

Trade and Competitiveness of the Mediterranean Countries on the Olive Oil Market

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Paper prepared for presentation at the I Mediterranean Conference of Agro-Food Social Scientists. 103rd EAAE Seminar 'Adding Value to the Agro-Food Supply Chain in the Future Euromediterranean Space'. Barcelona, Spain, April 23rd - 25th, 2007

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Abstract

In the context of the establishment of a Mediterranean Free Trade Area, the paper analyses the structure and competitiveness of the Mediterranean basin countries in the olive oil trade and gives a preliminary explanation of the likely impact of the next liberalization process and challenges for the EU Mediterranean countries. The paper starts showing the level of integration of the international olive oil market and underlining the main factors affecting the process. Then, after a brief explanation of the methodology adopted, it analyses the main results achieved. Conclusions try to understand the impact of the competitive scenario showed by the empirical analysis on the Euromediterranean olive oil market following the trade liberalization.

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1. Introduction

Since 1998, the European Union (EU) has signed seven Euromediterranean Association Agreements with Egypt, Israel, Jordan, Lebanon, Morocco, Tunisia and Algeria. These agreements, aimed at deepening the cooperation between the EU and the Southern Mediterranean countries, also provide a basis for the gradual trade liberalisation in the Mediterranean area, with a final establishment of a Mediterranean Free Trade Area (FTA).

The Euro-Mediterranean partnership began in 1995 (the Barcelona process) and also included Turkey with the establishment of a specific association. Concerning the relationships with this country, the Association Council of 1998 set out arrangements for preferential agricultural trade.

Once the agreement will enter into force, a transitional period of no more than twelve years is foreseen. The parties have set 2010 as the target date for the gradual establishment of the free trade area which will cover most traded goods in compliance with the World Trade Organisation (WTO) obligations. Tariff and non-tariff barriers to trade in manufactured products will be progressively eliminated in accordance with timetables to be negotiated between the partners. Trade in agricultural products will be liberalised in stages, as will trade in services.

The free movement of goods between the Community and the Mediterranean countries should result from the prohibition of customs duties, which will be gradually removed, the prohibition of quantitative restrictions on exports and imports, and the banning of any similar discriminatory measures between the parties. Safeguard measures may, however, be applied.

The work programme sets out some practical measures designed to promote free trade, such as the harmonisation of customs rules and procedures, the harmonisation of standards and the elimination of unwarranted technical barriers to trade in agricultural products.

Assuming the economic relevance of the olive oil sector in the Mediterranean countries, both EU members and non-members, and, for specific areas, its strategic value for the agricultural income generation, the aim of the paper is the knowledge of the structure and competitiveness of olive oil

trade for each of interested countries. Through specific trade indicators, the analysis gives a preliminary interpretation to the position and specialization of the Mediterranean countries in the olive oil trade in order to understand the likely impacts of the next liberalization process. The results achieved contribute to the evaluation of the consequent competitive pressure on the olive oil market and of the challenges facing the EU Mediterranean countries.

The paper is structured as follows. First, the level of integration of the international olive oil market is presented underlining the main factors affecting the process. Then, after a brief explanation of the methodology adopted, the main results achieved are analysed. Conclusions try to understand the impact of the competitive scenario previously described on the Euromediterranean olive oil market following the trade liberalization.

2. The integration of the international olive oil market

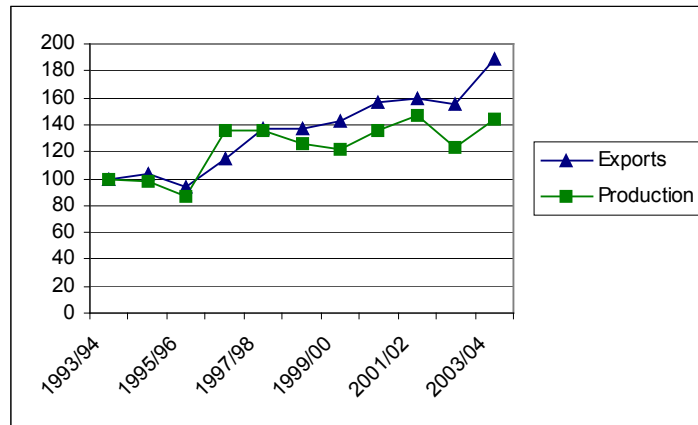
In the last decade, even if world exports represent on average only the 36% of production¹, the degree of integration of the international market of the olive oil has increased (Figure 1). Exports have grown faster than production² particularly after 1997 when the latter has featured a period of stagnation. The stable situation has been mainly influenced by the reduction in the output of the Community that, with a market share of more than 80%, represents the major producer³.

Figure 1 – Oil of olive production and export trend 1993/94-2003/04 (1993/94=100)

¹ The share of olive oil exports on production is low due to the fact that the product tends to be consumed in production areas (ADE, 2002).

² Olive oil production represents approximately the 3% of the edible oils on the world market (Court of Auditors, 2000).

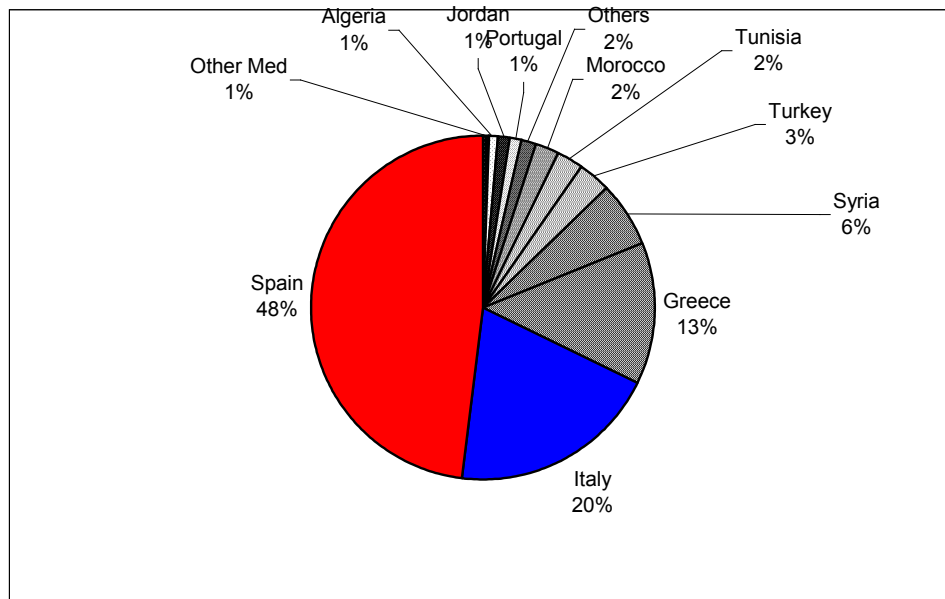
³ In the recent years, production trend by country is ascending but the great influence of the two dominant EU players, Spain and Italy, introduced a high level of uncertainty in the production level (UNCTAD, 2006b).



Source: Based on FAO data

Considering olive oil production by country, the area around the Mediterranean still accounts for the bulk of world output (Figure 2) even if the Coastal countries of the Southern and Central America and Australia are emerging (INEA, 1998). Spain, Italy and Greece are dominant players (more than 80% of total production) followed by four extra-Community countries, Syria, Turkey, Tunisia and Morocco (13% of total production). The remaining Euro-Med producers show a share 1% each.

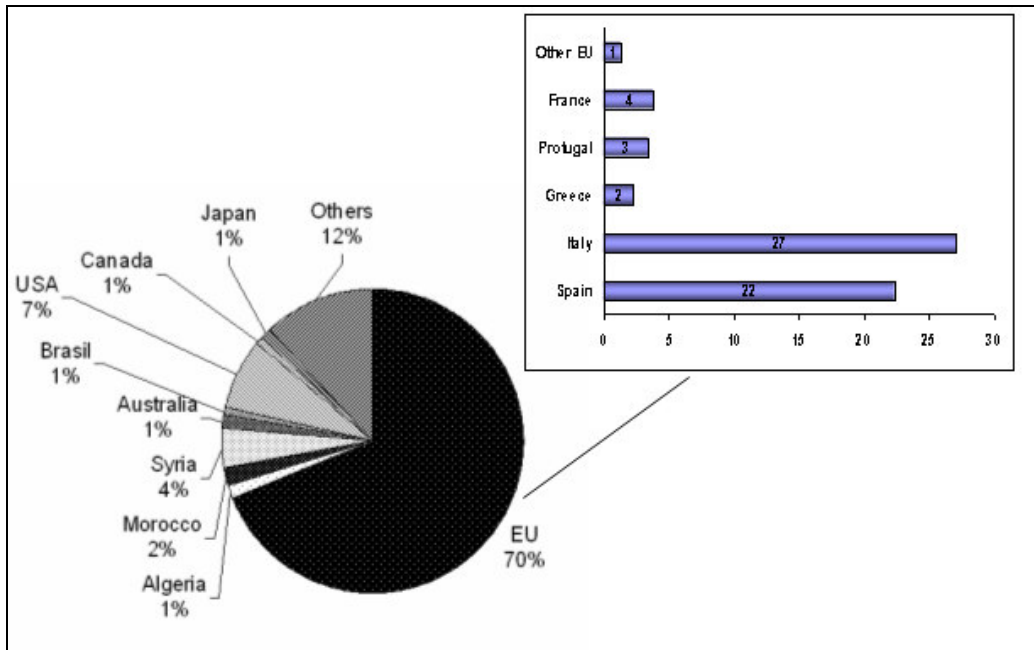
Figure 2 – Share of total production by country - % (2003/04)



Source: Based on FAO data

Olive oil consumption is concentrated in the major producer countries (Figure 3) (UNCTAD, 2006). The EU-15 demand is the highest. It is 70% of total, 50% of which refers to Italy and Spain. The third world biggest market is the United States followed by Morocco and Syria. Among the non traditional consumers Australia, Japan, Canada and Brazil are emerging also thanks to the specific measures to promote consumption supported by the EU⁴.

Figure 3 – Share of total consumption by country – % (2000/01-2004/05)



Source: Based on IOOC and Eurostat data

Olive oil production and consumption strongly affect trade flows: the biggest consumers not only are the most important producers but also the dominant traders. More than 95% of total exports are from the Mediterranean basin countries and trade is mainly intra European, although there are also trade flows with countries out of the Euro-Med area particularly in North America. The role of exports to the new consumers is understood as key in preserving the balance on the olive oil market and in ensuring that there are no structural surplus (ADE, 2002). This implies the need of a

⁴ The promotional programme in third countries is undertaken by the International Olive Oil Council and consists of the measures of dissemination of existing knowledge, market studies, publicity and promotional campaigns provided by the Article 11 of Reg. N. 136/66/EEC.

continuous increase in their consumption and a rise in the integration level of the olive oil world market.

3. Methodology

The indices of competitiveness adopted make reference to the theory of comparative advantages. In other words, the paper focuses on the degree to which the olive oil produced by a country meets the test of international markets under the assumption of open market conditions.

The analysis is based on specific indicators provided by the literature (Sassi, 2003).

The first two refer to the relative trade position approach and express the share of an area in total oil of olive trade both on the export and the import side. They are the *Export Market Share (EMS)* and the *Import Market Share (IMS)* and are defined as follows:

$$EMS = \frac{X_{ij}}{X_i} * 100 \quad (1)$$

$$IMS = \frac{M_{ij}}{M_i} * 100 \quad (2)$$

where,

X_{ij} = olive oil (i) exports of country j

X_i = world total olive oil exports

M_{ij} = olive oil imports of country j

M_i = world total olive oil imports.

The analysis is completed by four specific indices of competitiveness.

The first is the *Standardized Trade Balance (STB)*. It shows the weight of the olive oil trade balance on the overall olive oil trade flows of a country and is of the form

$$STB = \frac{X_{ij} - M_{ij}}{X_{ij} + M_{ij}} * 100 \quad (3)$$

with the same notations as before. The literature often understands the Standardized Balance as a first indicator of specialization: when it increases (decreases) also competitiveness should improve (worsen).

In this respect, following Vollrath (1991), the *Relative Trade Advantage index (RTA)* gives a better information on net trade advantage ($RTA > 0$) or disadvantage ($RTA < 0$) of a country in olive oil trade. It has been estimated according to the following equation:

$$RTA_{ij} = RXA_{ij} - RMP_{ij} = \left[\begin{array}{c} \frac{X_{ij}}{X_{nj}} \\ \frac{X_{ij}}{X_{ir}} \\ \frac{X_{ij}}{X_{nr}} \end{array} \right] - \left[\begin{array}{c} \frac{M_{ij}}{M_{nj}} \\ \frac{M_{ij}}{M_{ir}} \\ \frac{M_{ij}}{M_{nr}} \end{array} \right] \quad (4)$$

where,

RXA_{ij} = relative export advantage of country j in olive oil (i)

RMA_{ij} = relative import advantage of country j in olive oil

n = rest of the commodities

r = rest of the world.

RTA is the difference between the *Relative Export Advantage Index (RXA)* and the *Relative Import Penetration Index (RMP)*. The former indicator underlines a competitive advantage (disadvantage) of a country in olive oil exports when greater than 1 (<1). The *Relative Import Penetration Index* when lower than 1 (>1) suggests that an economy has an advantage (disadvantage) in olive oil imports.

A further improvement is given by the *Relative Competitive Advantage index (RCA)* that provides a more accurate description of the olive oil sector importance for the international specialization of a country than the *STB*. It is of the form

$$RCA = \left(\frac{\frac{X_{ij} - M_{ij}}{X_j + M_j} - \frac{X_j - M_j}{X_j + M_j} * \frac{X_{ij} + M_{ij}}{X_j + M_j}}{2} \right) * 100 \quad (5)$$

When RCI is greater than 0, the contribution of olive oil to trade balance is positive and more than proportional to its weight in total trade, and vice versa when it is negative.

Finally, the *Intra trade industry index* (ITII) or Grubel-Lloyd index (Grubel-Lloyd, 1975) underlines the olive oil trade structure of a country in comparison to that of the others and is given by the following equation

$$ITII = 1 - \left(\frac{|X_{ij} - M_{ij}|}{X_{ij} + M_{ij}} \right) \quad (6)$$

When the index approaches to 1, olive oil exports are roughly equal to imports, or, in other words, olive oil trade structure of the country under analysis tends to be similar to the world trade structure.

When the index approaches to 0, olive oil trade flows consist only of imports or exports. In the former case, trade provides the country with lacking products while in the latter it supplies the other countries with olive oil the area analysed is specialized in.

The analysis refers to the time period 2000-2004 and to 16 countries of the Euromediterranean (Euro-Med) area where production is concentrated. Five of them, Greece, Italy, France, Portugal and Spain, are Member States of the EU-15, and the others are extra-Community countries. They are the signers of the Barcellona Agreement, that is Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Syria, Tunisia and Turkey. Palestine is not included due to lack of data.

In order to estimate the indexes previously introduced, a network matrix has been elaborated for each year of the time period considered on the basis of the data provided by the FAO for the olive oil export flows by country. It points out the trade flows among each of the 16 countries of the sample and a group made of the other traders. As the FAO data does not distinguish among the various typologies of olive oil⁵ the analysis makes reference to its whole category. Finally, total

⁵ The classification of the different categories of olive oil is rather detailed. The four basic typologies of virgin live oil, redefined olive oil, olive oil and olive-pomace oil is further articulated in sub-groups. More precisely, The virgin oil includes virgin oil suitable for consumption (extra virgin olive oil, virgin olive oil, ordinary virgin olive oil) and lampante virgin olive oil while olive pomace oil the crude live-pomace oil, the refined olive-pomace oil and the olive-pomace oil (UNCTAD, 2006a).

merchandise trade refers to the WTO data. In order to compare olive oil and total merchandise data, values have been expressed in current 2000/01 US dollars.

The analysis compares the 2000/01 and 2003/04 average value of the indicators of competitiveness previously presented. This allows to overcome the seasonal trend of the olive oil production, characterised by wide fluctuations brought about by uncertainties of the climate and alternate bearing, changes that strongly affect trade flows (ADE, 2002).

4. Results

The countries of Euro-Med area as a whole represent the leading exporters (with 1,988 million of current dollars on average in 2003/04) and importer (with 2,257 million current dollars on average in 2003/04) on the olive oil world market.

Considering exports, Italy (with 1,292,392 thousand current dollars on average in 2003/04) and Spain (with 1,694,619 thousand current dollars) are the dominant traders on the international market, followed by Tunisia (328,659 thousand current dollars), Greece (213,637 thousand current dollars), Turkey (147,504 thousand current dollars), Portugal (75,028 thousand current dollars) and Syria (31,020 thousand current dollars) (Table 1). The other countries show an EMS lower than 1%. The Mediterranean basin is also an important trade area for almost all the countries analysed (Table 2) and for the majority of them the five EU-15 Euro-Med countries are the most relevant destination and origin markets. However, the network matrix for olive oil exports and imports shows that although trade tends to flows between Mediterranean Countries⁶, it also features the group of “Other Countries” (Table 5 and 6) that sometime absorbs the major trade share of certain trader. In addition to this, the Maps in Appendix 1 underline the relevance not only of the non producer EU Member States but also of the non traditional consumers. For example, the biggest share of the Italian olive oil exports flows part in Germany and part in the US and Canadian markets (Map 1.a).

⁶ Although the olive oil trade has a priority among producers, it does not consist of the only crossed exchanges: the major part of them refers to different typologies of olive oil (INEA, 1998).

Table 1 – EMS and IMS and STB by country (2000/01-2003/04)

	2003/04		% change 2000/01-2003/04		STB	
	EMS	IMS	EMS	IMS	2003/04	% change
Spain	43,35	3,96	14,75	124,67	0,83	-8,66
Italy	32,41	38,13	-6,76	7,68	-0,11	117,17
Tunisia	7,33	0,03	-5,89	-35,19	0,99	0,21
Greece	6,12	0,42	-35,58	153,34	0,82	-15,26
Turkey	4,05	0,03	3,95	-32,19	0,99	5,76
Portugal	1,89	3,78	-25,75	21,02	-0,35	160,31
Syria	1,16	-	919,13	-	1	-
Morocco	0,68	0,36	145,14	5	0,18	-150,32
France	0,51	7,16	-12,2	-5,92	-0,87	0,75
Jordan	0,13	0,001	185,33	-95,22	1	12,94
Lebanon	0,1	0,001	71,01	-74,86	0,96	19,24
Cyprus	0,07	0,01	3227,34	49,02	0,67	-372,24
Egypt	0,06	0,01	190,63	-78,09	0,61	-214,43
Israel	0,01	0,17	105,8	-43,05	-0,84	-11,94
Algeria	0,001	0,02	-51,51	68,76	-0,91	75,3
Malta	0,00001	0,05	0,0001	-18,87	-1	-0,06
Total Euro-Med area	97,86	54,12	0,52	10,6		

Source: Based on FAO data

Table 2 – Share of Euro-Med oil of olive trade on total olive oil trade by country and share of EU trade on Euro-Med olive oil trade by country – (2000/01-2003/04)

	2003/04		%change		2003/04		%change	
	Xmed/ Country	Mmed/ Country	Xmed/ Country	Mmed/ Country	Xeu/ Country	Meu/ Country	Xeu/ Country	Meu/ Country
	Total X	Total M	Total X	Total M	TotMed X	TotMed M	TotMed X	TotMed M
Spain	70,18	80,2	-1,93	-19,3	98,51	66,97	0	1,48
Italy	9,58	88	4,24	1,27	97,47	86,27	0	0,12
Tunisia	93,5	19,61	1,5	100	99,29	95,45	0,01	0,91
Greece	82,99	97,16	5,72	2,61	99,66	100	0	0
Turkey	68,42	48,45	15,15	-1,94	93,17	93,3	-0,03	0,74
Portugal	16,66	99,03	-9,9	-0,91	99,83	100	0,01	0,01
Syria	99,33	0	4407,8	-	34,37	0	-0,31	-
Morocco	52,31	67,46	455,44	-32,54	50	66,99	-0,5	0,11
France	18,85	98,85	-12,77	0	93,31	99,78	0,01	0
Jordan	36,68	90,91	-39,29	-9,09	0	100	-	0,43
Lebanon	28,12	90,93	-28,82	-8,92	96,66	39,33	-0,03	-0,26
Cyprus	94,25	100	88,5	1,94	49,04	99,99	-	0
Egypt	58,39	98,26	-4,29	2,79	25,73	96,51	1,62	-0,01
Israel	12,05	98,63	177,77	6,91	100	68,04	1	-0,03
Algeria	38,89	99,96	1421,74	3,6	0	100	-1	0

Malta	0	99,49	-	1,57	0	99,87	-	0,02
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Source: Based on FAO data

According to the STB the Euro-Med countries can be grouped into the following four categories:

- Strong net importers: Algeria, Israel, France and Malta with imports more than 80% of their total trade flows;
- Strong net exporters: Greece, Jordan, Lebanon, Spain, Syria, Tunisia and Turkey with exports more than 80% of their trade flows and Cyprus and Egypt with more than 60%;
- Weak net importers: Italy and Portugal with imports less than 0.20 of total trade flows;
- Weak net exporter: Morocco with exports less than 0.20% of total trade flows.

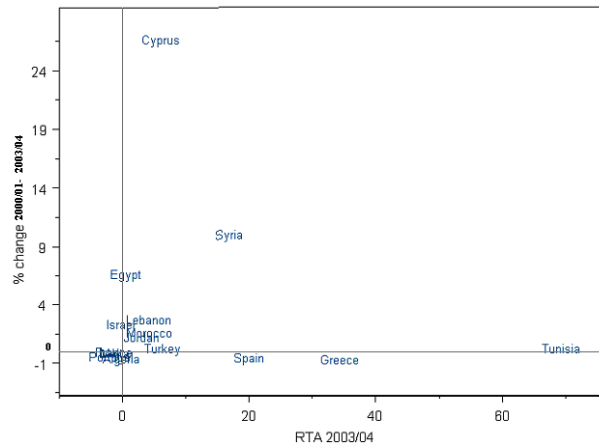
Understanding STB dynamics as a first indicator of competitiveness, the net importers have further deteriorated their position over the time period analysed while among the net exporters only Jordan, Lebanon and Turkey show a significant improvement.

The specific indicators of competitiveness support only partly the result, underlining a more articulated context particularly among the net exporters.

According to the RTA five groups of countries emerge (Figure 4). They are:

- Greece, Spain and Tunisia with a net and strong trade advantage but stable or decreasing over time;
- Cyprus and Syria with a net trade advantage and significant improvement over the time period analysed;
- Jordan, Lebanon, Morocco and Turkey with net trade advantage and a relatively low improvement over time;
- Egypt and Israel with a net trade disadvantage and further deterioration from 2000/01 and 2003/04;
- Algeria, France, Italy, Malta and Portugal with a net trade disadvantage but an improvement in their position over the time period analysed.

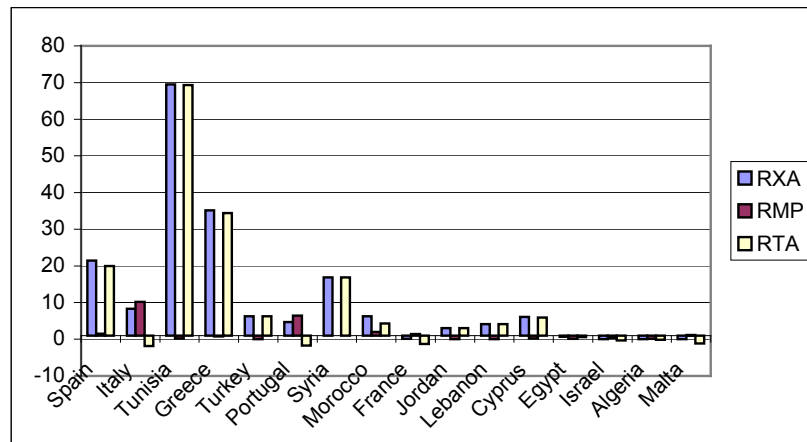
Figure 4 – Relative trade advantage index by country - 2003/04 and % change 2000/01-2003/04



Source: Based on FAO data

Figure 5 underlines that, a part from Algeria, Egypt, France and Israel, all the countries of the Mediterranean basin have a relative export advantage in olive oil. It is particularly high for Greece, Spain, Syria and Tunisia.

Figure 5 - Relative trade advantage index, Relative Export Advantage Index and Relative Import Penetration Index (2003-2004)



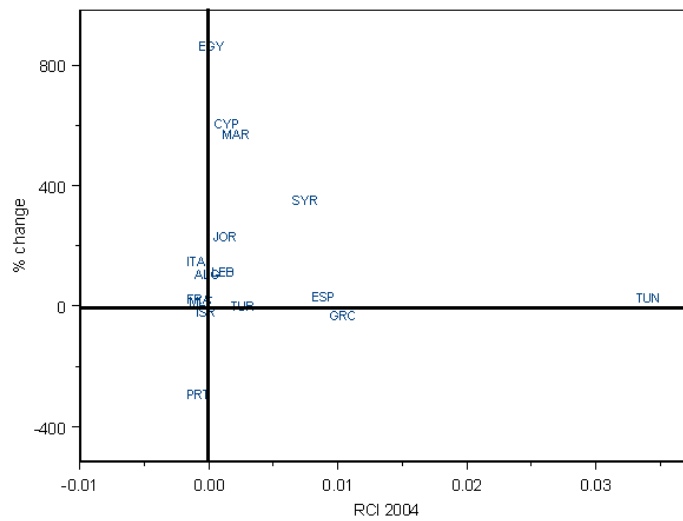
Source: Based on FAO data

As olive oil trade represents a low share of total merchandise traded by countries, RCI shows very low values (Figure 6). However, the index points out that for the exporters the contribution of the olive oil sector to trade balance is positive and more than proportional to its weight in total trade.

Furthermore, Figure 7 underlines a strong linear correlation between RTA and RCI with Tunisia, Greece, Spain, Syria and Turkey with the highest net trade advantage and the olive oil sector strategic for their international specialization.

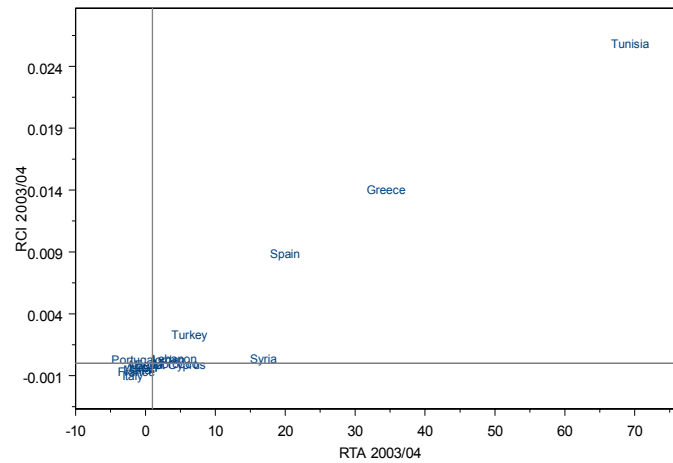
The IITI confirms the export or import oriented feature of the olive oil trade by country with the only exception of Italy (Figure 8).

Figure 6 - Relative competitive advantage index by country – 2003/04 and % change 2000/01-2003/04



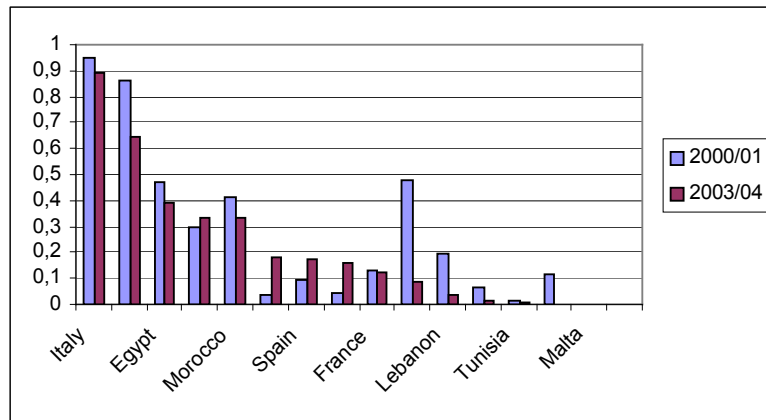
Source: Based on FAO data

Figure 7 – Relative trade advantage index and Relative competitive advantage index by country - 2003/04



Source: Based on FAO data

Figure 8 - Intra trade industry index (2000/01-2003/04)



Source: Based on FAO data

5. Conclusions

The analysis has pointed out interesting aspects. First of all, it has underlined an increasing integration process on the olive oil market due to an increase in trade stronger than that in production. This process has been mainly influenced by a positive dynamic in the demand coming, specifically, from the new markets characterized by a relatively low level of per capita consumption.

Olive oil production, consumption and trade are concentrated in the Mediterranean area, with few countries assuming a dominant position.

The empirical analysis has highlighted a relative advantage and specialization in olive oil trade for Tunisia and, although at a lower degree, for other countries such as Turkey, Lebanon, Syria, Spain. The olive oil exports play a strategic role compared to the production level specifically for Tunisia, both for the commercial balance and for the agricultural value added.

The structure of trade reveals a complex network, with the specific features compared to other agricultural commodities. At least, two main features should be underlined. The first concerns the role of one of the EU member countries, that is Italy. It is the collector of the bulk of trade flows coming from both non-member net exporters (for example, Tunisia and Turkey) and other member countries (mainly Portugal and Spain). The second regards the position of the main market of olive oil coming from the Mediterranean area that is again Italy where a high level of domestic demand is combined with a high level of exports to other non producing countries. In other terms, the Italian market assumes a “pivotal” role in the trade structure, because a large part of olive oil coming from the other countries undergoes some degree of processing and bottling in Italy. These quantities, adding to domestic production, acquire an Italian label and are destined for both domestic consumption and trade. Trade flows are for the biggest share towards the world market (USA, Canada and so on) and the remaining towards the other European Members (mainly Germany).

This explains the double role of Italy as one of the main importer and exporter on the Mediterranean area and its export differentiation in terms of areas of destination in a sector where the other exporters are mainly concentrated on the European market.

The olive oil trade structure also explains the importance of the APT processes within the Euro-Mediterranean market. A free trade area, with the consequent elimination of any tariff and non tariff barrier, should imply an increasing competitiveness mainly exerted by the non-member countries characterized by an higher comparative advantage in olive oil trade. Tunisia and, with a lower potential, Turkey, Lebanon, Syria are typical examples. As a consequence, the institutional reform should boost the olive oil production and trade in the countries where the sector assumes a strategic value in GDP and rural incomes, taking advantage of their relative position. Thus, the free

trade area can imply a positive effects in the agricultural incomes and rural development for areas characterized by a low income level and by shortage of other economic opportunities.

The positive impacts on the production and trade levels could be balanced only if they will be linked to the dynamics in the demand coming, especially and as expected, from the new and emerging markets. On these markets it is possible to foresee a gradual increase in the level of consumption thanks to the positive image of olive oil in terms of quality and safety and the spreading of new eating habits.

But the overall balance of the olive oil market is fragile at the moment, also for a recent rise in the olive oil production. The future balance might be brought into question if world production will rise faster than expected or if demand falls as a result of a shortage of new consumers. In this respect, it should be kept into account that in the 1990s the new investments in olive trees plantations have reached high levels in the EU producing countries as a whole despite their exclusion from the Community aid (OLISTAST data). This process can be explained both for the profitability of the new olive groves net of aid and for the expectation of certain producers concerning the effective application of the aid restriction on new plantation. In any case, the investments in the last decade will be completely productive in the near future with a estimated production of at least 360.000 tonnes (OLISTAT data). Based on the growth rates in the production and consumption in the Community for the 1990s, the market organization evaluation promoted by the Commission suggests that by 2010 the average production will exceed EU domestic demand by 10 to 16,6% compared with 5,1% in 2000. This predictable increase in olive oil producing member countries will be added to a possible larger volume from the non-member countries having a net relative advantage thanks to the elimination of European protectionism.

The final expected result is certainly in a higher competitive pressure from Mediterranean non-member countries that will influence both new and traditional markets where an increasing capacity of exports could be substitute for domestic production both in the internal demand and in the exports to the world market; in this last case after some processing and bottling phases. In this

perspective, not only a share of the Italian production, more inefficient, but also quotas of production of other member countries supplying the Italian market, both for final demand and oil mills, will be influenced by an higher competitive pressure, combined with a stronger competition on the domestic markets.

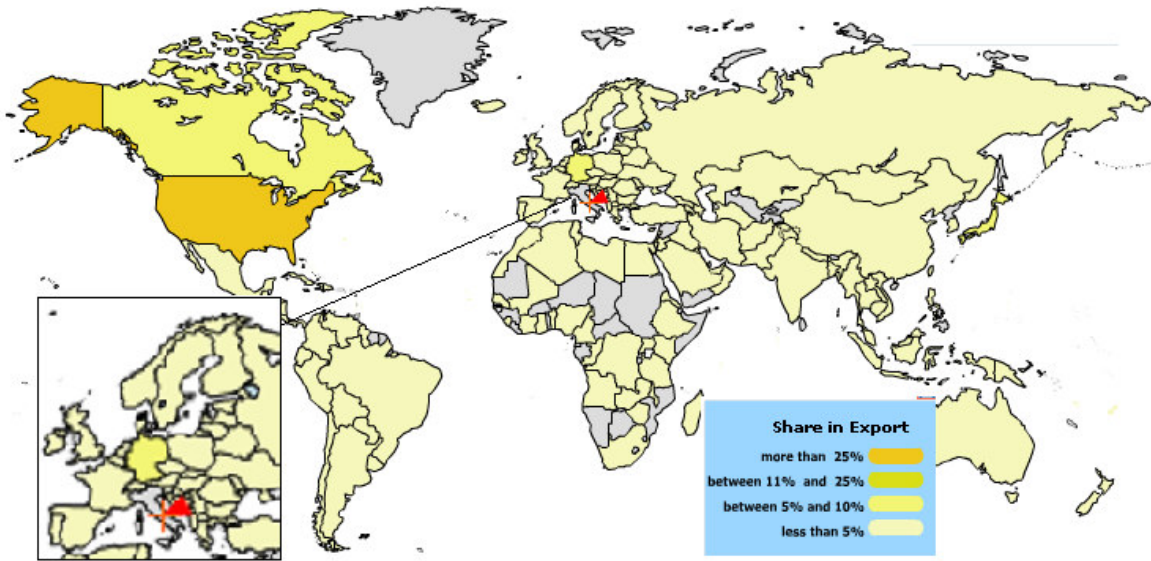
The desirable positive effects for rural development of some Mediterranean non-member countries should have a negative impacts on the European areas characterized by a lower development level and in which the olive oil sector assumes a relevant social, cultural and landscape value. Policy interventions have a key role in avoiding this impact. They should support structural programmes for rural areas in order to boost the level of demand on the European new Member States and promotional actions on the world market emphasising the high quality and safety standards of the European production. Quality is a key factor in increasing consumer confidence and the level of per capita consumption in both the EU and third countries. In this respect, traceability becomes a strategic instrument of this strategy.

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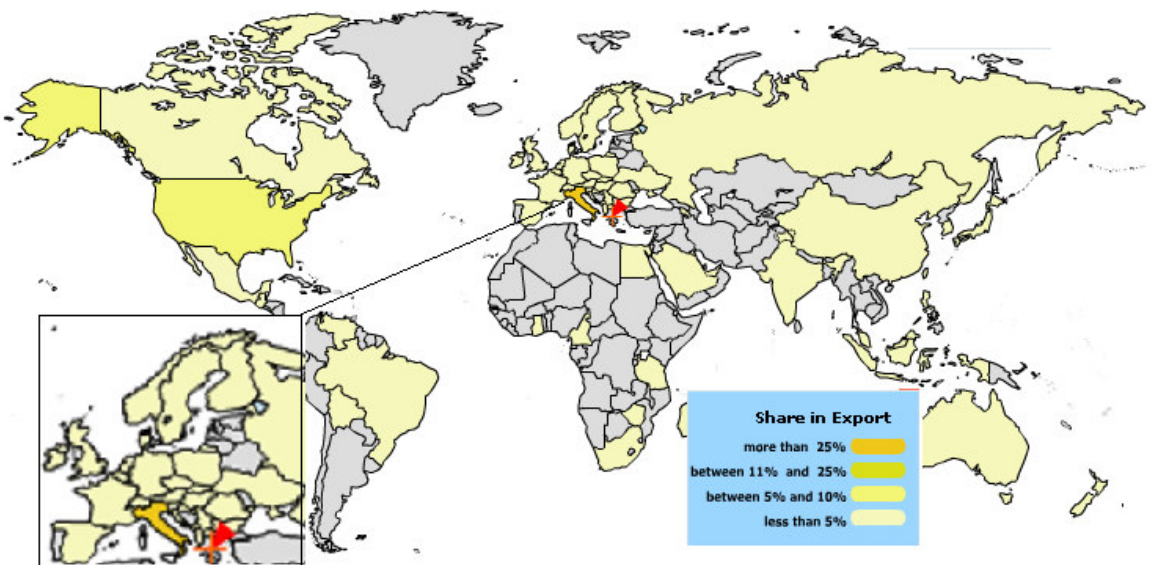
Appendix 1 – Virgin olive oil exports by destination country of the dominant exporters

Map 1.a – Italy: virgin olive oil exports by destination country



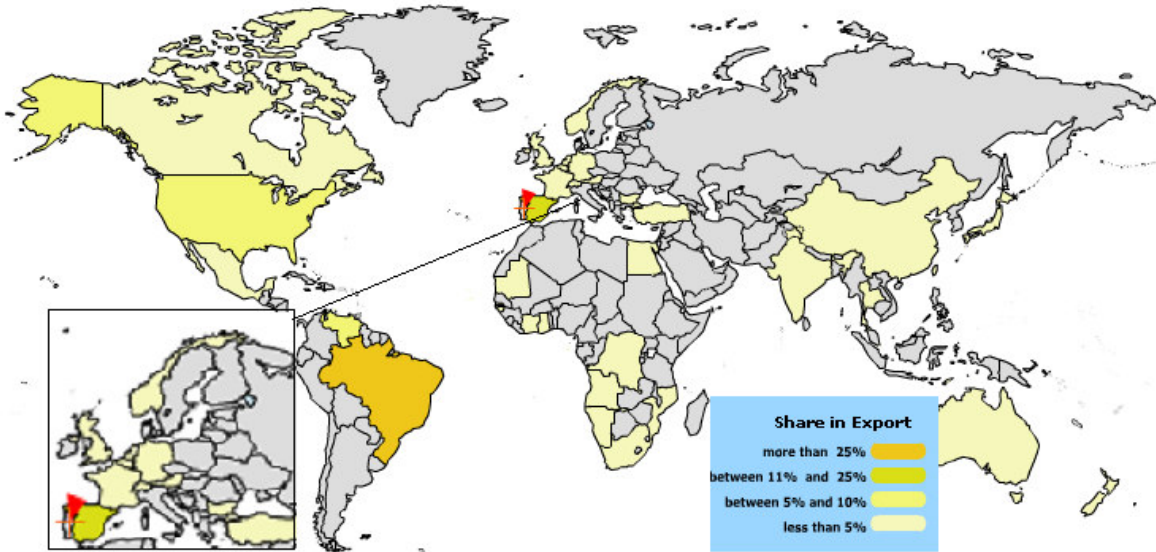
Source: Based on FAO data

Map 1.b – Greece: virgin olive oil exports by destination country



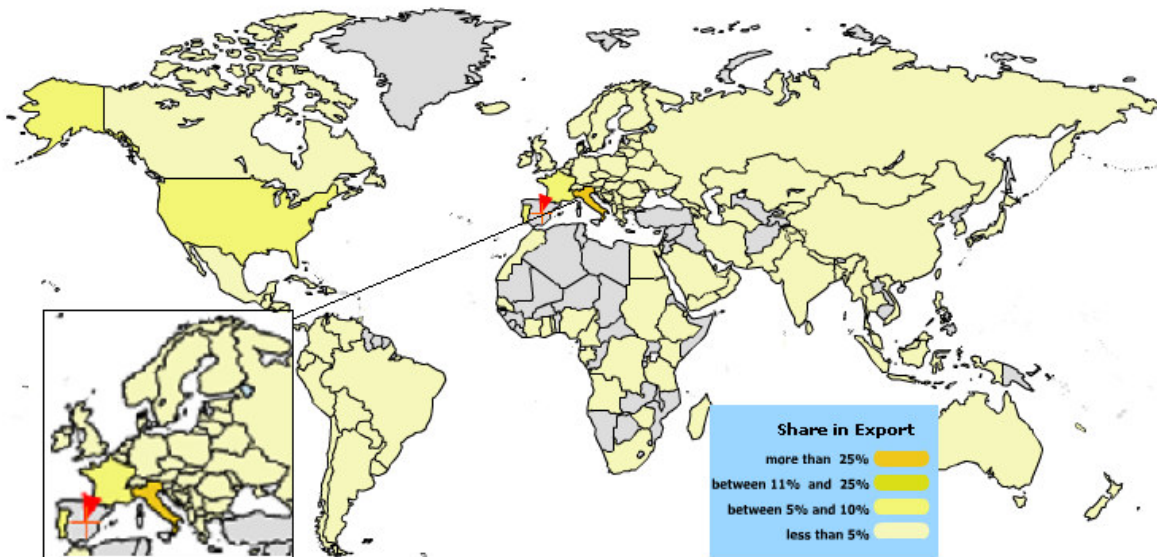
Source: Based on FAO data

Map 1.c – Portugal: virgin olive oil exports by destination country



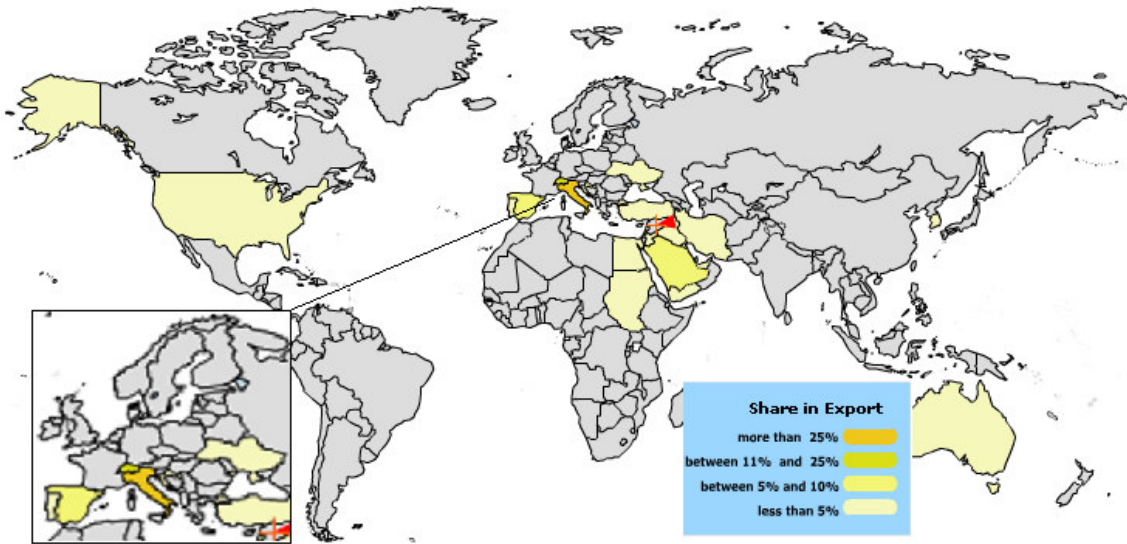
Source: Based on FAO data

Map 1.d – Spain: virgin olive oil exports by destination country



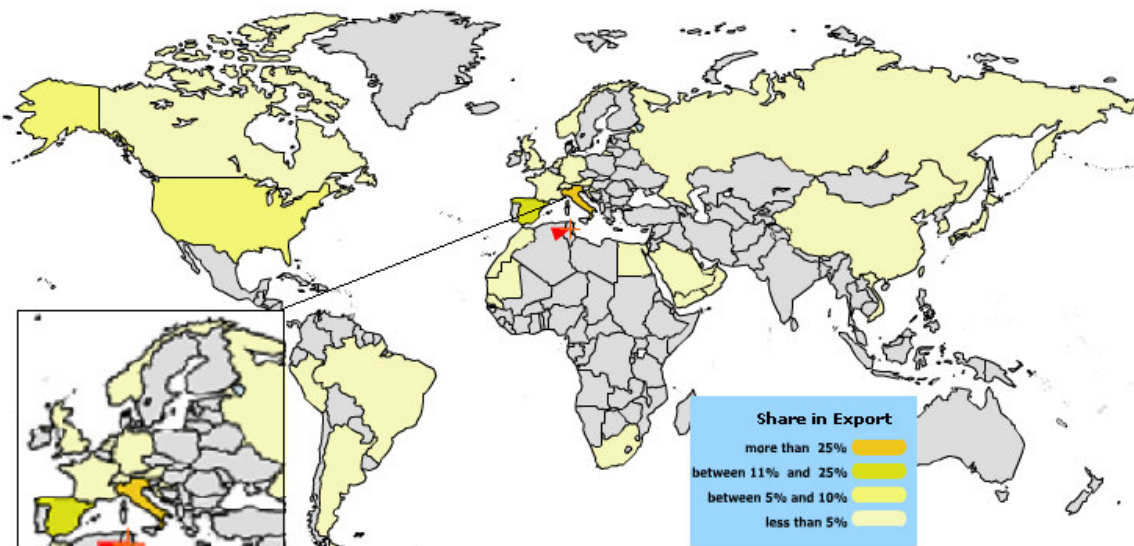
Source: Based on FAO data

Map 1.e – Syria: virgin olive oil exports by destination country



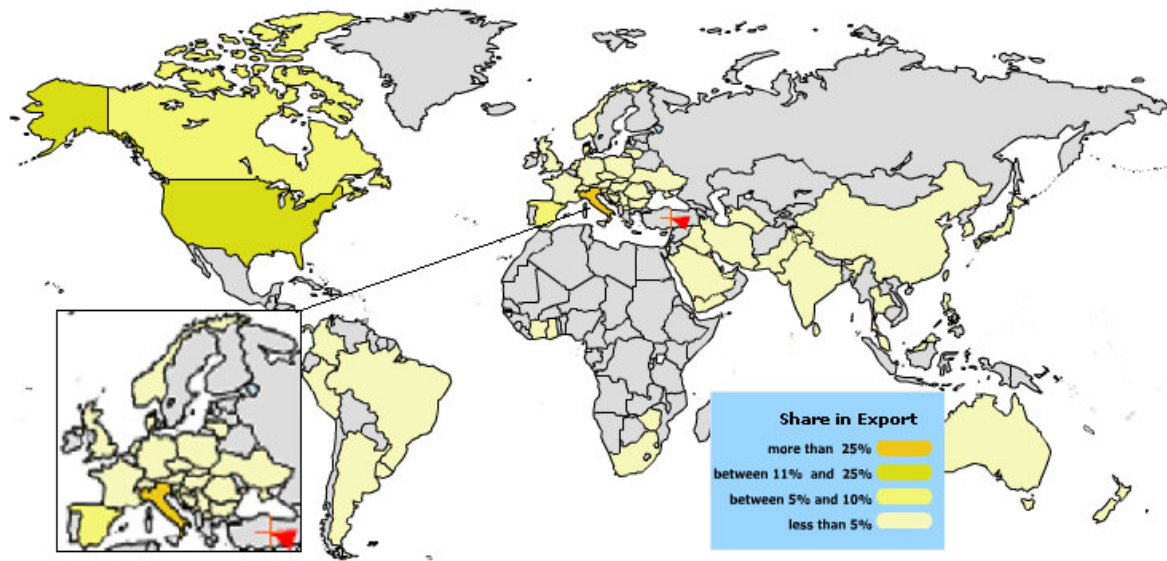
Source: Based on FAO data

Map 1.f – Tunisia: virgin olive oil exports by destination country



Source: Based on FAO data

Map 1.g – Turkey: virgin olive oil exports by destination country



Source: Based on FAO data

Table 5 - Export flows - % (2003/04)

	Greece	Italy	France	Spain	Portugal	Algeria	Cyprus	Egypt	Israel	Jordan	Lebanon	Malta	Morocco	Syria	Tunisia	Turkey
Greece		0,81	0,01	0,42	0,37											
Italy	81,55		14,23	48,57	3,01		89,33	43,15	6,89		16,90		71,38	83,02	73,51	58,55
France	1,18	6,18		11,89	2,06		1,02		5,77	0,28	1,77		0,07		0,13	0,01
Spain	3,43	1,99	4,37		9,92						9,61		12,21	13,74	18,79	7,14
Portugal			0,19	8,73							0,60		2,84	0,96		0,15
Algeria			0,04	0,05												
Cyprus	0,13		0,02	0,01												
Egypt	0,09	0,01		0,01	0,02					0,28	0,35			0,07		
Israel	0,01	0,02	0,23	0,22	0,25			14,12		37,16						0,13
Jordan											0,01					
Lebanon			0,04								0,41			0,11		
Malta	0,04	0,09	0,09	0,03				0,05								
Morocco		0,03	0,01	0,03	0,13			1,06						1,48	0,50	1,67
Syria																
Tunisia		0,01	0,03													
Turkey				0,05			2,75									
oil Exports to extra MED	13,57	90,84	80,74	29,99	84,23	100,00	6,90	41,62	87,34	62,28	70,33	100,00	13,50	0,62	6,23	32,34
Totale oil exp.	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00

Source: Based on FAO data

Table 6 - Import flows - % (2003/04)

	Greece	Italy	France	Spain	Portugal	Algeria	Cyprus	Egypt	Israel	Jordan	Lebanon	Malta	Morocco	Syria	Tunisia	Turkey	oil import to extra MED	Totale oil imp
Greece		57,49	0,01	38,63	1,52												2,34	100,00
Italy	10,93		0,17	51,62	0,14		0,14	0,06			0,04		1,39	2,20	15,15	5,42	12,74	100,00
France	0,87	27,60		69,67	0,53		0,01		0,01		0,02		0,01		0,14		1,11	100,00
Spain	4,15	14,58	0,48		4,21						0,21		2,14	3,28	34,93	5,96	30,06	100,00
Portugal		0,02	0,02	96,29							0,01		0,57	0,27	1,79	0,15	0,87	100,00
Algeria	1,23	1,53	0,82	95,72											0,65		0,06	100,00
Cyprus	63,24	13,99	0,81	21,97														100,00
Egypt	35,45	15,66		31,22	2,40					2,69	2,59			5,28	2,40		2,31	100,00
Israel	0,37	4,60	0,66	55,11	2,79			4,47		27,78						2,87	1,35	100,00
Jordan		75,00									8,33						16,67	100,00
Lebanon		14,04	9,94	0,01							18,13			55,56			2,33	100,00
Malta	4,09	63,38	0,90	30,88				0,05								0,11	0,58	100,00
Morocco		3,05	0,01	4,54	0,78			0,18						5,03	13,26	19,82	53,32	100,00
Syria																		-
Tunisia		16,64	0,44														82,92	100,00
Turkey		0,44		85,42			6,75										7,39	100,00

Source: Based on FAO data