and C. R. Milner, **The Economics of Intra-Industry Trade,** Oxford, Basil Blackwell, 1986.

[4] O. Havrylyshyn and E. Civan, "Intra-Industry Trade Among Developing Countries", **Journal of Development Economics,** Vol. 18, No. 2, 1985. pp. 253-271.

According to this formulation, if there is no intra-industry trade, the IIT index will be zero otherwise it will take a value of 1.[5]

Table 6 provides us the IIT values for MPCs and EU-10 countries with EU in 2003. Generally, in the trade literature, the degree of IIT is taken as a measure of the diversity, degree of specialization and degree of technical sophistication of its industrial sector. Therefore, if it is considered that the level of IIT as an indicative of the level of industrial advancement, table 6 clearly shows us that these countries do not have highly advanced industrial bases.

Table 6 Intra-Industry Indexes for MPCs and EU-10 Countries' Trade with EU, 2003

CY	CZ	EE	HU	LT	LV	MT	PO	SL	SK
0.41	0.81	0.61	0.71	0.34	0.23	0.41	0.66	0.74	0.65
DZ	EG	IL	JO	LB	PS	MA	SY	TN	TR
0.05	0.22	0.64	0.15	0.08	n.a.	0.30	0.06	0.40	.0.50

CY: Cyprus, CZ: Czech Rep., EE: Estonia, HU: Hungary, LT: Latvia, LV: Lithuania, MT: Malta, PO: Poland, SL: Slovenia, SK: Slovakia, DZ: Algeria, EG: Egypt, IL: Israel, JO: Jordan, LB: Lebanon, PS: Palestinian Authority, MA: Morocco, SY: Syria, TN: Tunisia, TR: Turkey
Source: Calculated from Eurostat data

Using Eurostat 2-digit data[6] for trade of the EU with MPCs and EU-10 countries, it is found that the share of IIT in whole MPCs' trade is between 5 % and 65 % in 2003, calculated with unadjusted G-L index. Among them three countries are exceptional; Israel, Tunisia and Turkey. Not surprisingly only Israel and Turkey and somehow Tunisia show a significant high level of IIT with the EU. Israel with an IIT index of 64 per cent for 2003 and Turkey has 50 per cent.

On the other hand, EU-10 countries' trade structures are characterized by intra-industry type for example the Czech Republic stands out in this regard. From Table 6, it is observed that The Czech intra-industry trade index stood at 0.81 in 2003, but this figure was 0.24 in 1989 and 0.47 in 1994.[7] Levels of intra-

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[5] The value of IIT indexes depends in part on the level of aggregation of the data used. The literature has identified this categorical aggregation as one of the important problems of the index; the less aggregated, the higher the index. The other problem is related with the aggregate trade imbalances problem. In this study both problems can be valid.

[6] At 2-digit level of the Combined Nomenclatıre is a standard system of trade classification used by the European Union.

[7] Bernard Hoekman and Simeon Djankov, "Intra-Industry Trade, FDI and the Reorientation of Eastern European Exports", World Bank Working Paper: 1652, 1996.
http://monarch.worldbank.org/pub/decweb/WorkingPapers/WPS1600series/wps165

industry trade are also high for almost all EU-10 countries, but especially for Slovenia (0.74), Hungary (0.71), Slovakia (0.65) and Poland (0.66).

A close consideration of the Table 6 reveals that there is a huge gap between the IIT level of EU-10 and MPCs. Of course, there are various dimensions that may underlie such a high level intra-industry exchange for EU-10. But this difference is partly explained by the special outward processing incentives which have been given by EU, in the early stages of the EU-10 countries' transition to market economy, to establish linkages with European counterparts. So, outward processing incentives and rules of origin were likely to stimulate sources of inputs from the EU and thus intra-industry trade.

When we look at the total trade relations of EU-10 countries with MPCs during the period of 1999 and 2003, both the average growth rate and trade volumes of this relation is not very high; 25 per cent for export growth and 18 per cent for import growth (Table 7). As it is seen from the table, the trade figures of this relation are not higher than 5 billion Euros.

Table 7 EU-10 Trade with MPCs, 1999-2003 (billion Euro)

	1999	2000	2001	2002	2003
EXPORT	1.1	1.7	1.8	2.2	2.2
IMPORT	1.3	1.8	2.2	2.6	2.9

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

On the other hand, the tables from 8 to 17 provides us total trade figures of these two partners with an indication of IIT figures for EU-10 countries with MPCs in 2003 separately. The first and second rows of each table represent total exports and imports of each EU-10 countries to each MPC. The third row shows intra-industry trade with each MPC. Of course it should be noted that instead of two-digit data when more digit-data are taken into consideration, the results will decline.

Table 8 Cyprus: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	2.3	7.9	5.2	10.9	7.4	0.8	2.4	3.2	0.003
Import	0.9	107.6	55.4	1.3	14.7	5.2	105.0	1.9	0.9
IIT	0.002	0.02	0.10	0.09	**0.28**	0.004	0.01	0.01	0.003

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Table 8 shows the trade figures and IIT indices of Cyprus with each MPCs. MPCs have a share less than 1 per cent of total exports of Cyprus and more than 6 per cent of its total imports. As it is seen easily, there is an unbalanced trade between the trade partners such as in trade relations with Syria and Egypt , and except Lebanon, Cyprus has low IIT relation with whole MPCs even the country has an advantage of geographical location.

Table 9.Czech Rep: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	59.7	32.2	55.4	12.1	28.1	8.5	25.8	18.4	290.2
Import	0.2	21.8	62.4	0.2	0.2	20.7	125.9	19.6	291.6
IIT	0.002	0.11	**0.33**	0.03	0.006	0.10	0.004	0.18	**0.37**

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Table 9 shows the exports and imports figures of Czech Republic to each MPCs. MPCs have similar shares in total exports and total imports of Czech Republic which are little more than 1 per cent. It should be noted that the main trade partners of Czech Republic in MPCs are Turkey, Syria and Israel. As a matter of fact, Turkey and Israel have, as expected, the highest levels of IIT for trade with MPCs; for example, 37 per cent of trade in similar products is generated between Turkey and Czech Republic and 33 per cent for trade with Israel.

Table 10 Estonia: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	0.2	12.4	2.6	0.07	0.06	1.0	-	0.05	10.7
Import	-	0.9	6.8	0.02	0.07	2.1	0.1	1.5	30.6
IIT	0	0.002	0.05	0	0	0.006	0	0.07	0.02

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Table 10 shows that Estonia has similar weak trade relations with the region; MPCs have similar shares in total exports and total imports of the country which are around 0.6 per cent. Within this weak trade relation, trade structures of Estonia and MPCs are absolutely inter-industry.

Table 11 Hungary: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	21.9	35.7	97.1	16.5	17.1	14.8	20.6	23.0	257.4
Import	0.002	6.6	26.8	2.1	62.5	6.6	0.9	4.0	139.1
IIT	0.0001	0.07	**0.24**	0.001	0.007	0.01	0.002	0.006	**0.12**

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Table 11 shows Hungary's trade relation with each of the MPCs. Again, Turkey and Israel are the most important two countries in Hungary's total trade and IIT with MPCs, which have an IIT index of 12 per cent and 24 per cent respectively.

Table 12 Latvia: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	8.1	11.2	2.5	0.2	0.18	2.3	0.11	0.18	0.80
Import	-	1.0	9.8	0.0001	0.001	0.5	0.0003	0.7	30.8
IIT	0	0.0002	0.10	0	0.005	0	0	0	0

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

With Estonia, Latvia has the lowest IIT figures which represent inter-industry trade structure. Table 12 shows this picture. For example, among EU-10 countries, Latvia is the only country which has an absolute inter-industry trade structure for the trade with Turkey. Other EU-10 countries have low or high IIT relation for trade with Turkey.

Table 13 Lithuania: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	0.3	0.4	4.0	0.04	0.3	0.2	0.1	0.1	107.8
Import	1.5	1.1	10.2	0.5	0.05	8.0	0.1	0.6	76.1
IIT	0	0.007	**0.24**	0.02	0.04	0.001	0	0.02	0.09

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Table 13 shows the trade figures of Lithuania with each of the MPCs. Among MPCs, Turkey is the biggest trade partner of Lithuania, and again Israel has the highest IIT share relative to other MPCs, such as 24 per cent.

Table 14.Malta: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	0.8	3.3	7.0	1.3	1.1	1.8	0.07	5.7	3.4
Import	0.008	3.1	4.7	0.1	0.3	4.2	0.1	1.6	39.3
IIT	0	**0.12**	0.06	0.005	0.05	0.07	0	**0.15**	**0.10**

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

On Table 14, Malta shows the similar IIT character except its trade relation with Tunisia. As it is observed from the table, Tunisia has the highest IIT level for trade with Malta. Since they have a geographic proximity,[8] it appears that Malta and Tunisia exhibit relatively larger amounts of intra-industry trade.

Table 15 Poland: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	76.6	61.8	43.7	9.0	5.1	35.3	12.3	6.0	316.1
Import	6.2	9.7	104.1	12.1	0.5	50.1	0.6	56.9	774.1
IIT	0.11	0.08	**0.19**	0.08	0.05	**0.44**	0.02	0.03	**0.24**

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Poland is one of the most important and powerful countries among EU-10 countries in terms of almost all economic indicators except its high unemployment rate. MPCs have a share more than 1 per cent in total exports of Poland and nearly 2 per cent in its total imports. Again, Turkey is the biggest trade part-

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[8] Geographic proximity appears as a very important determinant of intra-industry trade. In my opinion, Malta is an appropriate example for this determination. However, since Cyprus has some other political problems, it is difficult to observe such a reason.

ner of Poland among the MPCs. However, Morocco has the highest share of IIT level for trade with Poland; 44 per cent of trade in similar products is generated between Morocco and Poland. Other two countries, Turkey and Israel, have also relatively higher IIT level.

Table 16 Slovakia: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	0.01	2.6	15.8	0.5	0.03	8.3	0.2	11.4	98.0
Import	0.1	1.6	13.9	0.6	4.5	2.5	1.4	10.2	63.9
IIT	0	0.12	**0.73**	0.16	0.002	**0.39**	0.01	**0.92**	**0.68**

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORT
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Slovakia is the only country which has the highest share of IIT for trade with MPCs. MPCs' shares in total exports and total imports of Slovakia are quite low; 0.6 per cent and 0.5 per cent respectively. However, as it is observed from Table 16, Slovakia has the highest IIT relation for trade with MPCs; for example, 39 per cent of trade with Morocco, 68 per cent of trade with Turkey, 73 per cent of trade with Israel and almost completely intra-industry trade character for trade with Tunisia.

Table 17 Slovenia: Total Trade and IIT with MPCs, 2003 (million Euro)

	DZ	EG	IL	JO	LB	MA	SY	TN	TR
Export	9.5	31.0	17.1	2.2	1.7	1.4	8.3	2.6	71.2
Import	8.5	5.4	32.6	0.3	0.5	4.4	0.7	16.5	129.0
IIT	0	0.05	**0.17**	**0.21**	0.01	0.03	0.04	0.03	**0.40**

Source: Calculated from
http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORT
AL

Finally, Slovenia shows the similar picture of IIT with most of the other EU-10 countries; Turkey is the biggest trade partner for Slovenia and with Jordan and Israel, they have relatively highest IIT level. As it is observed from Table 17, these three countries have 40 per cent, 21 per cent and 17 per cent figures for IIT level, respectively.

B)   Trade Intensity

EU effect on trade can be seen from the direction of change in trade intensity between MPCs-EU and new-members-EU with the help of Table 6. In other words, we see which countries that are trading the most with EU, with the help of trade intensity index. Relative export intensity and Relative import intensity can be expressed as follows:

$$\text{Relative Export Intensity} = (Xij / Xi) / (Mj / W)$$

and

$$\text{Relative Export Intensity} = (Xij / Xi) / (Mj / W)$$

Where, Xij and Mij are exports from country and imports from country j, respectively. Xj and Mj are total exports and imports of country j and finally W are world exports and world imports. A greater/minor index reflects flows of a greater/lesser extent than justified by the countries' participation in world trade.

Intensity indicators clearly showed the same conclusion with IIT. (Table 18) That means, trade preferences of EU-10 countries are clearly concentrated more on the EU-15 than those of MPCs. For example, with minor exceptions, all trade intensity figures show us that MPCs trade less intensively than EU-10 countries. Only Morocco is the country that trade more intensively with the EU, both from the export and import manner. So, from the perspective of EU's widening and enlargement process, these figures also support the argument that the intensity of the economic relations between MPCs-EU and new members-EU is not uniform. Despite the historical meaning of Mediterranean region and strategic importance of this region, which is given by EU, the EU has been more concerned with EU-10 countries than MPCs.

Table 18.Trade Intensities of MPCs and EU-10 with EU, 2003

Countries	Export Intensity	Import Intensity
Cyprus	11,56	11,07
Czech Rep.	9,17	9,04
Estonia	10,27	8,40
Hungary	9,18	8,36
Latvia	6,44	6,77
Lithuania	10,30	7,81
Malta	6,20	11,97
Poland	8,80	8,55
Slovakia	8,49	6,79
Slovenia	8,51	9,91
Algeria	5,55	6,95
Egypt	5,25	5,40
Israel	2,95	4,20
Jordan	0,44	7,21
Lebanon	1,42	5,46
Morocco	8,41	7,33
Syria	4,51	4,29
Tunisia	4,20	5,79
Turkey	5,56	5,18

Source: Calculated from EUROSTAT data

C) Export Similarity and Some Lessons for Turkey

The index of export similarity (ES) measures the similarity of the exports of any two countries (or country groups) to a third market. In this study, the Dobrinsky index[9] of similarity of export patterns towards the EU have been calculated on Table 19 for Turkey.

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[9] ESexp = $\Sigma(Sij - Skj)^2 / (\Sigma S^2ij + \Sigma S^2kj)$, where Sij is the share in total exports of sector j in country I and Skj is similarly defined for country k.

Table 19. Comparison of the Export Similarities of Turkey with MPCs and EU-10 Countries

Cyprus	0,62	Poland	0,36	Algeria	0,98
Czech Rep.	0,38	Slovakia	0,43	Egypt	0,80
Estonia	0,55	Slovenia	0,36	Israel	0,99
Hungary	0,49			Jordan	0,74
Lithuania	0,48			Lebanon	0,66
Latvia	0,85			Morocco	0,31
Malta	0,47			Syria	0,98
				Tunisia	0,33

Source: Calculated from EUROSTAT data

As a candidate country, Turkey has received a kind of timetable for accession at December 17, 2004. There are several speculations over the future accession of Turkey as a Muslim country with its nearly 70 million population. On the other hand, from an economic standpoint, customs union agreement between EU and Turkey has a unique character, because contrary to other EU's enlargement process, Turkey has signed such an agreement before its membership. So, almost all barriers to trade between EU and Turkey have been eliminated to a large extent with the formation of the customs union and Turkey has adopted the EU's common customs tariffs on imports of industrial goods from third countries. This is the latest situation of Turkey in front of EU.

As it is clearly observed from this study, in terms of both socio-economic indicators and some analyses, Turkey has a special stand being somewhere in between MPCs and EU's new 10 members; the Turkish circumstances are different. From every measure that we have used in this study, show the same position for Turkey.

From Table 19, it appears that the exports of Turkey and MPCs towards EU are more similar than the exports of Turkey and EU-10 countries. The ES coefficients show that the degree of export similarity between Turkey and EU-10 countries is low. This means that by a possible accession of Turkey into the EU, Turkish exporters does not compete with exporters of EU-10. As a matter of fact, according to Yilmaz-Ergun study[10], EU-10 countries have similar trade structure with EU-15 members. For example, as the figures in Table 18 indicate, Czech

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[10] Bahri Yilmaz and S. Jurgen Ergun, "The Foreign Trade Pattern and Foreign Trade Specialization of Candidates of the European Union", Ezoneplus Working Paper No.19, 2003.

Republic, Hungary, Poland and Slovenia have different export pattern than Turkey.

On the other hand, according to trade intensity, Turkey is exactly between these two regions (see Table 18). Finally according to our third measure, intra-industry trade, only Israel and Turkey and somehow Tunisia show a significant high level of IIT with the EU; Turkey with a IIT index of 50 per cent for 2003 which is lower than some of EU-10 countries but much higher than most of the MPCs.

After all these measures and indicators, it is difficult to say something for the 'European' future of Turkey. Why? Because, in some cases, Turkey seems as a developed country in terms of its production capacity, urbanization ratio and/or its new reform program to adopt both the *acquis communautaire* of EU and stability program of IMF, but in some cases, Turkey seems as a typical developing country with its social structure and technological shortages in specific and important sectors.

Conclusion

In this study the empirical analysis made on the intra-industry trade, export similarity, and trade intensity has tried to explain trade pattern of two important partners of European Union, The Mediterranean Partner Countries and EU's 10 new member countries.

The results show that MPCs have quite a long way to catch up with EU. Moreover, these countries have lost part of its share in EU exports. The EU-10 countries' share in their exports with EU, 66 % in 2003, but the same figure is 33 % for MPCs. So that means Mediterranean Partner Countries have to compete with these new members in order to receive a little share. Meanwhile, after the new members' participation, intra-EU trade will increase to 66.60 per cent and the low level of intra-MPCs trade may cause serious economic and political problems in the region. In other words, this loose relationship among the MPCs does raise questions about its future relation with EU.

On the other hand, the study finds that the level of intra-industry trade between the EU and MPCs and EU-15 and the new members of EU falls into two categories. EU-15 and the new members show a rather high level of intra-industry trade. The observed level of intra-industry trade is comparable to that which normally occurs between industrialized countries. For example, 61 per

cent of trade in similar products is generated between Estonia and EU, 65 per cent for trade between Slovakia and EU, 74 per cent for trade between Slovenia and EU and finally 81 per cent for trade between Czech Republic and EU. In contrast, Mediterranean Partner Countries analyzed present low levels of intra-industry trade with the European Union, which show these countries' trade and industrial structure is bound to face an adjustment problem in the course of further EU policy such as Euro-Mediterranean Free Trade Area by 2010. For example, except Turkey, the highest IIT level belongs to Tunisia; the country has also established strong intra-industry trade relation with EU-10 countries such as Slovakia, Czech Republic and Malta.

On the other hand, as it was examined, the intra-industry trade has become a significant indicator to show EU-10 countries' comparative advantage over MPCs. Given their skilled human capital, proper infrastructure and geographical proximity, EU-10 countries may easily penetrate into the MPCs' market. But we cannot make the same assessment for MPCs into the EU-10 market.

Similarly, when we look at the trade structure between EU-10 countries and MPCs, it is obvious that there is an absolute inter-industry trade structure in general. However, intra-industry trade structure can exist in some of the trade relations such as between Slovakia and MPCs and/or between Poland and the cited region.

At the final stage, the relationship between the MPCs and EU has characterized as a complex of security rather than economic priority.

References

http://www.eia.doe.gov/emeu/kabs/

http://www.wto.org/english/res_e/statis_e/its2004_e/section3_e/iii37.xls

http://epp.eurostat.cec.eu.int/portal/page?pageid=1090,1137397&_dad=portal&_schema=PORTAL

Gonel, D. F., "How Important is Intra-Industry Trade Between Turkey and Its Trading Partners?", **Russian and East European Finance and Trade,** Vol. 37, No. 4, 2001.

Greenaway, D. and R.C. Hine, "Intra-Industry Specialization, Trade Expansion and Adjustment in the European Economic Space", **Journal of Common Market Studies,** Vol. 24, No. 6, 1991.

Greenaway, D. and C. R. Milner, **The Economics of Intra-Industry Trade,** Oxford, Basil Blackwell, 1986.

Grubel, H. and P. J. Lloyd, **Intra-Industry Trade. The Theory and Measurement of International Trade in Differentiated Products,** London, Macmillan, 1975.

Havrylyshyn, O. and E. Civan, "Intra-Industry Trade Among Developing Countries", **Journal of Development Economics,** Vol. 18, No. 2, 1985.

Hoekman, B. and S. Djankov, "Intra-Industry Trade, FDI and the Reorientation of Eastern European exports", World Bank Working Paper: 1652, 1996 http://monarch.worldbank.org/pub/decweb/WorkingPapers/WPS1600series/wps 165

Salvatore, D., **International Economics,** New York, John Wiley & Sons, 7th edition, 2001.

Yilmaz, B. and S. Jurgen Ergun, "The Foreign Trade Pattern and Foreign Trade Specialization of Candidates of the European Union", Ezoneplus Working Paper No.19, 2003.

EU Official Journal, Doc.2000/458/CFSP, OJ L 183, 22.07.2000.