The Political Economy of Governance in the Euro-Mediterranean
Partnership

International Competitiveness and Foreign Trade Specialisation: The Mediterranean Neighbouring Countries and the EU15

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1. Abstract

The main purpose of this research is to examine the international foreign trade pattern and the structure of specialization in foreign trade of the Mediterranean countries included in the Barcelona Euro-Mediterranean Partnership Project (MPCs), which was also signed by the Southern and Eastern Mediterranean countries. In other words, this paper aims to focus on the international competitiveness of the Southern and Eastern Mediterranean partner countries Morocco, Tunis, Egypt, Israel, Syria, Jordan, Algeria; the two member countries, Cyprus (Greek part of Cyprus) and Malta; and the candidate country Turkey to compare the structure of specialization in foreign trade with each other and the EU15 by focusing on the years from 1996 to 2003. Finally, we will draw some lessons and we make fundamental policy recommendations on how the proposed Euro-Free-Trade Zone, which is one of the main pillars of the Barcelona Process, can be realized by 2010.

The empirical results illustrate that except Israel all MPCs countries show the main economic features of developing countries. This means that most non- member countries in consideration have specialised and seem to own comparative advantages in _Non-fuel primary commodities_ (see CEP values: Algeria, Turkey, Syria, Jordan Morocco and Egypt). All countries in consideration except Israel have a considerably large export share devoted to Labour-intensive manufactures. Tunisia, Turkey and Morocco are in a very strong position in the export of labour intensive commodities. On the other hand, Turkey seems unable to catch up with the European Union countries in a short term period, which can be justified with the upward trend. The empirical study covering the period from 1991 to 1996, which is not included in this paper, shows that Turkey improved its trade diversification greatly from the beginning of the 1990s to the beginning of the 2000s. A great acceleration can be seen especially after 1996 which points to the fact that the Customs Union Agreement has had a positive effect on Turkey's trade development.

2. Objectives

On November 27 and 28, 2005 the 10th Anniversary of the Euro-Mediterranean Partnership (EMP) was to be celebrated with a summit of heads of state and government in Barcelona. The meeting aimed to demonstrate the EU's close interests in and solidarity with its larger neighbourhood. This meeting also offered the opportunity to draw some lessons from the implementation and experiences of the Barcelona Declaration adopted at the Euro-Mediterranean Conference 27 and 28 November 1995, as well as to set new priorities and clear objectives for the future of the Partnership between Europe and mainly Arab Mediterranean partners.

During the last summit meeting, the Europeans and their Southern Mediterranean neighbours agreed on the common goals of preserving the regional long-term partnership approach of the EMP and deepening it in accordance with their mutual interests. Furthermore, they came to the conclusion that more effort should be given to achieve the ambitious aims set in the 1995 Barcelona Declaration, of creating a "zone of peace, stability, and shared prosperity" around the Mediterranean in addition to establishing the Euro-Mediterranean free trade area, targeted for 2010".

"The Barcelona Declaration" was based on four main pillars: (a) political and security partnership; (b) economic and financial partnership; (c) social, cultural and human affairs partnership; (d) and the newly added dimension migration, social integration, justice, and security".

As far as Economic and Social Partnership is concerned, the declaration is focused on the following long-term objectives:
1. Acceleration of the pace of sustainable socio-economic development;
2. Improvement of the living conditions of their populations, increase in employment levels and reduction in the development gap within the Euro-Mediterranean region;
3. Encouragement of regional cooperation and integration.

In order to achieve these objectives, the participating countries agreed to establish an economic and financial partnership, which is based on:

1. The progressive establishment of a free trade area;

2. The implementation of appropriate economic cooperation and concerted action in the relevant areas;

3. A substantial increase in the European Union's financial assistance to its partners.

One of the essential aims of the Barcelona Declaration is the establishment of a free trade area, which will be founded through the new Euro-Mediterranean Agreements and free-trade agreements between partners of the European Union. 2010 was set by participant countries as the target date for the gradual establishment of the free trade zone, which will aim at achieving:

1. Progressive elimination of tariff and non-tariff barriers to trade in manufactured goods in accordance with timetables to be negotiated between the partner economies;

2. Taking as a starting point traditional trade flows, as far as the various agricultural policies allow and with due respect to the results achieved within the GATT negotiations, trade in agricultural products will be progressively liberalised through reciprocal preferential access among the parties;

3. Trade in services including right of establishment will be progressively liberalised having due regard to the GATS agreement.

4. The participants decide to facilitate the progressive establishment of this free trade area through the adaptation of suitable measures as regard rules of origin, certification, protection of intellectual and industrial property rights and competition;

5. The pursuit and the development of policies based on the principles of market economy and integration of their economies taking into account their respective needs and levels of development.

The main purpose of this research is to examine the international foreign trade pattern and the structure of specialization in foreign trade of the Mediterranean countries included in the Barcelona Euro-Mediterranean Partnership Project (MPCs), which was also signed by the Southern and Eastern Mediterranean countries. In other words, this paper aims to focus on the international competitiveness of the Southern and Eastern Mediterranean partner countries Morocco, Tunis, Egypt, Israel, Syria, Jordan, Algeria; the two member countries,

Cyprus (Greek part of Cyprus) and Malta; and the candidate country Turkey to compare the structure of specialization in foreign trade with each other and the EU15 by focusing on the years from 1996 to 2003. Finally, we will draw some lessons and we make fundamental policy recommendations on how the proposed Euro-Free-Trade Zone, which is one of the main pillars of the Barcelona Process, can be realized by 2010.

The first section describes the methodology that is used to assess the competitiveness indices of these nine Mediterranean countries and the EU15. The Second Section focuses on interpretation of the empirical results. This empirical analysis sheds light on the structural differences in trade sectors among the countries in question and the extent to which such differences have increased or decreased between the EU15. The final section draws some basic conclusions from these empirical results and considers the future position of the MPCs within the enlarged EU.

The following figures give an overall picture of the world export and import performances of the countries in question between 1996 and 2003.

Figure 1: Development of Total Export Volumes
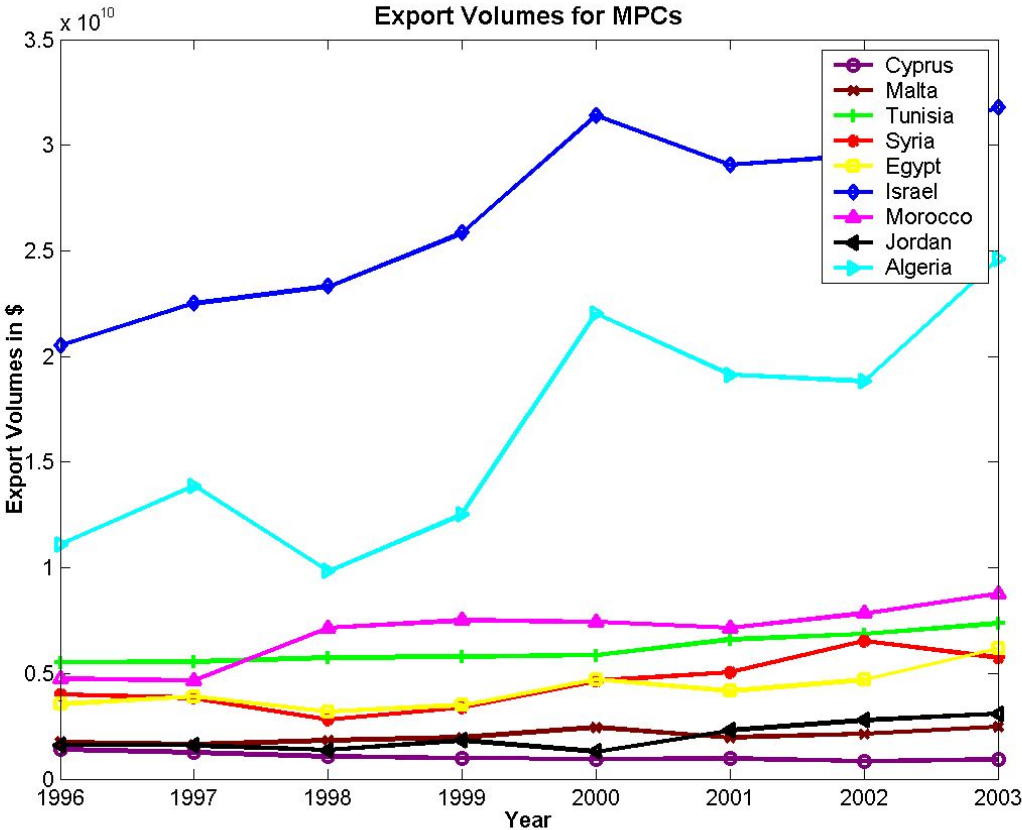
As Figure 1 illustrates, the export values and the export growth patterns of Jordan, Cyprus and Malta very close to each other and their export values are lowest among MPC countries. Egypt, Syria, Tunisia and Morocco can be regarded as a group themselves and are taking an intermediate position. The exports of these four countries follow a continuous increase except slight fluctuations between 1996 and 2003. On the other hand, Israel and Algeria perform more or less a similar performance except for a small fluctuation around 1999. These two countries, with a growing distance to all others, seem to make a considerable improvement starting with 1998 onwards.

In the case of import performance, Israel continues alone its growing pattern – as it does in exports. The same is true for Morocco and Algeria, which face a slight fluctuation around 1999 and recover from it beginning in 2002. Malta, Cyprus, Syria and Jordan do not show any significant improvement within these six years. Following a first decrease in 1998 and 1999, Egypt decreases its import volume significantly.

Figure 2: Development of Total Import Volumes
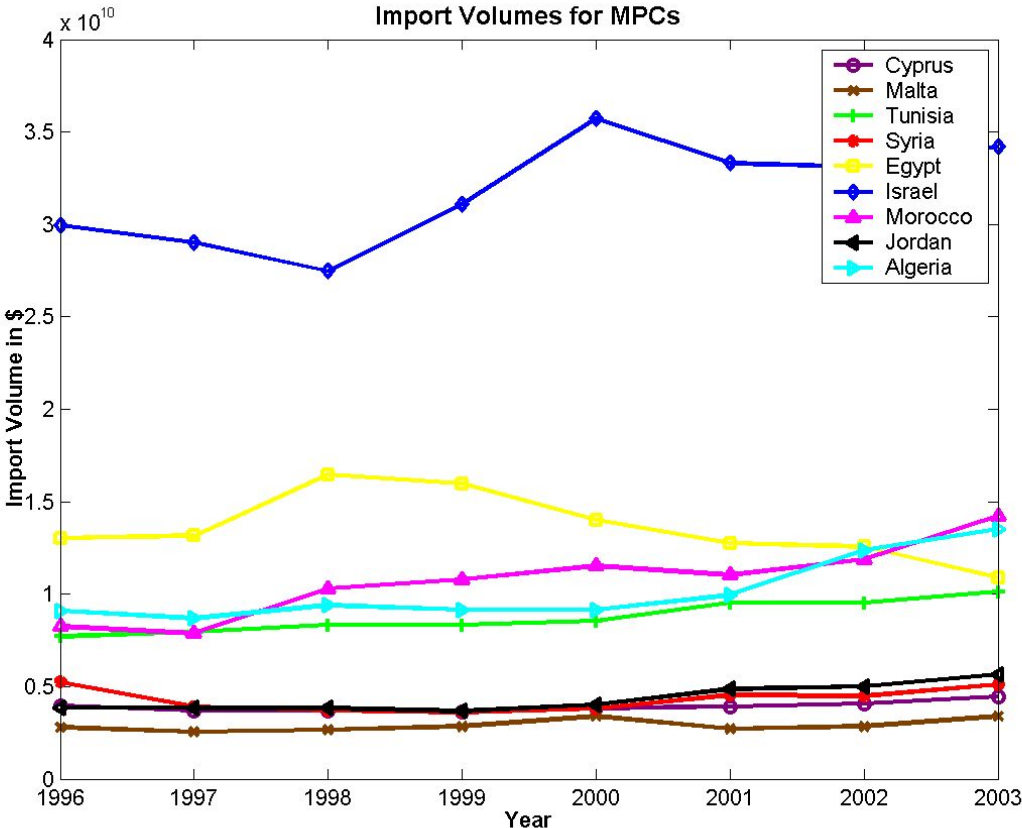
3. Methodology and Database

In order to estimate the trade competitiveness of the countries in question, we use the following indices:

1. "Revealed Comparative Advantage (RCA) Coefficient" (Balassa 1965)[1].
2. "Comparative Export Performance (CEP) Index" (Donges 1982)[2].
3. "Trade Overlap (TO) Index" (Finger and de Rosa 1979)[3].
4. "Export Similarity (ES) Index" (Finger and Kreinin 1979)[4].
5. "Export Conformity Coefficient (ECC)" (Fels and Horn 1972)[5].

In calculating the above indices, United Nations COMTRADE Database is used. The classification of the trading sectors is according to the "Standard International Trade Classification (SITC). However, the trade sectors are grouped according to the "OECD Classification" which is raised by Mayer, Butkevicius and Kadri in their discussion paper: "Dynamic Products in World Exports"(see Appendix Table 1)

4. Empirical Results

1. Revealed Comparative Advantage (RCA) Index:

The revealed comparative advantage index is often used to analyze the international competitiveness in terms of trade. In this paper, Balassa's RCA index formulation is used. Balassa's formula is as follows:

$$RCA = \ln[x_i / m_i] \bullet \left(\sum_{i=1}^{n} x_i / \sum_{i=1}^{n} m_i \right) \bullet 100$$

where 'x' stands for exports and 'm' stands for imports. The subscript 'i' refers to the sector groupings of the "OECD Classification". The higher (lower) the RCA index, the more (less) successful is the export performance of the country in question in a particular area of

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[1] The methodology was originally developed by Bela Balassa (1965) and refined later.
[2] For methodology see Jurgen Donges et.al. (1982).
[3] For details on the methodology and its analytical applications see Finger and de Rosa (1979).
[4] For methodology see Finger, J.M. and M.E. Kreinin (1979).
[5] G.Fels and E.J Horn (1972). An application for this coefficient to data of CEECs is contained in Bahri Yilmaz (1996.2002,2003).

industry. The RCA indices calculated for the following six trading sectors are shown in Table 1 below: Non-fuel primary Commodities, Resource-intensive Manufactures, Labour-intensive Manufactures, Differentiated Products Req.Spec. Supp., Scale-intensive Manufactures, Science-based Manufactures.

TABLE 1
REVEALED COMPARATIVE ADVANTAGE INDICES

TUNISIA	1996	1997	1998	1999	2000	2001	2002	2003
1st group	-62,77	-46,01	-47,96	-75,09	-44,07	-59,84	-66,06	-54,26
2nd group	4,31	21,00	8,60	-86,00	3,73	-26,83	6,61	24,52
3rd group	17,08	14,60	4,90	84,58	16,68	6,73	20,01	18,40
4th group	-82,75	-77,02	-76,67	-80,15	-66,44	-55,51	-54,72	-56,91
5th group	-13,28	-21,54	-8,86	-73,52	-43,84	-12,69	-35,95	-40,69
6th group	-156,79	-160,95	-58,95	-88,73	-116,49	-64,41	-113,06	-94,19

SYRIA	1996	1997	1998	1999	2000	2001	2002	2003
1st group	-4,46	-2,79	-1,66	-8,54	-10,88	-14,51	5,24	-8,36
2nd group	-87,93	-73,89	-178,41	27,22	-82,63	-115,63	-140,43	-59,67
3rd group	-15,33	-15,64	-1,94	-35,00	-12,66	27,19	7,47	-34,30
4th group	-131,20	-172,93	-198,32	-124,81	-159,86	-226,45	-172,61	-121,46
5th group	-128,17	-161,74	-137,19	-111,73	-141,33	-227,63	-188,54	-59,91
6th group	-77,10	-104,07	-158,71	-101,02	-78,06	-117,98	36,02	-26,50

EGYPT	1996	1997	1998	1999	2000	2001	2002	2003
1st group	-28,91	-33,61	-28,53	-29,86	-33,22	-33,01	-37,35	-39,78
2nd group	-38,95	-16,06	-28,51	-23,32	-34,19	-23,04	-0,04	7,03
3rd group	-9,71	3,26	-2,11	-13,19	-2,54	-6,61	-4,29	-4,05
4th group	-78,94	-83,86	-78,44	-70,63	-79,36	-76,77	-87,68	-119,27
5th group	-22,91	-40,84	-34,65	-20,91	-31,61	-30,77	-33,55	-25,87
6th group	-39,38	-44,35	-40,68	-42,08	-51,75	-56,75	-66,04	-92,31

ISRAEL	1996	1997	1998	1999	2000	2001	2002	2003
1st group	-46,92	-57,32	-55,56	-57,11	-67,60	-71,23	-40,10	-39,61
2nd group	4,09	12,42	23,49	16,44	25,53	32,54	27,55	35,04
3rd group	-5,13	-2,89	0,11	7,35	8,07	3,93	14,17	22,65
4th group	-26,74	-9,45	-4,19	-7,09	16,89	12,67	2,06	5,31
5th group	-25,99	-17,93	-7,37	-14,06	3,97	-3,82	-1,92	8,91
6th group	-25,05	-7,21	-3,57	-9,56	-36,28	-26,22	-18,76	-15,37

MOROCCO	1996	1997	1998	1999	2000	2001	2002	2003
1st group	-0,02	8,79	9,36	12,96	5,70	0,60	-10,54	6,75
2nd group	-33,28	-40,77	-44,75	-44,28	-47,72	-37,88	-59,34	-49,42
3rd group	22,72	17,67	21,28	20,19	19,35	15,85	124,03	10,62

4th group	-174,00	-178,73	-100,55	-88,50	-84,47	-80,51	-70,07	-58,30
5th group	-32,26	-31,23	-50,34	-38,48	-42,04	-40,56	-79,95	-63,18
6th group	-227,39	-223,91	-147,60	-146,67	-151,44	-151,91	-185,08	-143,72

JORDAN	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1st group	-14,93	-14,93	-25,01	-20,80	-44,14	-25,20	-18,39	-24,69
2nd group	9,79	9,79	-61,89	-25,65	-20,10	-25,77	-15,41	-21,35
3rd group	-52,68	-52,68	-63,25	-34,63	-17,24	-11,48	-2,82	6,22
4th group	-100,12	-100,12	-116,99	-65,55	-48,61	-69,94	-73,94	-83,51
5th group	-29,90	-29,90	-8,05	-22,87	-42,53	-37,11	-41,14	-43,51
6th group	-61,96	-61,96	-40,96	-25,48	-23,77	-22,20	-22,49	-23,57

ALGERIA	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1st group	-25,08	-15,52	-11,29	-14,12	-16,67	-15,96	-17,74	-
2nd group	-40,15	-19,30	-13,45	-14,30	-17,48	-14,19	-5,26	-
3rd group	-12,45	-16,27	-12,21	-15,05	-16,02	-15,04	-21,54	-
4th group	-36,65	-24,94	-17,53	-16,69	-21,46	-19,35	-21,27	-
5th group	-14,36	-8,22	-7,80	-8,39	-9,61	-9,32	-10,98	-
6th group	-32,23	-23,63	-19,32	-18,64	-21,22	-26,25	-30,35	-

TURKEY	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1st group	-9,34	-6,25	-3,26	4,54	-15,22	16,81	-18,97	-23,90
2nd group	18,17	25,86	21,28	41,69	35,60	104,23	93,12	91,97
3rd group	58,50	56,44	63,63	82,72	58,18	110,31	88,13	86,72
4th group	-105,40	-103,41	-94,46	-97,70	-80,93	-83,19	-74,80	-68,53
5th group	-63,20	-66,16	-69,76	-61,20	-66,60	-34,57	-31,81	-39,32
6th group	-175,35	-146,59	-156,18	-121,64	-101,05	-130,07	-192,81	-150,11

CYPRUS	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1st group	-11,33	-13,15	-12,31	-13,30	-15,17	-14,50	-15,78	-14,31
2nd group	-59,66	-45,78	-43,47	-50,73	-41,94	-48,02	-40,12	-39,98
3rd group	-45,92	-49,07	-44,00	-46,93	-42,65	-42,27	-37,96	-39,07
4th group	-64,23	-74,96	-70,02	-59,07	-66,26	-59,50	-51,24	-50,51
5th group	-85,30	-92,33	-74,08	-79,02	-70,71	-73,56	-54,80	-47,45
6th group	-53,23	-55,47	-44,85	-38,66	-36,34	-32,77	-25,22	-24,67

MALTA	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1st group	-117,01	-105,06	-120,47	-118,80	-102,62	-110,34	-79,34	-86,63
2nd group	-147,94	-114,62	-126,80	-139,06	-201,63	-149,84	-146,19	-187,07
3rd group	-5,04	-4,29	-6,57	1,91	-27,40	-0,45	9,58	8,13
4th group	-5,15	-6,43	-2,73	-2,59	-0,96	4,77	5,15	3,70
5th group	-85,34	-79,83	-61,50	-76,63	-104,06	-109,90	-115,96	-103,78
6th group	-31,26	-21,13	-26,57	-25,98	-7,69	-24,18	-25,87	-32,08

EU15	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
1st group	-16,23	-16,25	-18,92	-17,79	-18,44	-17,09	-13,83	-12,91
2nd group	22,30	22,04	16,61	12,31	11,76	11,90	15,28	11,47

3rd group	-0,41	0,06	-4,85	-6,43	-7,29	-6,97	-6,49	-8,13
4th group	30,41	30,90	25,51	20,34	16,53	20,21	25,21	22,68
5th group	17,06	19,62	15,94	12,84	16,32	16,60	19,03	18,53
6th group	0,14	1,99	-3,60	-5,34	-3,45	2,70	3,28	3,90

The following comments can be made drawing on these results:

a. In the Non-fuel primary commodities, ,all countries, except for Morocco, and also the EU15 have comparative disadvantages. Exceptionally, Turkey has positive indices in 1999 and 2001, and Syria seems only to have positive performance in 2002.

b. Israel, Turkey, and the EU15 seem to have comparative advantages in Resource- intensive manufactures. Turkey's export performance over the eight years is the biggest in terms of volume among the others. Egypt has an increasing trend beginning with 2003. Jordan and Tunisia are more competitive in the period before 1999 and then Tunisia has been increasing its comparative advantages since 2002 again.

c. Turkey, Tunisia and Morocco appear to be in a competitive position with respect to the Labour-intensive manufactures. However, Turkey maintains its strong competitive position compared to the others, although it has some fluctuations during 1999 and 2000. Syria and Malta show an unstable picture. In the case of Egypt, Cyprus, Algeria, Jordan the results show that they have already lost their comparative advantage in the Labour-intensive manufactures.

d. As far as the Differentiated products requiring specialized suppliers are concerned, the EU15 is the only one having comparative advantage during the whole period. Other countries obviously have comparative disadvantages. However, Israel and Malta show a positive trend in export performance starting from 2000 and 2001, respectively.

e. Regarding the Scale-intensive manufactures, the EU15 has comparative advantage compared to the other countries. Israel's RCA indices begin to increase beginning with the year 2003.

f. In the Science-based manufactures, the EU15 has a stable advantageous position against the others. Israel improves its position beginning with the year 2000.

2.   Comparative Export Performance (CEP) Index

Because the RCA indices are based on actual export and import volumes, trade barriers, such as tariffs on imports, can distort the comments based on these calculations. Since the CEP index takes into account only the export shares, it allows for the comparison of findings between the two measures. CEP index is calculated with the following formula:

$$CEP = \left(x_{ij} / X_{iw} \right) / \left(\sum_{i} x_{ij} / \sum_{i} X_{iw} \right)$$

where 'x' stands for exports. The subscript 'j' refers to the country in question, 'w' to the EU15 and 'i' shows the different product groups, respectively. CEP index values above (or below) unity mean that the particular sectors have a greater (lower) share in total exports of the individual country than they have in the EU as a whole. Thus, the country in question possesses a relative advantage (or disadvantage) in the export of these products.

TABLE 2
COMPARATIVE EXPORT PERFORMANCE INDICES

TUNISIA	1996	1997	1998	1999	2000	2001	2002	2003
1st group	0,77	1,06	0,99	0,68	1,05	0,82	0,82	0,89
2nd group	0,49	0,57	0,51	0,53	0,57	0,42	0,58	0,64
3rd group	4,34	4,06	3,93	4,59	4,60	4,15	4,77	4,65
4th group	0,40	0,43	0,45	0,52	0,52	0,63	0,60	0,63
5th group	0,54	0,52	0,61	0,49	0,44	0,58	0,40	0,39
6th group	0,09	0,07	0,27	0,17	0,13	0,26	0,14	0,19

SYRIA	1996	1997	1998	1999	2000	2001	2002	2003
1st group	4,79	5,28	6,19	5,84	5,37	3,91	5,09	5,14
2nd group	0,12	0,12	0,04	1,96	0,09	0,05	0,11	0,38
3rd group	2,12	1,86	1,47	1,12	2,70	4,27	1,84	0,94
4th group	0,03	0,02	0,00	0,02	0,01	0,01	0,06	0,08
5th group	0,04	0,04	0,03	0,07	0,04	0,02	0,05	0,56
6th group	0,07	0,04	0,02	0,12	0,06	0,02	0,80	0,20

EGYPT	1996	1997	1998	1999	2000	2001	2002	2003
1st group	2,82	2,26	2,75	2,58	2,94	3,19	3,14	3,05
2nd group	0,32	1,65	0,82	1,24	0,70	1,15	2,91	2,48
3rd group	1,50	3,36	3,17	1,74	3,15	2,52	2,09	1,78
4th group	0,03	0,04	0,04	0,06	0,07	0,09	0,09	0,07
5th group	1,15	0,43	0,52	1,20	0,64	0,71	0,63	0,85
6th group	0,21	0,22	0,23	0,18	0,16	0,16	0,18	0,12

ISRAEL	1996	1997	1998	1999	2000	2001	2002	2003
1st group	0,58	0,53	0,54	0,49	0,41	0,42	0,54	0,55
2nd group	7,45	7,60	7,04	7,57	8,02	8,01	9,26	9,83
3rd group	1,00	0,95	0,99	0,97	0,89	0,94	0,95	0,95
4th group	0,89	0,90	0,96	0,91	1,11	1,10	0,91	0,86
5th group	0,49	0,51	0,53	0,51	0,48	0,51	0,46	0,47
6th group	0,76	0,81	0,81	0,81	0,55	0,56	0,58	0,58

MOROCCO	1996	1997	1998	1999	2000	2001	2002	2003
1st group	3,47	3,69	2,62	2,64	2,80	2,74	2,69	2,52
2nd group	0,39	0,39	0,29	0,30	0,31	0,37	0,57	0,39
3rd group	1,82	1,69	3,23	3,13	3,24	3,37	3,18	3,31
4th group	0,10	0,09	0,31	0,41	0,41	0,40	0,49	0,58
5th group	0,70	0,74	0,46	0,46	0,45	0,43	0,40	0,38
6th group	0,03	0,03	0,08	0,09	0,07	0,07	0,08	0,08

JORDAN	1996	1997	1998	1999	2000	2001	2002	2003
1st group	3,69	3,84	3,57	3,11	2,27	2,71	2,62	2,42
2nd group	1,19	1,23	0,97	0,86	1,30	0,94	1,11	0,97

3rd group	0,56	0,56	0,30	0,86	1,82	1,85	2,23	2,68
4th group	0,23	0,22	0,14	0,35	0,50	0,38	0,32	0,28
5th group	0,85	0,86	1,21	0,89	0,67	0,66	0,58	0,53
6th group	0,28	0,26	0,41	0,74	0,81	0,74	0,68	0,70

ALGERIA	1996	1997	1998	1999	2000	2001	2002	2003
1st group	1,97	2,30	3,04	2,13	2,04	1,91	1,60	-
2nd group	0,11	0,23	0,37	0,53	0,51	0,70	0,97	-
3rd group	1,50	0,38	0,51	0,35	0,42	0,52	0,17	-
4th group	0,20	0,11	0,17	0,46	0,27	0,39	0,37	-
5th group	1,42	1,94	1,54	1,71	1,92	1,85	1,43	-
6th group	0,21	0,10	0,07	0,19	0,17	0,05	0,04	-

TURKEY	1996	1997	1998	1999	2000	2001	2002	2003
1st group	1,74	1,77	1,69	1,57	1,41	1,38	1,12	1,10
2nd group	0,87	0,94	0,96	1,00	1,18	1,16	1,26	1,32
3rd group	3,20	3,20	3,49	3,40	3,56	3,28	3,37	3,29
4th group	0,34	0,34	0,42	0,41	0,45	0,49	0,56	0,58
5th group	0,61	0,60	0,55	0,63	0,64	0,77	0,79	0,80
6th group	0,07	0,11	0,10	0,21	0,25	0,19	0,09	0,13

CYPRUS	1996	1997	1998	1999	2000	2001	2002	2003
1st group	4,40	4,94	4,70	4,79	4,97	4,68	3,88	3,92
2nd group	0,70	0,97	1,07	0,93	1,13	1,02	1,25	1,31
3rd group	1,14	1,06	1,34	1,21	1,38	1,45	1,52	1,34
4th group	0,36	0,23	0,25	0,32	0,21	0,29	0,29	0,27
5th group	0,16	0,12	0,17	0,13	0,13	0,13	0,21	0,25
6th group	0,42	0,37	0,47	0,60	0,65	0,72	1,02	1,05

MALTA	1996	1997	1998	1999	2000	2001	2002	2003
1st group	0,27	0,37	0,30	0,30	0,31	0,38	0,57	0,50
2nd group	0,12	0,21	0,17	0,15	0,06	0,15	0,17	0,11
3rd group	1,73	1,78	1,57	1,66	0,94	1,65	1,76	1,71
4th group	2,33	2,20	2,38	2,38	2,71	2,49	2,39	2,51
5th group	0,18	0,19	0,22	0,18	0,11	0,12	0,12	0,14
6th group	0,60	0,60	0,48	0,46	0,59	0,44	0,48	0,46

The CEP indices shown in the above graphs lead to the following conclusions:

a. In case of the export of <u>Non-fuel commodities</u>, Syria, Egypt, Morocco, Cyprus, Jordan, Turkey, Algeria have a stronger position compared to the EU15. Israel, Malta and Tunisia (except 1997 and 2000) always have CEP index below unity.

b.   The export shares of Egypt, Turkey, Cyprus, and Jordan with regard to <u>Resource-intensive Manufactures</u> are higher than the share of the EU15 as a whole. Especially, Israel has a strong position in exporting this product group. Tunisia, Syria, Algeria, seem to have approximately the same export share with the EU15 but comparative disadvantages in this sector.

c.   All countries in consideration except Israel have a considerably large export share devoted to <u>Labour-intensive manufactures</u>. Tunisia, Turkey and Morocco are in a remarkably in a very strong position and have approximately the same export proportion in this product category with the EU15.

d.   The proportion of the <u>Differentiated Products Req.Spec.Supp.</u> among the total volume of exports is smaller than the EU15's proportion for Tunisia, Syria, Egypt, Morocco, Jordan, Turkey, and Cyprus. Interestingly, Israel and Malta have been showing remarkable export performance in this sector.

e.   Only Algeria seems to have the same export proportion of the <u>Scale-intensive manufactures</u> on average as the EU15. On the other hand, all other countries including Israel are far removed from the EU15's pattern.

f.   The export shares of the <u>Science-based manufactures</u> are significantly below those for the European Union as a whole. More or less none of the countries in consideration has shown any significant competitiveness in this sector.

3.   Trade Overlap (TO) Index

As a further step, we analyze the intra-industry and inter-industry specialization of the six countries and the EU15. Under monopolistic competition, there are two different ways of trading within the manufacturing sector. The exchange of manufactures for manufactures is called intra-industry trade and the exchange of manufactures, for instance, for food is called inter-industry trade. The intra-industry trade shows how and to what extent an economy is integrated into the world market and also the degree of liberalization that an economy has already realized throughout the economic development process.

Trade Overlap index is calculated with the formula below:

$$TO = 2\sum_{i=1}^{n} \min(X_i, M_i) / \sum_{i=1}^{n}(X_i + M_i).$$

where X_i and M_i refers to exports and imports, respectively. 'i' represents the product groups of OECD Classification, and "min" defines the magnitude of the total trade that overlaps in dollar terms. The index can vary between 0 and +1. The closer it comes to unity, the more intra-industry specialization exists. A lower coefficient implies that trade takes the form of inter-industry specialization.

TABLE 3
TRADE OVERLAP INDICES

	TUNISIA	SYRIA	EGYPT	ISRAEL	MOROCCO	JORDAN	ALGERIA	CYPRUS	MALTA	TURKEY	EU15
1996	0,75	0,43	0,26	0,88	0,77	0,69	0,17	0,60	0,82	0,56	0,93
1997	0,76	0,56	0,27	0,92	0,76	0,69	0,09	0,57	0,83	0,55	0,93
1998	0,81	0,48	0,27	0,93	0,76	0,57	0,07	0,48	0,85	0,56	0,93
1999	0,47	0,43	0,26	0,92	0,78	0,77	0,08	0,46	0,86	0,58	0,94
2000	0,74	0,48	0,32	0,90	0,79	0,56	0,09	0,42	0,87	0,54	0,94
2001	0,81	0,49	0,34	0,90	0,81	0,74	0,09	0,42	0,85	0,67	0,94
2002	0,75	0,58	0,40	0,92	0,59	0,81	0,10	0,34	0,84	0,66	0,93
2003	0,75	0,53	0,51	0,90	0,79	0,78	-	0,32	0,83	0,66	0,93

The empirical results are given above and the following comments are deducted:

a. EU15 is the only one having the largest level of intra-industry trade specialization. Besides EU member states, Malta and Israel are the ones that improve their intra-industry trades in a continuous manner. These two countries seem to be capable of catching up with the EU15 in the next decades.

b. The TO indices of Syria, Egypt, Algeria, Cyprus are much lower than those of EU15, which means that these countries mostly specialise in inter-industry trade. However, they also do not seem to have any increasing tendency towards unity. Jordan, Turkey, Morocco and Tunisia can be placed in an intermediate position

4.   Export Similarity (ES) Index

Export Similarity Index, calculated by the formula of Finger and Kreinin (1979), measures the matched proportion of a country's exports by its competitor's exports in the same product category. The ES index can vary between 0 and +1. The closer it comes to 1; there is a

greatest degree of similarity between two countries. On the other hand, 0 indicates no export similarity between the countries in question and no overlap at all.

$$ES(ab,c) = \sum_i \left[EX_i(ac) - \frac{EX_i(ac) + EX_i(bc)}{2} \right]$$

where $EX_i(ac)$ is the share of commodity I in a's exports to c. This formula measures the difference in the export patterns of the countries a and b to the market c. If the distribution of the exports of a and b are identical, then the index will be zero.

TABLE 4
EXPORT SIMILARITY INDICES

	TUNISIA	SYRIA	EGYPT	ISRAEL	MOROCCO	JORDAN	ALGERIA	CYPRUS	MALTA
1996	0,83	0,57	0,67	0,50	0,27	0,61	0,70	0,58	0,43
1997	0,86	0,52	0,77	0,50	0,30	0,61	0,53	0,53	0,46
1998	0,89	0,42	0,85	0,52	0,12	0,51	0,52	0,56	0,44
1999	0,82	0,43	0,69	0,52	0,13	0,65	0,59	0,54	0,45
2000	0,85	0,42	0,82	0,51	0,17	0,79	0,53	0,51	0,44
2001	0,85	0,42	0,78	0,52	0,17	0,76	0,60	0,52	0,44
2002	0,81	0,41	0,68	0,53	0,19	0,73	0,56	0,52	0,48
2003	0,82	0,48	0,70	0,55	0,18	0,75	-	0,51	0,48

The ES indices for the 9 countries and Turkey show that there is a similarity between the export patterns of Turkey, Tunisia and partly with Egypt and Jordan. On the other hand, Israel, Malta, Syria and Algeria do not seem to have a similar export pattern with Turkey. The main question here is whether Turkish export goods are complementary or substitutive.

5.   Export Conformity Coefficient (ECC)

The last instrument that is used to analyze trade patterns is the Export Conformity Coefficient. It is calculated according to the following formula:

$$\frac{\sum_{i=1}^{n} x_i m_i}{\sqrt{(\sum_{i=1}^{n} X_i X_i)(\sum_{i=1}^{n} M_i M_i)}}$$

where x stands for exports and m stands for imports. The subscript i shows different product groups. ECC takes on values between 0 and +1. The higher the value of the export

conformity coefficient the more identical are the export structures of the two countries compared with each other. The calculated coefficients are as the following:

TABLE 5
CONFORMITY COEFFICIENTS

	TUNISIA	SYRIA	EGYPT	ISRAEL	MOROCCO	JORDAN	ALGERIA	CYPRUS	MALTA	TURKEY	EU15
1996	0,90	0,55	0,88	0,98	0,89	0,94	0,77	0,90	0,96	0,67	0,99
1997	0,91	0,67	0,63	0,98	0,89	0,94	0,67	0,90	0,96	0,66	0,99
1998	0,93	0,63	0,70	0,98	0,89	0,84	0,77	0,82	0,97	0,65	0,99
1999	0,57	0,68	0,82	0,99	0,90	0,98	0,74	0,83	0,97	0,67	0,99
2000	0,90	0,67	0,76	0,98	0,90	0,96	0,72	0,82	0,98	0,68	0,99
2001	0,94	0,59	0,85	0,98	0,92	0,97	0,72	0,82	0,96	0,77	0,99
2002	0,91	0,64	0,87	0,99	0,70	0,96	0,69	0,81	0,96	0,78	0,99
2003	0,91	0,77	0,89	0,99	0,92	0,94	-	0,77	0,96	0,79	0,99

The main results that can be drawn are the following:

a. Especially Israel, Malta, Jordan and Tunisia have indices very close to +1; that is to say, their export specialization pattern show great similarity with that of the European Union's. Considering the European Union as a single country, the results point out the fact that especially these four countries show in a sense a microstructure of the export pattern of the whole European Union.

b. Although Egypt's and Cyprus's coefficients seem to be close to unity, they slowly tend to move away from +1. Turkey is the only country that does not have such a similar trade pattern with the EU15's. Nevertheless, Turkey seems to decreasing the gap beginning with the year 2000.

5. Conclusion

This empirical analysis sheds light on the trade patterns and competitiveness of 10 Mediterranean countries, including Turkey, Cyprus, Malta and the EU15.

First of all, the results show that MPCs countries still have a long way to catch up with the European Union. The main failure of all these countries is the weakness in their production performance in science-based manufactures, where Israel is the only exception to some extent.

The empirical results show that except Israel all other MPCs countries show the main economic features of developing countries. This means that most non- member countries in consideration have specialised and seem to own comparative advantages in *Non-fuel primary commodities* (see CEP values: Algeria, Turkey, Syria, Jordan Morocco and Egypt). All countries in consideration except Israel have a considerably large export share devoted to Labour-intensive manufactures. Tunisia, Turkey and Morocco are in a very strong position in the export of labour intensive commodities. On the other hand, Turkey seems unable to catch up with the European Union countries in a short term period, which can be justified with the upward trend. The empirical study covering the period from 1991 to 1996, which is not included in this paper, shows that Turkey has improved its trade diversification in a great extend from the beginning of the 1990s to the beginning of the 2000s. A great acceleration can be seen especially after 1996 which points to the fact that the Customs Union Agreement has had a positive effect on the trade development of Turkey.

In recent years Brussels has increased financial assistance in the region remarkably in order to foster restructuring process and regional cooperation. In the framework of MEDA programs the European Commission has provided almost 9 billion Euros and the European Investment Bank (EIB) has granted and about 10 billion Euros.[5]

Impacts of this financial help on regional economies cannot be determined in the short run, but despite different growth rates and economic performance, the region is generally

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[5] According to information from the European Commission: commitments through MEDA I (1995-1999): almost 3.5 billion Euros; MEDA II (2000-2006): almost 5.4 billion Euros. The EIB's credit volume 1995-1999 about 4.8 billion Euros, 2000-2007 about 6.4 billion Euros.

characterised by poverty and high unemployment rates resulting from still higher population growth in the southern Mediterranean countries.

In order to close the economic gap between Eastern and Southern Mediterranean countries (ESMCc), we recommend that:

1.   Maruell Asseburg pointed out in her article correctly that because of two reasons the emphasized principle of *co-ownership* of the Barcelona Process (consultation and decision making among equal partners) cannot operate efficiently and therefore may have to face two main difficulties: firstly, it is not the easiest way to cooperate as an equal partner on the same ground; if one of them is the donor country another one is the recipient country. In other words, there is a remarkable imbalance between the EU/25 and only 10 Mediterranean states concerning their negotiation power. This means that EU institutions are playing a dominating role in the reshaping of relations between what are in fact two unequal partners. Secondly, the EU presidency is the same presidency of the EMP and the EU Commission can have a great influence on action plans and the distribution of MEDA funds among the ESMCs. Because of this fact it seems necessary to establish a permanent joint institution with a secretary general or a co-presidency, which should represent interests of both sides. Another important aspect of Euro-Med relations is that the Arab group coordinated by Egypt made clear that they are not interested in seeing any close relationship between reform policies and financial support. They prefer to cooperate in the *ownership-principle*: "The EU should acknowledge each nation's modernisation priorities and generally support their implementation instead of issuing instructions for reform."[6]

2.   The empirical results show that most of the MPCs have a comparative advantage and possess international competitiveness in the primary products and labour intensive commodities. In contrast, the EU15 has a remarkable comparative disadvantages in these two production groups. Under these circumstances, if the EU would continue to protect its unproductive and uncompetitive sectors, especially agricultural products, against non-member countries, a fruitful and beneficial economic cooperation between EU members and the ESMCs cannot be established and if trade liberalisation between two partners would only

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[6] Muriel Asseburg ,"Barcelona Plus 10", SWP Comments 55, SWP, pp.1-8, Berlin, December 2005.

base on industrial products, the EU will be the main beneficiary and gain enormous benefits of trade liberalisation and establishing of the Free Trade Area in the region in 2010.

3.   In order to improve and to end the economic integration with a success story between EU and ESMCs, first of all it is necessary to create basic conditions for well functioning market economies. Therefore, it was decided by the last summit meeting to introduce socio-economic reform immediately to improve the environment for FDI, to establish macroeconomic stability and social security.

4.   Finally, another important point is that all of the ESMCs need to increase their transfer of technology to overcome the shortcomings of their trade balance. The main accelerator will be to attract more and more foreign direct investment, which requires stronger economic stability in all countries.[7] Improving competitiveness rests on three levels: firm level, industry level and national macroeconomic policies. Although the national macroeconomic stability is one of the main determinants of successful trade policy, firms have to take action to invest in close cooperation with multinational companies (MNCs), up-grade and improve productivity, quality of human resources, on-time delivery. It is very important for managers to adjust themselves to changes in the rules of the game for operation in the domestic and international markets.

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Appendix: OECD Classification

SITC Rev. 2 Codes

1. Non-fuel primary commodities: 0, 1, 2 (less, 233, 244, 266, 267), 4, 68

2 .Resource-intensive manufactures:

Woods products	63, 82
Non-metallic mineral products	66

3. Labor intensive manufactures:

Leather, textiles, apparel, footwear	61, 65, 83, 84, 85
Fabricated metal products	69
Other manufactures, excluding plastics	89 less 893

4. Differentiated products requiring specialized suppliers:

Non-electrical machinery	71, 72, 73, 74
Electrical machinery	77
Communications equipment	76

5. Scale-intensive manufactures:

Paper	64
Chemicals excluding pharmaceuticals	5 less 54
Rubber and plastic products	62, 893
Iron and steel	67
Road motor vehicles	781–784
Ships and other transport equipment other than aerospace	79 less 792

6.Science-based manufactures:

Aircraft	792
Computers and office equipment	75
Pharmaceuticals	54
Scientific instruments	87, 88

Table 1 – OECD Classification; Source: "Dynamic Products in World Exports" by Mayer, Butkevicius, Kadri.