

# Competitiveness of the Southern Mediterranean Countries in the Italian agri-food market<sup>1</sup>

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## 1 Introduction

Relations between the European Union and Southern Mediterranean Countries (SMCs) have developed and intensified over the last ten years.

On one side, this process could be part of the increase in the volume at global trade, connected to the globalization of markets, fostered by the availability of new and more efficient techniques of conservation and of transportation. On the other side, the implementation of the Association Agreements between the EU and the SMC, together with the evolution of the Barcelona process, has increased trade in the Mediterranean region.

Italy is playing an important role in reinforcing and expanding the commercial relationships among Mediterranean countries, though, more for its geographical location than for its economy.

The Italian balance of trade is characterized by a structural deficit, -7.817 million Euros in 2004. Notwithstanding this, the situation improved between 1993 and 2004: the normalized balance of trade went from -35% to -17%, thanks to a greater increase in exports than in imports.

The deficit is more serious for primary than for processed products. The Italian industry buys raw materials, transforms them and produces goods destined to satisfy the growing demand for high-added value manufactured products.

## Abstract

Political and economic changes over the last ten years have intensified agri-food trade among Mediterranean countries. This paper aims to examine the exchanges between Italy and these countries. The analysis of these exchanges highlight trends that indicate Italy's agri-food balance has deteriorated during the previous ten years. A Constant Market Shares Analysis has been performed on Italy's fruit and vegetable imports from Egypt, Turkey, Morocco and Tunisia, which aims to assess their competitiveness. The results are then compared with those of Italy's major fruit and vegetable suppliers, the EU and Latin America, which indicate some Mediterranean Partners have high levels of competitiveness.

**Keywords:** competitiveness, Mediterranean region, agri-food trade, partnership.

## Résumé

*Ces dix dernières années, les changements politiques et économiques ont intensifié le commerce agroalimentaire entre les pays méditerranéens. Cette étude examine les échanges entre l'Italie et ces pays. L'analyse de ces échanges montre que le bilan agroalimentaire italien s'est détérioré. On a appliqué la Constant Market Shares Analysis aux importations italiennes de fruits et de légumes à partir de l'Égypte, de la Turquie, du Maroc et de la Tunisie afin d'évaluer leur compétitivité. Les résultats ont été comparés avec les principaux fournisseurs de fruits et de légumes pour l'Italie, voire l'UE et l'Amérique latine, ce qui indique que certains partenaires méditerranéens ont des niveaux de compétitivité élevés.*

**Mots clé:** compétitivité, région méditerranéenne, commerce agroalimentaire, partenariat

The primary trade partners for Italy are the 25 EU members, with a share of about 70% on both the imports and the exports. Outside the European borders, Italian imports come mainly from the developing countries and are directed for the most part towards North America and non-EU European countries.

SMCs possess only peripheral shares of the Italian exchanges of agri-food product: they absorb a mere 2% of exports and 4% of imports comes from them. However, if considering only agricultural products, the SMCs achieve greater importance, being the origin of 5% of the Italian imports of this category.

The trend of Italian agri-food exchanges with the SMCs contradicts the world trend. A noticeable deterioration marked the normalized balance of trade, that dropped from -20% in 1993 to -49% in 2004. Between the biennia 1993-94 and 2003-04, the value of imports of agri-food products from SMCs increased by 81%, while the value of exports declined by 6%. Nevertheless Mediterranean countries didn't gain much in terms of market shares, because of the scarcity of their exports.

This work aims to analyse data on the exchanges between Italy and its Mediterranean Partners, to identify trends and to study the level of competitiveness of the SMCs in the agri-food Italian market. The commercial performances of Southern Mediterranean countries will be examined, for all agri-food products together and for single categories of goods, with particular attention given to vegetable and fruit.

## 2 Methods

At first, trends and breakdowns, by product, of exchanges between Italy and the SMCs were analysed. Some indica-

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tors of Italy's competitiveness, in the world market and in its trade with the SMCs, were calculated.

Subsequently the performances of some SMCs were compared with those of Italy's main trade partners, the EU and Latin America. Constant Market Shares Analysis (CMSA) was used for this purpose. It is a tool for the quantitative analysis of international exchanges, aiming at the evaluation of one or more countries exporting in one or more destination areas. It is based on the decomposition of the variations occurred either in their exports or in their market shares.

The 1970 Leamer and Stern formulation was selected for this work as it offered the best results, thanks to assumptions and a construction consistent with the objects of the research. It analyses the exports rather than the shares. The destination area may consist in more than one country, but here it is only the Italian market. The following description will therefore concern the application to a single destination market.

The methods rely on the background consideration that the growth rate of imports coming from the whole world is different from the growth rate of imports coming from a single country. For each exporting-supplier country, the difference between the real change in its imports and the change that would have occurred if those imports had been subject to the global growth rate, can be broken into two components, that correspond to the second and third effect in the formal decomposition:

$$V^t - V^0 = (rV) + \sum (r_i - r)V_i + \sum (V_i^t - V_i^0 - r_i V_i^0) = [rV] + \underbrace{\left[ \sum r_i V_i - rV \right]}_I + \underbrace{\left[ \sum (V_i^t - V_i^0) - \sum r_i V_i^0 \right]}_{II+III}$$

where

$V$  = total imports from an exporting country, at the beginning of the period of observation;

$V^t$  = total imports from an exporting country, at the end of the period of observation;

$V_i$  = imports of product  $i$ , from an exporting country, at the beginning of the period of observation;

$V_i^t$  = imports of product  $i$ , from an exporting country, at the end of the period of observation;

$r$  = percentage change of total imports from all over the world, during the period of observation;

$r_i$  = percentage change of imports of product  $i$  from all over the world, during the period of observation.

The effects I, II, III, calculated for each exporter, can be defined as follows:

Growth effect (I): it reflects the general increase of total imports of the importing country; hence its weight on the export change is identical for all the supplying countries and for all products.

Commodity composition effect (II): it is caused by the heterogeneity of growth rates among products, in the imports of the importing country coming from all over the world; the supplier countries are differently affected, according to the initial composition of their exports.

Residual effect, interpreted as competitiveness effect (I-II): for each product and each supplier country, it is the difference between the observed variation in the country's exports and the variation that would have occurred if that country experienced growth rates identical to those of imports from the whole world, distinct by product. It measures the ability to gain market shares, or the part of the exports growth that is not attributable to the increased demand in the destination market, be it total or differentiated by product.

Discrepancies between data in value and in quantity suggest price changes, so the analysis was performed on both.

The classification and selection of goods influence the results considerably. The categories were therefore defined in order to be (i) as homogeneous as possible, in their behaviour relevant to the analysis (ii) important to Italy's trade with the SMCs.

Vegetable and fruit were analysed separately. For vegetable, CMSA adopted the following categories: "potatoes", "fresh tomatoes", "onions and other alliaceous vegetable", "other fresh and dried vegetable", "prepared or preserved tomatoes", "other prepared or preserved vegetable". Fruit were broken into: "citrus fruit", "other fresh fruit", "nuts", "prepared or preserved fruit". Coeweb, the Italian Statistic Institute database on trade, is the source of data. They consisted of the Italian imports from Turkey, Egypt, Morocco and Tunisia; the 25 EU members and Central and Southern America (altogether) were added for comparisons, as they are Italy's main fruit and vegetable suppliers.

### 3. Trade between Italy and the Southern Mediterranean Countries

The introduction depicted the broadening of Italy's agri-food deficit with the SMCs, as well as the small amount of Italian imports from those countries.

A look at the composition of the flows shows that primary products represent almost half of all agri-food goods coming from the SMCs to Italy (about 46% in 2003-04, 54% in 1993-95). The normalized balances are negative for all the most important agricultural goods. The SMCs supply a third of the nuts and of the cotton Italy purchases abroad and one tenth of the fresh and dried vegetable (tab. 1).

The importance of processed products in imports from SMCs has been growing in the period under examination. As a consequence, the normalized balances have deteriorated for many processed goods. The Mediterranean Countries cover a crucial role in supplying olive oil; imports from that area represent one fourth of the monetary value of Italian imports for olive oil and have been growing at an average annual rate of 7.4%.

In 2003-04, 75% of Italian exports directed to the Mediterranean area consisted of processed goods. This percentage is similar to Italian global exports (towards the whole world) share of processed goods and, unlike the

world, it has been decreasing. This change opposed general trends and has been caused by an exceptional drop in milling industry products exported to Algeria and, to a lesser extent, to Syria and Israel. The intensity of the phenomenon reduced the entire Italian agri-food exports towards SMCs, in spite of the expansion of exports for primary products and for many processed products, to the SMCs..

As for market shares, SMCs attract 70% of Italian exported wheat. This flow doesn't generate a large monetary value because wheat is not an important product within Italian exports.

Italy's performance indexes, evaluating agri-food trade with the SMCs (tab. 2), confirm initial discussion. The indexes are more meaningful when looking at the changes between the beginning and the end of the period, rather than at their absolute values, that are always small, because of the tiny SMCs' shares on trade flows.

Export propensity diminished because of the reduction in milling industry products exported. If the effect of the category could be eliminated, one could advance the hypothesis that the export propensity would remain almost constant, thus assuming that other categories' exports grew proportionally to Italy's agri-food internal production.

Import propensity increased, as expected.

Trade openness (volume of trade/internal production) was constant, but logically it would have grown if it was not for the drop in milling industry products exports.

Export/import ratio towards the SMCs went from 66% to 37%, as result of the small reduction of exports and of the notable raise in imports from the Mediterranean countries. The trend is opposite to that of the whole world, that grew from 56% to 71%, thanks to an improvement of the overall trade deficit.

Table 1: Italian agri-food trade with the SMCs (data in value, countries' shares calculated for 2003-04)

	Export				Import			
	1993-94 (€)	2003-04 (€)	MPCs' share on Italian exports	Average annual growth rate	1993-94 (€)	2003-04 (€)	MPCs' share on Italian imports	Average annual growth rate
<b>Primary products</b>	<b>66.168.346</b>	<b>88.092.582</b>	<b>2%</b>	<b>+2,9%</b>	<b>290.716.464</b>	<b>463.662.038</b>	<b>5%</b>	<b>+4,8%</b>
Live animals	3.067.568	751.748	2%	-13%	1.325.909	2.039.927	0%	+4%
Fresh fish	26.083	750.763	1%	+40%	24.823.607	42.787.313	8%	+6%
Live trees and other plants	3.267.767	15.666.646	3%	+17%	4.373.686	4.739.858	1%	+1%
Fresh vegetable	663.629	2.701.094	0%	+15%	15.886.451	57.375.277	9%	+14%
Dried vegetable	38.890	613.823	1%	+32%	15.203.944	18.919.929	10%	+2%
Nuts	946.151	453.190	0%	-7%	55.959.651	101.894.346	30%	+6%
Fresh fruit	1.761.452	9.044.813	0%	+18%	46.461.642	71.383.446	6%	+4%
Coffe, tea and spices	74.263	2.013.846	8%	+39%	636.294	1.088.354	0%	+6%
Cereals	24.224.151	30.093.536	32%	+2%	3.086.598	18.482.450	1%	+20%
Oil seeds	1.795.006	4.436.665	4%	+9%	14.515.835	18.882.179	3%	+3%
Raw cocoa	0	0	-	-	0	25.606	0%	-
Raw tobacco	25.401.322	13.870.234	6%	-6%	7.707.173	2.387.434	2%	-11%
Wood and articles of wood	397.939	731.061	7%	+6%	7.020.318	3.868.113	1%	-6%
Cotton	144.283	1.226.836	11%	+24%	76.804.412	82.742.463	29%	+1%
Other products of animal origin	1.450.064	2.733.809	2%	+7%	9.421.156	23.339.232	3%	+9%
Other products of vegetable origin	2.909.780	3.004.522	10%	0%	7.489.791	13.706.116	6%	+6%
<b>Processed products</b>	<b>307.234.438</b>	<b>263.897.734</b>	<b>2%</b>	<b>-1,5%</b>	<b>271.815.509</b>	<b>553.682.584</b>	<b>3%</b>	<b>+7,4%</b>
Meat and preparations of meat	11.091.146	10.303.626	1%	-1%	760.067	2.409.128	0%	+12%
Fish and preparations of fish	838.940	10.363.444	3%	+29%	86.343.914	145.297.669	6%	+5%
Dairy produce (no eggs)	1.921.383	3.979.514	0%	+8%	25.495	142.288	0%	+19%
Milled rice	13.091.619	19.386.886	7%	+4%	392.826	114.352	1%	-12%
Milling industry products	142.825.792	15.170.980	8%	-20%	946.153	82.281	0%	-22%
Animal or vegetable fats and oils	26.412.152	15.719.497	1%	-5%	118.668.399	293.585.240	15%	+9%
Sugar confectionery	47.841.605	50.894.691	7%	+1%	6.048.824	17.423.208	2%	+11%
Prep. of cereals and pastrycooks' prod.	19.503.988	44.274.394	2%	+9%	577.132	3.581.617	1%	+20%
Preparations of vegetable	4.548.206	7.307.056	1%	+5%	12.240.434	19.359.125	3%	+5%
Preparations of fruit	1.874.045	5.259.237	1%	+11%	19.458.249	30.086.053	7%	+4%
Beverages, spirits and vinegar	6.309.655	20.536.437	1%	+13%	93.130	1.871.048	0%	+35%
Prepared animal fodder	19.441.158	14.627.009	6%	-3%	1.228.915	15.307.157	1%	+29%
Other processed products	7.344.319	46.074.965	3%	+20%	1.950.388	24.423.421	2%	+29%
<b>Total agri-food products</b>	<b>373.402.784</b>	<b>351.990.316</b>	<b>2%</b>	<b>-1%</b>	<b>562.531.972</b>	<b>1.017.344.622</b>	<b>4%</b>	<b>+6%</b>

Source: Istat

Table 2: Italy's performance indexes on agri-food trade with the SMCs.

	average 1993-94	average 2003-04
<b>EXPORT PROPENSITY</b> ( <i>export / internal production</i> )		
Agri-food	0,4%	0,2%
Primary	0,2%	0,2%
Processed	0,5%	0,3%
<b>IMPORT PROPENSITY</b> ( <i>import / internal supply</i> )		
Agri-food	0,6%	0,7%
Primary	0,7%	1,0%
Processed	0,4%	0,5%
<b>OPENNESS TO TRADE</b> ( <i>volume of trade / internal production</i> )		
Agri-food	0,9%	0,9%
Primary	0,9%	1,2%
Processed	0,9%	0,8%
<b>EXPORT/IMPORT</b>		
Agri-food	66,4%	34,6%
Primary	22,8%	19,0%
Processed	113,0%	47,7%

Source: Istat

Italian export are not distributed equally among the SMCs: the first 5 countries (Turkey, Algeria, Israel, Albania, Lebanon) possess similar shares, between 12% and 19%, summing up to 80% (tab. 3).

Imports are even more concentrated than exports: the five main countries' concentration index amounts to 92%. Goods coming from Turkey and Tunisia account for 35% and 25% respectively of the monetary value of Italy's imports from the SMCs. The greater growth rate, on average

is 15% per year and belongs to Egypt, which is ranked only sixth in 1993-94 (tab. 3).

The breakdown of exchanged products into primary and processed (fig. 2) confirms that the latter category prevails over the former on the exports, with the exception of Algeria. Nearly 60% of flows directed to this country consist of primary goods (46% wheat).

Primary commodities place more weight on imports, especially on those originating from Egypt. The supremacy of

Table 3: Amount, composition and variation of Italy's imports and exports with SMCs.

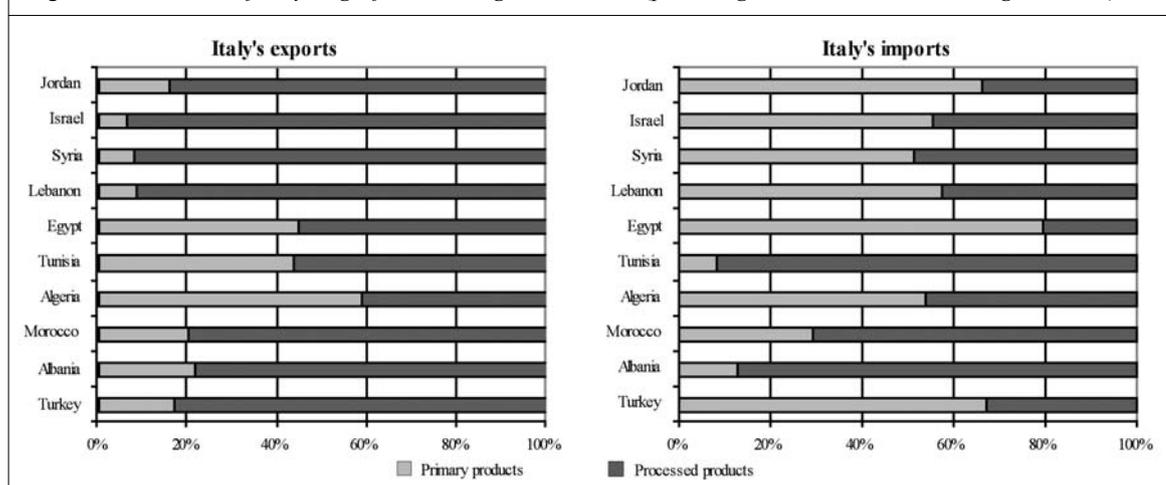
	ITALY'S IMPORTS				ITALY'S EXPORTS			
	1993-04 (€)	2003-04 (€)	Country's share on Italy imports from MPCs (2003-04)	Annual average variation rate	1993-04 (€)	2003-04 (€)	Country's share on Italy exports to MPCs (2003-04)	Annual average variation rate
Turkey	175.901.614	352.303.380	34,6%	+7,2%	26.172.990	66.333.421	18,8%	+9,7%
Tunisia	155.666.015	257.518.279	25,3%	+5,2%	13.420.781	16.980.876	4,8%	+2,4%
Morocco	83.892.933	133.530.166	13,1%	+4,8%	4.628.969	12.380.510	3,5%	+10,3%
Egypt	27.476.950	112.392.420	11,0%	+15,1%	41.294.323	25.474.410	7,2%	-4,7%
Syria	60.138.311	81.983.176	8,1%	+3,1%	31.135.619	5.789.064	1,6%	-15,5%
Israel	43.595.628	53.800.939	5,3%	+2,1%	55.154.006	57.777.222	16,4%	+5%
Albania	6.861.145	19.587.579	1,9%	+11,1%	21.767.793	55.562.159	15,8%	+9,8%
Jordan	5.122.100	2.261.519	0,2%	-7,9%	7.105.165	10.287.811	2,9%	+3,8%
Algeria	2.148.415	2.060.507	0,2%	-4%	144.074.293	58.592.618	16,6%	-8,6%
Lebanon	1.728.863	1.906.660	0,2%	+1,0%	29.616.446	42.812.228	12,2%	+3,8%

olive oil and preparations of fish, among the goods Italy purchases from Tunisia, Albania and Morocco, leads imports from these three countries to be made of processed products for more than 70%.

with a 10% country share on Italy's cotton imports. Italian exports to Egypt consist mainly of raw tobacco and milling products, whose flows have reduced.

Olive oil represents 46% of Italian imports from Syria.

Figure 1: Breakdown of Italy's agri-food exchanges with SMCs (percentages on data in value, average 2003-04)



The deterioration of Italy's agri-food balance with the SMCs is clear also when considering every single country, particularly Egypt and Syria. The balances are positive only with the countries whose trade connections are weaker with Italy.

Among the countries under observation, Turkey has a more intense agri-food exchange. The main exported product is hazel-nuts. Turkey's share on this fruit almost reaches 90%. After nuts, the goods Turkey exports more to Italy are olive oil, that experienced a fast growth, fresh fruit, fish, cotton and preparations of fruit.

Animals' raw hides and skins represent one fifth of Italian exports to Turkey, sugar confectionery 15%, animal fodder and milled rice 13% each.

Olive oil is the most important product imported from Tunisia, with a product share of 70% and a country share of 15%. Fresh and prepared fish and fresh fruit, mostly dates, are the other main imported goods.

Flows originating in Italy and going to Tunisia are quite scarce, made up for the most part of oils and fats and preparations of fish.

Prepared fish constitutes the major agri-food product that Italy purchases from Morocco (54% share) and fresh fish is fourth in the ranking. Olive oil imports are expanding quickly, since in 1993-94 they were not recorded and in 2003-04 they were the second imported product.

Egypt stands out among other SMCs because its exports to Italy underwent the highest increase: the average annual variation was 15% between 1993-4 and 2003-04. Fresh vegetable make up nearly one third of imports from Egypt, with a country share of 5% on Italian fresh vegetable imports and an annual growth rate of 38%. Within the category, there is a strong concentration of potatoes, leguminous vegetable and garlic. Cotton is the second exported good,

Cotton and wheat imports have a certain relevance, while other products are not very significant.

Oil seeds and oleaginous fruit, sugar confectionery, fresh and processed fruit are the most important Israeli products imported by Italy, with noteworthy increases only on sugar confectionery.

Italian imports from Albania are extremely concentrated:

60% of them are anchovies and 23% are animals' raw hides and skins. Italian exports to Albania are much more diversified, with a predominance of beverages, preparations of cereals, pastrycooks' products and preparations of meat.

Agri-food exchanges between Italy and Jordan are quite limited. Imports decreased at an average rate of 8%, during the ten years under observation. Italian exports to the same area grew slightly. Garlic and alliaceous vegetable make up 60% of Jordanian exports, followed by preparations of vegetable, almost all prepared tomatoes, which fell sharply.

Algeria is the country that contributed to a largest extent to the reduction of Italy's exports towards the SMCs. In 1993-94 it absorbed nearly 40% and in 2003-04 a mere 17% of Italy's exports to the area. The average annual variation rate of Italian exports to this country was -9%, entirely attributable to milling industry products (essentially wheat flour). This decrease is the main cause of the decrease in Italian exports to SMCs. The value of milling industry products directed from Italy to Algeria dropped from 100 million to less than 2 million, with an average annual variation rate of -33%. Today 46% of Italian exports to Algeria are still made up of cereals, but it is non-milled wheat.

Algerian exports to Italy are very scarce and consist largely of processed and fresh fish products.

#### 4. Results of the Constant Market Shares Analysis of Turkey, Tunisia, Egypt e Morocco's fruit and vegetable exports to Italy

Some preliminary notes on Italian fruit and vegetable imports pattern, during the period examined for the CMSA, i.e. 1995-2005, may help to understand the results. The product categories are described in the second paragraph.

Italy's imports grew, in quantity, for all the categories, while in value terms potatoes and prepared tomatoes imports decreased. This obviously suggests a decline in prices for the imports of these goods. A meaningful import price reduction is also detectable for the preparations of fruit, whose imported quantities increased more than imported values. Fresh tomatoes, preparations of vegetable (except tomatoes) and especially citrus fruit show an opposite trend, with growth rates higher for values than for quantities and growing import prices.

(378%), Tunisia (240%), Morocco(52%) and the EU (45%), all above the average. Turkish exports' fall is much sharper in quantity than in value (-48%).

Egypt and Tunisia's strong performances stem from their high competitiveness, that is to say from their actual ability to gain market shares.

Egypt's competitiveness is nevertheless connected to a decrease in potatoes and fresh vegetable prices. This consented exported quantities to increase, without a proportional increase in exports' value, resulting in a competitiveness effect greater in quantity than in value. Egypt's composition effect is negative in value and positive in quantity because of the falling price of Italian potatoes imports from all over the world.

Tunisia's exports developed in a similar fashion, since it reduced the prices of its main exported category, "fresh and dried vegetable", thus attaining market shares in quantity but not in value.

Morocco as well is more competitive in quantity. In fact the ratio between its exports' prices and global Italian imports prices has been falling, for processed and fresh vegetable, that is the product Morocco exports more. Morocco's composition effect is negative primarily because Italian fresh vegetable imports (excluding potatoes, onions and tomatoes) have been growing less than other vegetable imports.

Table 4: Total variations, competitiveness effect and composition effect of CMSA on Italian fruit and vegetable imports, in the period 1995 – 2005 (percentage variations calculated on 1995 values)

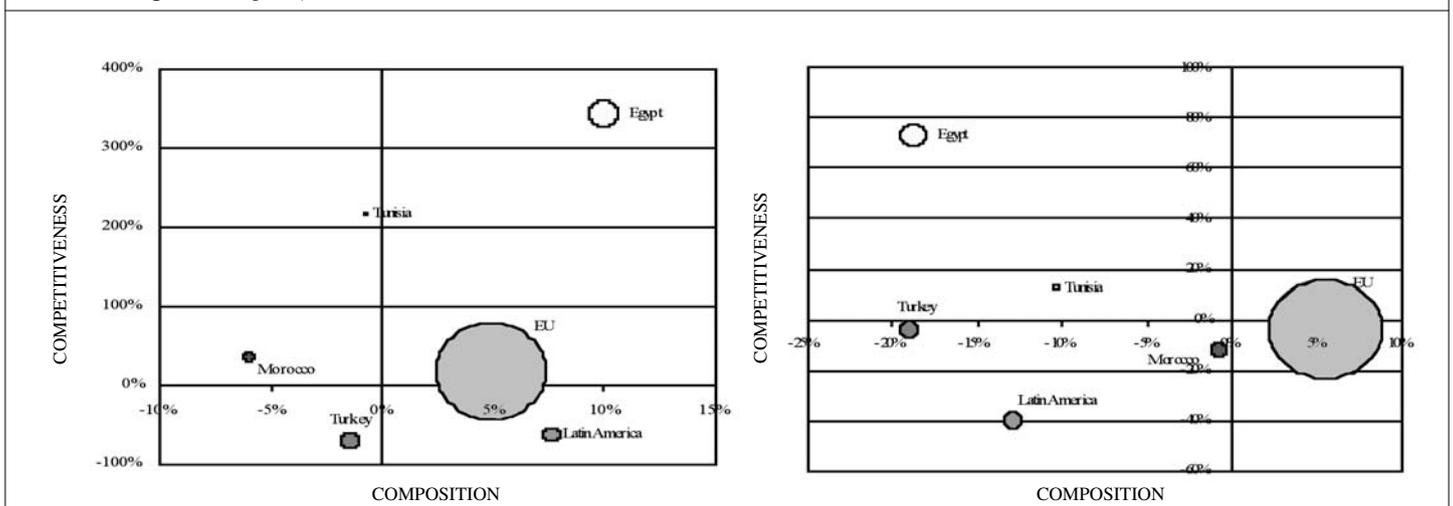
	QUANTITY			VALUE		
	COMPETITIVENESS	COMPOSITION	TOTAL	COMPETITIVENESS	COMPOSITION	TOTAL
<b>VEGETABLES</b>						
Turkey	-70%	-1%	-48%	-4%	-19%	-6%
Morocco	35%	-6%	52%	-12%	-1%	5%
Egypt	344%	10%	378%	73%	-19%	72%
Tunisia	217%	-1%	240%	13%	-10%	20%
UE 25	16%	5%	45%	-4%	5%	19%
Latin America	-63%	8%	-31%	-40%	-13%	-36%
<b>FRUITS</b>						
Turkey	-25%	9%	30%	3%	72%	147%
Morocco	231%	-3%	275%	306%	3%	381%
Egypt	3724%	-4%	3766%	4073%	-6%	4139%
Tunisia	51%	-17%	80%	-26%	-30%	16%
UE 25	-28%	3%	22%	-25%	-12%	34%
Latin America	74%	-15%	105%	74%	-27%	119%

### 4.1. Vegetables

Had their shares in Italian vegetable import remained unchanged, all countries would have increased their exports by 17% in value and by 24% in quantity. CMSA explains the divergence between these theoretical rates and the actual countries' rates.

Countries that, in value, recorded growth rates greater than 17% are Egypt (72%), Tunisia (20%), EU (19%). Turkey and Latin America's exports decreased by 6% and 36%. In quantity, the highest growth rates belong to Egypt

Figure 2: CMSA on vegetable Italian imports (effects are expressed as percentages on 1995 values, bubbles' sizes are proportional to 2005 shares on Italian vegetable imports)



Potatoes, representing 60% of imports from Turkey in 1995, affect the country's performance. During the last ten years the flow has almost reduced zero, bringing about a severe loss of market shares and a negative competitiveness effect, especially in quantity. The composition effect is more negative on data in value than in quantity, because of the drop in prices of Italy's potatoes imports from the whole world.

Latin America's declining exports and low competitiveness are mainly caused by preparations of tomatoes and by "onions and alliaceous products". In 1995 imports from this area consisted for the most part of prepared tomatoes and of fresh vegetable (except tomatoes, onions and potatoes). Italian global imports, relative to these goods, decreased or grew less than other vegetable, so the composition effect is negative. Nonetheless the quantities of prepared tomatoes that Italy imports have been increasing more than those of other vegetable: this could have favoured Latin America, as suggested by its positive quantity composition effect, if only the area had reduced its prices on preparations of tomatoes. Latin American prices grew instead, hindering its competitiveness.

The 25 members of the EU, first agri-food suppliers to Italy, show a rather stable situation, with small shares' changes. This is also caused by the amount of their export in 1995, because changes are expressed as percentage variations on initial figures.

The EU competitiveness effect is positive in quantity because it gained market shares in fresh vegetable (except potatoes, onions and tomatoes) and on preparations of vegetable (except tomatoes). Its composition effect is positive mainly because in 1995 the EU had a share greater than 99% on Italian imports of fresh tomato, that is the product whose Italian global imports augmented more, among the categories considered.

## 4.2. Fruits

Italy's global fruit import grew, between 1995 and 2005, by 46% in value and by 72% in quantity. Imports from Egypt (4,139% in quantity and e 3,766% in value), Morocco (381% in value and 275% in quantity) and Latin America (119% in value and 105% in quantity) largely exceeded the average rates. Imports from Tunisia increased by more than average in quantity (89%) but not in value (16%), while imports from Turkey grew more in value (147%) than in quantity (30%). Imports from the EU display lower rates, both in value (22%) and in quantity (34%), consequently leading to a loss of market shares.

While reading these figures, it should be considered, that in 1995 fruit imports from Egypt and from Morocco were extremely scarce; growth rates are percentage of 1995 values, so they can easily reach high values. An opposite mechanism affects the EU because, with large initial values, large effects would be unlikely.

Fruit imports from Egypt grew exceptionally. Fresh fruit and citrus fruit are the categories that enabled Egypt to expand its market shares and to show a competitiveness not based on prices reductions. The average price of Egyptian imported fruit increased, more than the price of Italian imports from the rest of the world (for the same product). This could stem from a qualitative improvement of the product, from the opening of new trade and distribution channels or from the capability to adjust its offer to the destination market. Moreover, as proved by the negative composition effect, Egypt was not favoured by the Italian market change. Nuts and preparations of fruit also contributed to the results, but only in quantity and not in value, since their price in imports from Egypt decreased.

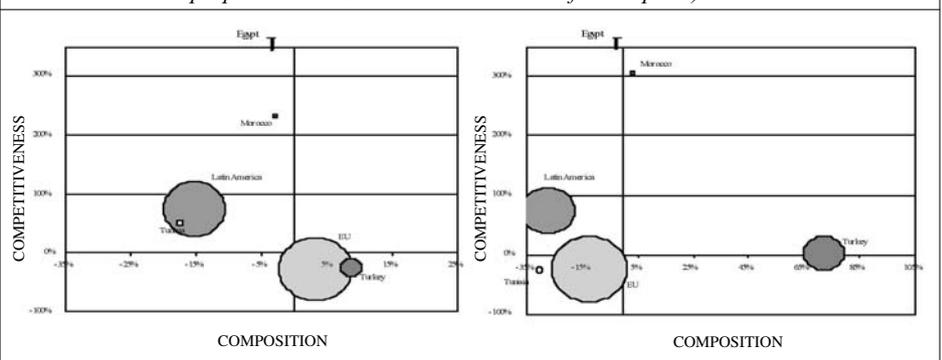
Morocco quickly expanded its fruit exports, more in value than in quantity, although not as much as Egypt. The composition effect is quite low, so Morocco's success could be ascribed almost completely to its competitiveness, on all the goods considered.

Fruit imports from Tunisia consist for the largest part of fresh fruit, which is the category that most affects its results. This country looks competitive on quantities only because it did reduce fresh fruit prices, while in the same period prices of fresh fruit that Italy imports from the rest of the world increased. So Tunisia gained shares in quantity and lost shares in value. As for the composition, Italy's fresh fruit imports growth rate is smaller than Italy's other categories growth rates, so that it could be argued that Tunisia has been hindered by Italy's demand evolution.

Turkey proved more successful with fruit than vegetable, as its exports increased. The CMSA indicates that its accomplishments are the results of an advantageous development of Italian demand rather than of Turkey's competitiveness. Actually this country lost shares on all the categories, except citrus fruit, whose importance is modest.

Although Turkey's composition effect is extremely positive, because in 1995 imports from Turkey were based on nuts, the category whose value in Italian imports had a greater increase. Nevertheless Turkey has not been able to take advantage of its advantageous initial situation. Preparations of fruit is the only strong category in this analysis.

Figure 3: CMSA on fruit Italian imports (effects are expressed as percentages on 1995 values, bubbles' sizes are proportional to 2005 shares on Italian fruit imports)



The price of the preparations of fruit imports coming from Turkey increased, so that preparations of fruit category market share increased, in value.

The EU is perhaps the geographic area that displays the worse performance, for fruit. Its exports to Italy grew slower than Italian imports from the whole world, both in value and in quantity, because of its low competitiveness. The value of imports from the EU increased less than those from the rest of the world for all the categories under examination. The quantity of nuts and of preparations of fruit imported from the EU has increased more than the same quantity imported from the rest of the world, suggesting a competitiveness based on prices.

Fruit imports from the EU, in 1995, consisted mainly of fresh fruit (except citrus fruit) and of preparations of fruit. Italian imports of these two categories grew slower than the other fruit categories, in value. This results in a negative composition effect on values, for the EU. Looking at the quantities, only fresh fruit appears to have grown below the average, but the fast growth of citrus fruit balances its effect and improves the composition effect on quantities.

Finally, Latin America obtained good results notwithstanding the fresh fruit, their main exported product, are the category whose Italian demand increased less. The negative composition effect proves it, but fresh fruit imports from Latin America increased much more than the same imports from all over the world. So this area increased its share on fresh fruit and proved highly competitive in the fruit CMSA.

## 5. Conclusions

Market process globalization, EU agricultural policy reforms, multilateral negotiations, and the evolution of agri-food markets has liberalized trade at both international and regional level. Consequently, Italy has recently opened its markets to SMC products.

The need to expand product range, satisfy domestic market needs, and develop external trade, is at the heart of the marked interest showed by the Italian food industry for SMC products, especially in the fruit and vegetable sector. In fact, with respect to seasonality and assortment, this sector boasts characteristics which are complementary to Italian productions.

It should be pointed out that, when compared to Italy's agri-food world trade as a whole, the volume of SMC trade is modest. This is due to completely different trends, especially in logistics, quality and organisational aspects.

When compared to other competitors, SMCs showed a higher trade performance in the Italian market especially in the fruit and vegetable sector -in quantity however but not in quality. This means that product price and consequently quality are not given sufficient consideration in Italy.

Moreover, the Italian market is an important market for SMC and the increasing agri-food trade flow means that the application of EU association agreements, in general, and the development of commercial partnership in Italy, in par-

ticular, have had a positive effect. It has strengthened commercial partnerships and economic relationships between SMC and Italy.

Trade liberalisation in the Mediterranean region could be seen as an opportunity for European economic operators to increase added value through the integration and completion of a productive agrifood commercial process, in an attempt to enhance production specificity and, not only as a concern of domestic production in Eu-Mediterranean countries.

In this context, Italy could play a big role in the logistical organization and in distributing agri-food flows between northern and southern Mediterranean coasts. Italy, due to its geographic location in the middle of Mediterranean area, and due to the characteristics of its agri-food system based primarily on the processing industry, could play an important role in a common process of economic development and market openness. It could constitute a logistic platform capable of channelling agri-food products coming from the southern part of the Mediterranean, which if integrated and processed with Italian services could easily reach the big European retailers.

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## Appendix

Total variations, competitiveness effect and composition effect of CMSA (in percentage on 1995 values) on Italian vegetable imports, in the period 1995 – 2005.

	CMSA results on data in quantity			CMSA results on data in value		
	Competitivity	Composition	Export variation	Competitivity	Composition	variation
<b>TURKEY</b>						
Potatoes	-128%	4%	-100%	-72%	-45%	-100%
Onions and other alliaceous vegetable	141%	98%	263%	638%	89%	745%
Fresh tomatoes	3381%	180%	3585%	7442%	293%	7753%
Other fresh and dried vegetable	3%	-16%	11%	-3%	-14%	0%
Prepared or preserved tomaotes	-131%	11%	-96%	-60%	-42%	-85%
Other prepared or preserved vegetable	172%	-3%	194%	135%	20%	173%
<b>Total</b>	<b>-70%</b>	<b>-1%</b>	<b>-48%</b>	<b>-4%</b>	<b>-19%</b>	<b>-6%</b>
<b>MOROCCO</b>						
Potatoes	-16%	4%	12%	-8%	-45%	-36%
Onions and other alliaceous vegetable	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Fresh tomatoes	2368%	180%	2572%	4064%	293%	4375%
Other fresh and dried vegetable	50%	-16%	58%	-3%	-14%	1%
Prepared or preserved tomaotes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other prepared or preserved vegetable	-61%	-3%	-40%	-77%	20%	-40%
<b>Total</b>	<b>35%</b>	<b>-6%</b>	<b>52%</b>	<b>-12%</b>	<b>-1%</b>	<b>5%</b>
<b>EGYPT</b>						
Potatoes	292%	4%	320%	272%	-45%	244%
Onions and other alliaceous vegetable	-50%	98%	73%	5%	89%	111%
Fresh tomatoes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other fresh and dried vegetable	1396%	-16%	1404%	-3%	-14%	0%
Prepared or preserved tomaotes	-31%	11%	4%	-1%	-42%	-26%
Other prepared or preserved vegetable	3448%	-3%	3469%	7954%	20%	7991%
<b>Total</b>	<b>344%</b>	<b>10%</b>	<b>378%</b>	<b>73%</b>	<b>-19%</b>	<b>72%</b>
<b>TUNISIA</b>						
Potatoes	4518%	4%	4546%	3963%	-45%	3935%
Onions and other alliaceous vegetable	233%	98%	355%	180%	89%	286%
Fresh tomatoes	219%	180%	423%	643%	293%	954%
Other fresh and dried vegetable	161%	-16%	169%	-3%	-14%	0%
Prepared or preserved tomaotes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other prepared or preserved vegetable	2946%	-3%	2967%	852%	20%	890%
<b>Total</b>	<b>217%</b>	<b>-1%</b>	<b>240%</b>	<b>13%</b>	<b>-10%</b>	<b>20%</b>
<b>EU25</b>						
Potatoes	2%	4%	30%	-7%	-45%	-35%
Onions and other alliaceous vegetable	10%	98%	132%	3%	89%	109%
Fresh tomatoes	-19%	180%	184%	-21%	293%	290%
Other fresh and dried vegetable	32%	-16%	40%	3%	-14%	6%
Prepared or preserved tomaotes	-61%	11%	-26%	-34%	-42%	-59%
Other prepared or preserved vegetable	37%	-3%	58%	-5%	20%	33%
<b>Total</b>	<b>16%</b>	<b>5%</b>	<b>45%</b>	<b>-4%</b>	<b>5%</b>	<b>19%</b>
<b>LATIN AMERICA</b>						
Potatoes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Onions and other alliaceous vegetable	-148%	98%	-25%	-138%	89%	-32%
Fresh tomatoes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other fresh and dried vegetable	25%	-16%	33%	-3%	-14%	0%
Prepared or preserved tomaotes	-135%	11%	-100%	-75%	-42%	-100%
Other prepared or preserved vegetable	44%	-3%	66%	2%	20%	39%
<b>Total</b>	<b>-63%</b>	<b>8%</b>	<b>-31%</b>	<b>-40%</b>	<b>-13%</b>	<b>-36%</b>

n.a.: the values in 1995 were zero

Total variations, competitiveness effect and composition effect of CMSA (in percentage on 1995 values) on Italian fruit imports, in the period 1995 – 2005.

	CMSA results on data in quantity			CMSA results on data in value		
	Competitivity	Composition	Export variation	Competitivity	Composition	Export variation
<b>TURKEY</b>						
Citrus fruits	662%	63%	772%	974%	21%	1067%
Other fresh fruits	-12%	-18%	16%	-25%	-32%	14%
Nuts	-44%	32%	34%	-14%	151%	209%
Prepared or preserved fruits	-59%	25%	12%	115%	-21%	166%
<b>Total</b>	<b>-25%</b>	<b>9%</b>	<b>30%</b>	<b>3%</b>	<b>72%</b>	<b>147%</b>
<b>MOROCCO</b>						
Citrus fruits	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other fresh fruits	122%	-18%	150%	137%	-32%	177%
Nuts	303%	32%	381%	399%	151%	621%
Prepared or preserved fruits	121%	25%	193%	279%	-21%	330%
<b>Total</b>	<b>231%</b>	<b>-3%</b>	<b>275%</b>	<b>306%</b>	<b>3%</b>	<b>381%</b>
<b>EGYPT</b>						
Citrus fruits	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other fresh fruits	2193%	-18%	2221%	3984%	-32%	4024%
Nuts	7%	32%	85%	-226%	151%	-3%
Prepared or preserved fruits	2197%	25%	2269%	1298%	-21%	1348%
<b>Total</b>	<b>3724%</b>	<b>-4%</b>	<b>3766%</b>	<b>4073%</b>	<b>-6%</b>	<b>4139%</b>
<b>TUNISIA</b>						
Citrus fruits	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other fresh fruits	44%	-18%	72%	-45%	-32%	-5%
Nuts	755%	32%	833%	1986%	151%	2208%
Prepared or preserved fruits	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Total</b>	<b>51%</b>	<b>-17%</b>	<b>80%</b>	<b>-26%</b>	<b>-30%</b>	<b>16%</b>
<b>EU25</b>						
Citrus fruits	-65%	63%	45%	-63%	21%	29%
Other fresh fruits	-36%	-18%	-8%	-26%	-32%	14%
Nuts	90%	32%	168%	-10%	151%	213%
Prepared or preserved fruits	16%	25%	87%	-11%	-21%	40%
<b>Total</b>	<b>-28%</b>	<b>3%</b>	<b>22%</b>	<b>-25%</b>	<b>-12%</b>	<b>34%</b>
<b>LATIN AMERICA</b>						
Citrus fruits	2239%	63%	2349%	2257%	21%	2350%
Other fresh fruits	65%	-18%	94%	61%	-32%	101%
Nuts	-50%	32%	28%	84%	151%	307%
Prepared or preserved fruits	-76%	25%	-4%	4%	-21%	55%
<b>Total</b>	<b>74%</b>	<b>-15%</b>	<b>105%</b>	<b>74%</b>	<b>-27%</b>	<b>119%</b>

n.a.: the values in 1995 were zero