

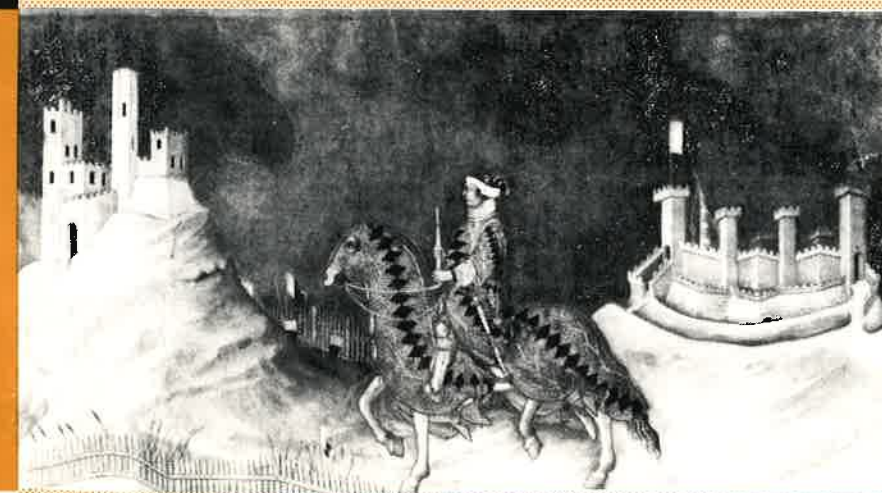
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QUADERNI DEL DIPARTIMENTO
DI ECONOMIA POLITICA

Elisabetta Croci Angelini
Secondo Tarditi

**EC ENLARGEMENT
AND TRADE LIBERALIZATION
IN THE VEGETABLE OILS MARKET**



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Siena, dicembre 1990

Summary *

The EC third enlargement to include Spain and Portugal raised substantial problems in the olive oil international market where EC10 accounts for the largest share of world market (48% of production and 52% of consumption) and the new EC members for the second largest share (30% and 24% respectively). Olive oil was highly supported in the EC10, where production prices were more than twice the international prices. Extending (between 1986 and 1991) the EC10 price support to Spanish and Portuguese producers would have meant huge EC12 budgetary costs and a complete price collapse on the tiny world market.

The paper presents three simulations of the world market by means of a multi-product and multi-regional price equilibrium model of the oils and fats sector investigating (a) the impact of the EC enlargement to Spain and Portugal without CAP changes; (b) the impact of the EC12 offer in the GATT negotiations implying a 30% decrease in domestic support for olive oil, butter, animal fats and a 6% import tariff for oilseeds and other vegetable oils; (c) the decrease in the producer price support of olive oil which would be needed to offset the impact of enlargement on the EC12 trade balance.

Keywords: Common Agricultural Policy; EC enlargement; Price policy; GATT negotiations; Olive oil market; Vegetable oils market; Oils and fats market.

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INTRODUCTION

Oils and fats consumption accounts for a variable share of total food expenditure in EC countries, ranging from 1.62% in the UK to 7.11% in Italy. The relatively high degree of substitutability among oils and fats at the consumer level compels the policy-maker to develop coordinated policy measures for this sector of agricultural production.

The Common Agricultural Policy (CAP) has been very active in the oils and fats sector: while in the early years of the EC it dealt mainly with the olive oil and butter subsectors, more recently its impact on the oilseed production expanded considerably. Given the differences in price policies practised in Spain and Portugal, particularly in the olive oil subsector, the third enlargement of the EC created new problems for the policy-maker. Levels of price support were quite different between the EC10 and the Iberian Countries, as were the administrative instruments implementing these policies.

Though Spain and Portugal joined the EC in 1986, a transitional period was agreed for the oils and fats sector for delaying the consequences of a unified market until 1991. This paper will therefore focus on the international problems related to the EC enlargement particularly in the olive oil sector.

The following pages will first offer a brief overview of the oils and fats sector (section 1), aimed at giving a glimpse of the relative importance of the commodities considered and an outline of the model. After a concise description of the measures regulating the olive oil subsector (section 2), the paper will estimate the likely effects of the third EC enlargement on producer and market prices, supply, demand and trade balance, for each region and subsector, under the hypothesis of no changes in the CAP (section 3).

A further simulation will show how these figures would change if the present EC proposals within GATT negotiations would be applied to this sector (section 4). Finally the reduction in the EC12 olive oil price necessary to offset the effects of EC enlargement on its trade balance will be assessed. This policy would prevent destabilizing the tiny international market and damaging the olive oil producers in other Mediterranean countries.

For each scenario in addition to production, consumption and trade flows, financial consequences will also be assessed, with reference to the expected changes in budgetary expenditure as well as in producers, consumers and overall economic surplus.

1 FEATURES OF THE OILS AND FATS SECTOR

According to FAO estimates, nearly 3/4 of world oils and fats production is of vegetable origin. Within vegetable oils, olive oil (2%) is produced by perennial trees, a very typical cultivation in Mediterranean regions, and is considered a product of higher quality vis-à-vis "other vegetable oils". These are partly produced by perennial trees mainly grown in tropical regions (lauric oils 7% and palm oil 12%), while about 50% of total oils and fats is produced by annual oilseeds plants mainly grown in temperate regions.

Over 1/4 of world production of oils and fats is of animal origin: butter accounts for 9%, while "other animal fats" are obtained as a by-product of meat production (lard and tallow, 15%) or derived from sea creatures (2%).

World production of oils and fats has been growing at a rate of 3.7% per year in the 1970s, slowing down to an average rate of 2.6% in the 1980s, which is still faster than population growth (1.7%) (FAO, 1986a).

Production of oils and fats of animal origin is growing at a lower rate (1.1%), while vegetable oils and fats produced in tropical regions show the highest rate of growth (7.2% palm oil, 3.6% lauric oils) due both to the rapid expansion of the cultivated area and to the genetic improvements which resulted in yield increases. Olive oil production is growing at the lowest annual rate (1%).

In order to examine and assess in quantitative terms the impact of the existing policy measures, a non-linear price equilibrium model was used for the analysis of international trade in oils and fats.¹

The world market was divided into five regional aggregates: the European Community before its third enlargement (EC10), Spain and Portugal grouped as Iberian Countries (ICs), the United States of America (USA), Centrally Planned Economies (CPEs) and the Rest of the World (RoW).

The oils and fats sector was divided into four subsectors: "olive oil", "other vegetable oils", "butter" and "other animal fats", reflecting the existing major differences in production, substitutability at the consumer level and different policy measures implemented in the EC.

The year 1986, before GATT negotiations had started in Punta del Este, was chosen as reference and the statistical information used was largely based on FAO estimates of production, utilization and prices. Since olive oil supply is characterized by a very high variability from year to year, production and consumption figures for this commodity were estimated on their long term trends.

The quantitative analysis was carried out with reference to agricultural markets at the producer level. Economic surplus on the demand side was considered "consumer's surplus" under the assumption that it will be transferred to consumers through the marketing channel without major modifications.

¹ for more details on this model see Tarditi and Croci-Angelini, 1988

The geographic location of production and consumption of oils and fats is quite uneven. About one half of world's olive oil production (48%) and consumption (52%) is concentrated in EC10 countries, and a further quarter (30% of production and 24% of consumption) is found in Spain and Portugal. The enlarged EC12 will therefore account for around 3/4 of total world production and consumption of olive oil, while the EC12 share of world production of "other vegetable oils"² is only about 6%. EC10 production of butter is also relatively high, over 1/4 of world total supply, and EC10 share in the production of other animal fats is only 16%.

While EC10 accounts for 15% of world consumption of total oils and fats and 10% of world production, the US account for 22% of world production and 13% of world consumption. Centrally planned economies account for a substantial share of world production and consumption of oils and fats: 20% for vegetable oils, 33% for butter and 37% for other animal fats. However, they had limited trade relations with the world market: they imported a very small share (2%) of their own consumption and so far their foreign trade has been more related to unbalances in the domestic market due to unpredictable crop failure rather than to world price levels. Their foreign trade was considered constant in the model.

International trade of oils and fats is, and will continue to be, fairly concentrated. Seven countries (Argentina, Brazil, Canada, Indonesia, Malaysia, Philippines and United States) account for about four fifths of world exports of vegetable oils. The largest increases in exports are forecast in the Far East countries, especially Indonesia and Malaysia where development of high-yield varieties has been successful and where further genetic improvements are expected to

² According to FAO definition: "Domestic production of oil is defined as the oil equivalent of the agricultural production which is available for crushing, regardless of whether it is crushed in the producing country or exported in the unprocessed form for crushing in the importing country"

be applied soon on a wide commercial scale. The increasing competitive advantages of tropical oil production contributed to decrease world prices in the "other vegetable oils" subsector.

The policy analysis examined in the following pages refers to the world situation in 1986 which is the year taken as reference for present GATT negotiations. As in most comparative static analyses, the model does not take into consideration time trends or productivity developments, but will focus on the likely impact of the envisaged changes due to price policies.

2 ECONOMIC POLICY MEASURES IN THE OLIVE OIL SUBSECTOR

The common policy for the vegetable oils sector was laid down in 1966 (Reg. CEE 136/66) when the EC6 self sufficiency ratio for these products was very low. Therefore the policy tool most frequently used by the CAP, i.e. external protection of domestic agricultural markets through variable levies and export restitutions, was not extensively applied in the vegetable oils sector.

As under the GATT regulations no tariffs are levied on oilseeds in the EC, the crushing industry obtains its supplies at prevailing world market prices. Therefore, given the substitutability between olive oil and "other vegetable oils", the domestic market price for olive oil could not be raised as high as the production target price without reducing excessively consumption, the support system had then to be organized on a scheme of deficiency payments.

The common agricultural policy for olive oil aims not only at granting a fair return to producers, but also at maintaining a level of demand such as to absorb EC production. For each marketing year the EC Council of Ministers sets a "representative market price" (RMP) at a level "permitting normal marketing of olive oil, account being taken of likely price trends of competing products". (EC, 1986)

The domestic price level is prevented from downward movements by a "threshold price" (TP), for olive oil imported from third countries, which is "fixed in such a way that at the Community frontier crossing point the selling price will be the same as the representative market price" (EC, 1986). The threshold price follows any adjustment in the representative market price during the marketing year.

A c.i.f. price is fixed with reference to the most favourable purchasing possibilities on the world market. The import levy makes up the difference between the threshold price and the c.i.f. price when the world market price is below the representative market price. The Commission sets its amount periodically, roughly equivalent in principle to export refunds which are granted in order to allow EC traders to export on the world market. For 1985/86 import levies were estimated at 650 ECU/t as a weighted average of actual variable levies.

EC10 prices are established for a standard quality of olive oil, with premia for higher qualities. In order to enable sales to abide over the year, prices are gradually increased during the marketing year taking into account storage costs and interest charges.

The Council of Ministers establishes a "production target price" (PTP) which "is fixed at a level which is fair to producers, account being taken of the need to keep Community production at the required level" (EC, 1986) in order to provide olive oil producers with what it considers a "fair" income and permit to preserve the number of trees and the existing production.

The production target price is attained by providing the olive oil producer with a direct "production aid" (PA), limited to the production of oil originating from trees planted before October 31st 1978 in the EC-9, before January 1st 1981 in Greece and before 1984 in Spain and Portugal.

Aid to growers belonging to a producer's organization is based on the quantity of oil actually produced. In Italy roughly 97% of olive growers are members of organizations and about 95% in Greece. Other growers receive aid at a fixed rate according to the number and production potential of the trees they cultivate. Starting from November 1st 1984, aid is granted at a fixed rate to very small producers, i.e. those whose output of olive oil is less than 400 kg.

The production aid used to be the difference between the producer target price and the representative market price ($PA=PTP-RMP$) until April 1979, when the representative market price was lowered while the producer aid was not increased. An equivalent drop in the producer price was prevented by the institution of the so-called "consumption aid" (CA) covering the difference between the target price minus the production aid and the representative market price, ($CA=PTP-PA-RMP$) as shown in Figure 1.

The consumption aid is granted to oil marketing firms for oil sold in packages of five litres maximum capacity by approved packaging factories and only for oil produced and marketed in the Community. Imported oil cannot benefit from consumption aid and, in order to avoid frauds, it must either be sold directly to consumers or is subject to an extra duty equivalent to the consumer aid granted to domestic production.

Consequently, price for domestic production should be roughly equivalent to the target price less production aid. This price level is guaranteed by the "intervention price" (IP), fixed by the EC Council, at which the intervention agencies must purchase any quantities offered to them.

Other less important policy measures are implemented by the EC10 at the consumer level in order to promote olive oil consumption. These measures are financed by a share of the consumption aid outlays and account for less than 1% of the budget expenditure in the olive oil sector.

Therefore benefits of the consumption aid accrue only to domestic producers. In practice the difference between the producer target price and the representative market price (i.e. the sum of production aid and consumption aid) is equivalent to a traditional deficiency payment.³

In order to guarantee producer prices and increase the EC10 self-sufficiency level, the oilseed production is supported by deficiency payments as well.

3 IMPACT OF EC ENLARGEMENT

Though the enlargement of EC10 to include Spain and Portugal for oils and fats is not yet fully effective, it is important to foresee the impact that a unified market will have on supply, demand and trade balance, as well as on EC budgetary expenditure, in order to implement in due time appropriate counter-measures aiming at offsetting some undesired effects of economic integration between the EC10 and the Iberian Countries.⁴ Figure 2 sketches the olive oil world market before and after the third EC enlargement as described below.

The unification of EC10 and Iberian markets for oils and fats, under present CAP regulations, will not cause relevant changes in the EC10 market where prices both at the producer and at the market level will not change. The impact of EC enlargement will be mainly felt in the Iberian and in Third Countries, while EC10 countries will be

³ Since not all producers and wholesalers meet the requirements or endure the bureaucratic procedures to get these aids the effective budget cost of olive oil policies does not coincide with the nominal cost obtained by multiplying the sum of production and consumption aid by the quantities produced. A coefficient is needed to adjust the nominal to the actual budget outlays, which also include minor expenditure items in specific policy measures at production and trade level such as storage costs. This coefficient was expected to be almost 80% in 1986 and approaching unity within the next few years.

⁴ This simulation has been presented in a previous report: EC (1988)

concerned with the budgetary expenditure they will have to share with the newcomers. Table 3 summarizes the main results of the model for this scenario.

In the Iberian Countries the enforcement of present CAP rules will mean much higher producer (+109%) and market (+31%) prices for olive oil together with higher producer prices (+47%) and lower market prices (-56%) for "other vegetable oils". The price of butter will be reduced (-10%), while, according to our estimates based on FAO and COI sources, the prices of "other animal fats" will show minor changes.

The Iberian supply response to olive oil price changes will depend on how CAP policies are used to implement producer price increases. If production aid is limited to existing olive trees and strictly controlled, supply response will be much lower than in case increases in producer price are granted to all producers by means of a generalized production or consumption aid. The likely range of the Iberian supply response has been examined assuming a low (0.3) and a high level (1.0) of supply elasticity. However, in this analysis an intermediate level of supply elasticity (0.5) was assumed.

According to this hypothesis, Iberian olive oil supply will expand by 210000 tons, while the converging effect of higher market prices for olive oil and lower market prices for "other vegetable oils" will reduce olive oil demand by 104000 t. The result will be a huge increase in the exportable surplus (314000 tons) which, if dumped on the thin world market, would depress world price for olive oil by as much as -50%.

The impact of EC enlargement in the olive oil market will be more dramatic under the hypothesis of a higher supply elasticity, with an increase of 626000 t in the exportable surplus. In the case of the implementation of policies involving a low response from Iberian

producers to EC prices, the weak expansion of Iberian supply could limit the exportable surplus to 218000 t, which would still generate a -32% fall in world market prices.

If these surpluses are dumped on the small world market, the effects are likely to be catastrophic for olive oil producers in Third Countries under all reasonable assumptions of Iberian supply response. Taking into account that Tunisia, Turkey, and other relatively poor Mediterranean Countries will face the most unpleasant consequences of this policy, severe political problems are likely to emerge. The EC Council of Ministers could develop some new and ingenious uses for olive oil extra-surpluses, as it has done for butter. However it will not be an easy task under present budgetary constraints.

The impact of EC prices on the Iberian market for "other vegetable oils" will have the opposite effect on the Iberian trade balance. The impact of lower demand prices will offset the increased oil supply due to higher producer prices and expand by one third the present Iberian deficit in "other vegetable oils".

Iberian olive oil producers will benefit most from a unified market for oils and fats under present CAP regulations. Their economic surplus will increase by 1 billion ECU, much more than the gain enjoyed by oilseed producers (136 Mio ECU).

The EC budget on the other hand will bear the largest burden due to the converging effect of new producer subsidies paid to the Iberian producers and higher export restitutions for the increased EC12 exports to a world market where prices have dramatically dropped. The increase in EC12 budget expenditure is estimated to be 1338 million ECU in the olive oil sector and 1836 million in the whole oils and fats sector.

In the Iberian Countries the impact on consumers surplus of lower prices for "other vegetable oils" (374 Mio ECU) and for butter will more than offset the effect of higher market prices for olive oil (-157 Mio ECU). The net consumers benefit for the whole "oils and fats" sector will be 224 million ECU.

The overall economic welfare impact of the unification of EC10 and Iberian oils and fats markets will be substantially negative (-479 Mio ECU) mainly as a consequence of increased price distortions in the Iberian olive oil sector. In the "other vegetable oils" sector, the negative impact on overall economic welfare of higher producer prices is completely offset by the positive effect of lower market prices.

4 THE EC PROPOSAL IN GATT NEGOTIATIONS

For the first time in 1986 GATT negotiations explicitly included agriculture, which turned out to be a major obstacle in the effort of reaching an agreement. In 1988 the mid-term review in Montreal failed to envisage a compromise on the most thorny issues, among which the agricultural sector was still standing. On the eve of the conclusion of the negotiations the EC proposed a 30% cut in support rate for most agricultural products (including oilseeds, olive oil as well as livestock products) with reference to support levels existing in 1986. Table 4 indicates how this proposal would affect the oils and fats sector.

The results show that major changes are likely to occur vis-à-vis the situation existing in 1986, before Spain and Portugal joined the EC (i.e. reference scenario). In this simulation the model assumes the intermediate level of olive oil supply price elasticity (0.5) for the Iberian countries.

In the EC-10 prices for all oils and fats will drop, with the exception of the demand price for "other vegetable oils" where the EC proposal suggests the introduction of a 6% tariff on imports in order to re-balance the market. The domestic supply shrinks for all goods, the domestic demand shows an increase for both olive oil and butter to the detriment of "other vegetable oils", while "other animal fats" record minor variations in prices as well as in quantities.

The enforcement of the EC proposals in Spain and Portugal, which will coincide with the end of their transitional period, is likely to mean less dramatic changes as compared to the former scenario (i.e. extension of CAP regulations to the Iberian countries without policy adjustments). Still, producer prices will show a considerable increase (73%) for olive oil, not so striking for "other vegetable oils" (20%), matched by an equivalent decrease for butter (-20%) and for "other animal fats".

Under this hypothesis the third enlargement appears less dramatic for olive oil than in the previous scenario, however, the effect of Spain and Portugal being covered by the CAP on average will still mean an increase in olive oil support rate in the EC-12 and will depress the world market price (-19%) though to a lesser extent than in the previous scenario (-50%). The EC-12 will exceed the self-sufficiency level and will have to find outlets for its extra-production on the world market. This implies a net increase in budgetary expenditure needed to support producers, as the savings in EC-10 are more than offset by the additional funds needed for Spain and Portugal.

While consumers in EC-10 will face price adjustments lesser than 10% in both directions (-9% for olive oil and 7% for "other vegetable oils") which will not greatly affect their demand, consumers in Iberian countries will experience prices for olive oil higher in the range of 20% and prices for "other vegetable oils" lower by more than 50%. Ceteris paribus, this is likely to modify considerably their consumption pattern.

The decrease in protection rate in the EC-10 brings about significant savings in overall budgetary expenditure (-1613 Mio Ecu) for oils and fats, which are not completely offset by the additional funds (1130 Mio Ecu) needed for extending financial solidarity to the Iberian countries. These variations are mainly due to the vegetable oils sub-sector, where major difficulties are foreseen to follow the market unification after the enlargement. Given the characteristics of the international market for olive oil, where the EC-12 accounts for around 3/4 of the entire market, and the strict links between olive oil and "other vegetable oils", this is hardly surprising. A 30% cut in the EC support is not likely to affect to the same extent the market of fats of animal origin where the EC does not enjoy a similar dominant position, and where the world market prices are deemed to increase.

5 IMPACT ON THIRD COUNTRIES

One of the most disturbing effects of EC10 enlargement to Spain and Portugal in the olive oil sector, is the disruption of the international market where some Mediterranean countries offer one of their most typical products by which a notable share of their farmers earn a living. The European Community has always tried to avoid causing serious damages to these developing countries, some of which have also applied for membership, and benefit from special trade arrangements.

This complex political background suggested to investigate which producer price for olive oil could offset the impact of the enlargement to the Iberian Countries by an internal adjustment within the EC12, so averting the effects on the external trade with Third Countries Figure 3.

In the scenario 'b' just described, the drop in producer price was 17% of the 1986 target price. In order to offset the increased Iberian supply by a reduction of the EC10 supply (scenario 'c'), the olive oil 'production target price' should be further decreased by 10% of the 1986 level. The resulting rate of protection with respect to the thin international market would then be 70% for the supply price and 30% for the demand price.

The overall EC12 welfare would then increase by 150 million ECU as the welfare loss, due to increased protection in the Iberian Countries, would be more than compensated by the welfare gain of reduced protection in EC10 countries.

CONCLUDING REMARKS

The EC oils and fats sector will necessarily undergo a strong adjustment process due to the EC enlargement to include Spain and Portugal in particular for the olive oil market.

The impact of such a merge will be disruptive both in terms of world market prices for olive oil and of EC budgetary outlays for the oils and fats sector. The negative effects of present EC agricultural policy, due to a wide inter-commodity price distortions and to inconsistencies among policy measures within the oils and fats sector, will show their major shortcomings.

Harmonization of price policy alone is not likely to be the answer in a situation very uneven in many respects. With reference to the olive oil sector alone, producer incomes would be less affected by inevitable price reductions if appropriate structural policies were implemented, reducing present production costs in traditional and inefficient olive groves.

A differential treatment could be deserved to disadvantaged areas where olive production cannot be substituted by other economic activities. The rate of production aid could be related to the positive externalities developed by agriculture in these areas, especially if it is granted according to existing olive trees in order to ease administrative controls. However, neither consumer aid nor market price support can be targeted to the areas where they are really needed. By consequence they benefit in a larger proportion producers in fertile better-off areas, encouraging surplus production which is disruptive for the world market and blows up consumer costs and budgetary expenditures.

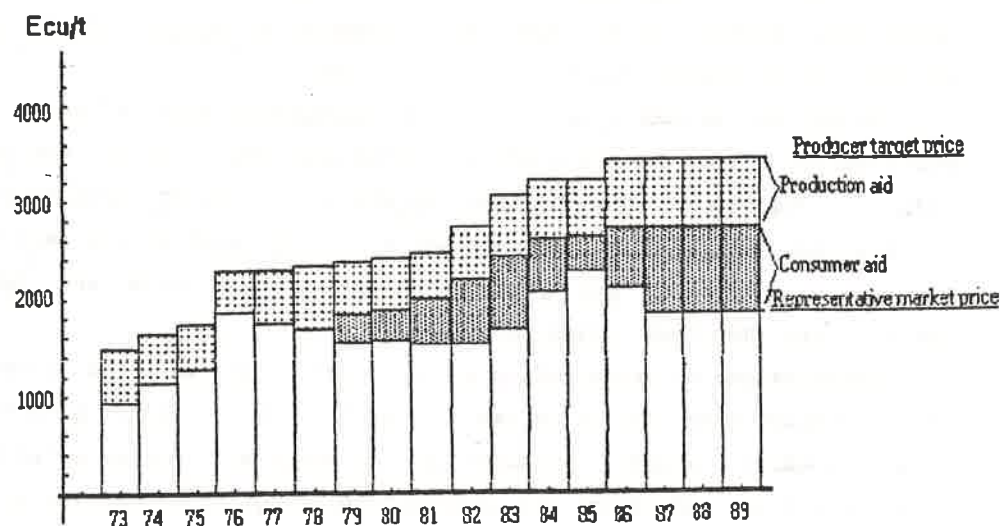


Figure 1 Olive oil price system

Table 1 World production of oils and fats (000 mt)

	1972	ACTUAL		1980	%	PROJECTED		GROWTH RATES	
		%				1990	%	72-80	80-90
ALL FATS & OILS ¹	44876	100%	60001	100%		77661	100%	3.7	2.6
VEGETABLE ORIGIN ¹	29673	66%	42476	71%		58090	75%	4.6	3.2
Soft oils	20485	46%	29693	49%		37936	49%	4.6	3.0
Olive oil	1618	4%	1884	3%		2085	3%	1.9	1.0
Cottonseed oil	2925	7%	3156	5%		4044	5%	1.0	2.5
Groundnut oil	3299	7%	3197	5%		4253	5%	-4	2.9
Rapeseed oil	2416	5%	3553	6%		5283	7%	4.9	4.0
Soybean oil	6745	15%	12990	22%		15986	21%	8.5	2.1
Sunflower oil	3482	8%	4913	8%		6285	8%	4.4	2.5
Palm oil	2420	5%	5028	8%		10060	13%	9.6	7.2
Lauric acid oils	3218	7%	3721	6%		5312	7%	1.8	3.6
Coconut oil	2614	6%	2834	5%		3542	5%	1.0	2.3
Palm kernel oil	604	1%	887	1%		1770	2%	4.9	7.2
ANIMAL ORIGIN	15203	34%	17525	29%		19571	25%	1.8	1.1
Butter	5158	11%	5847	10%		6682	9%	1.6	1.3
Lard & tallow	8908	20%	10507	18%		11547	15%	2.1	.9
Marine oils	1137	3%	1171	2%		1342	2%	.4	1.4

¹Includes oils and fats not shown separately (castor, maize, lin, etc.)
Source: FAO - Committee on Commodity Problems - Various years

Table 2 Regional and commodity shares of supply and demand

	EC10	Iberia	USA	RoW	CPEs
COMMODITY SHARES OF PRODUCTION					
Olive Oil	11%	54%	0%	1%	0%
Other vegetable oils	34%	35%	73%	84%	58%
Butter	24%	2%	3%	7%	12%
Other animal fats	32%	9%	24%	8%	30%
TOTAL	100%	100%	100%	100%	100%
COMMODITY SHARES OF CONSUMPTION					
Olive Oil	8%	30%	0%	1%	0%
Other vegetable oils	50%	57%	69%	83%	57%
Butter	14%	2%	5%	7%	13%
Other animal fats	28%	11%	26%	10%	30%
TOTAL	100%	100%	100%	100%	100%
REGIONAL SHARES OF PRODUCTION					
Olive Oil	48%	30%	0%	22%	0%
Other vegetable oils	5%	1%	23%	52%	20%
Butter	26%	0%	7%	34%	33%
Other animal fats	16%	1%	28%	19%	37%
TOTAL	10%	1%	22%	43%	24%
REGIONAL SHARES OF CONSUMPTION					
Olive Oil	52%	24%	2%	21%	1%
Other vegetable oils	11%	1%	13%	55%	20%
Butter	24%	0%	7%	35%	34%
Other animal fats	21%	1%	17%	23%	37%
TOTAL	15%	2%	13%	47%	24%

Source: our computation on FAO data.

Table 3 Present CAP extended to Iberian Countries

Unit	EC10 Iberia	USA	RoW	EC10 Iberia	USA	RoW	EC10 Iberia	USA	RoW	EC10% Iberia	USA	RoW
	(Reference scenario)			(New scenario)			(Change vs. reference)			(% Change vs. reference)		
OLIVE OIL												
Supply Price (Ecu/t)	3226	1544	1387	3226	1544	1387	0	1682	-699	-699	0%	109%
Demand Price (Ecu/t)	1986	1520	1387	1986	1520	1387	0	466	-699	-699	0%	31%
Supply Protection rate	1.33	.11	0	base	3.69	3.69	0	2	4	0	178%	3158%
Demand Protection rate	.43	.10	0	base	1.89	1.89	0	1	2	0	337%	1865%
Supply (000 t)	800	490	1	359	800	700	1	205	0	210	-0	-154
Demand (000 t)	860	390	40	340	860	286	57	483	-0	-104	17	143
Trade Balance (000 t)	-60	100	-39	19	-60	414	-56	-278	0	314	-17	-297
Budget Impact (MioEcu)	956	25	0	0	914	1405	0	0	-42	1380	0	0
Producer surplus (MioEcu)									0	1000	-1	-197
User Surplus (MioEcu)									0	-157	34	288
Economic Welfare (MioEcu)									42	-537	33	91
OTHER VEGETABLE OILS												
Supply Price (Ecu/t)	1280	872	366	366	1280	872	366	366	0	408	0	0
Demand Price (Ecu/t)	366	831	366	366	366	831	366	366	0	-465	0	0
Supply Protection rate	2.50	1.38	0	base	2.49	2.49	0	base	-0.01	1.11	0	0
Demand Protection rate	0	1.27	0	base	0	0	0	base	0	-1	0	0
Supply (000 t)	2416	318	11982	26427	2416	349	11991	26472	0	31	9	45
Demand (000 t)	5449	724	6532	28283	5446	887	6523	28216	-3	163	-9	-67
Trade Balance (000 t)	-3033	-406	5450	-1856	-3030	-539	5468	-1744	3	-133	18	112
Budget Impact (MioEcu)	2208	-176	0	0	2207	318	0	0	-1	494	0	0
Producer surplus (MioEcu)									0	136	4	10
User Surplus (MioEcu)									-2	374	-2	-10
Economic Welfare (MioEcu)									-1	16	2	-1
BUTTER FAT												
Supply Price (Ecu/t)	3132	3481	3000	2000	3132	3132	3000	1995	0	-349	0	-5
Demand Price (Ecu/t)	3132	3481	3000	2000	3132	3132	3000	1995	0	-349	0	-5
Supply Protection rate	.57	.74	.50	base	.57	.57	.50	base	0	-0.00	0	1
Demand Protection rate	.57	.74	.50	base	.57	.57	.50	base	0	-0.00	0	1
Supply (000 t)	1697	15	470	2214	1697	14	470	2212	0	-1	-0	-2
Demand (000 t)	1554	21	455	2310	1554	20	455	2308	-0	-1	-0	-2
Trade Balance (000 t)	143	-6	15	-96	143	-6	15	-96	0	-0	0	0
Budget Impact (MioEcu)	162	-9	15	0	163	-7	15	0	1	2	0	0
Producer surplus (MioEcu)									0	-5	0	-11
User Surplus (MioEcu)									0	7	0	12
Economic Welfare (MioEcu)									-1	1	-0	0
OTHER ANIMAL FATS												
Supply Price (Ecu/t)	586	586	469	469	586	586	468	468	0	0	-1	-1
Demand Price (Ecu/t)	516	516	469	469	515	515	468	468	-1	-1	-1	-1
Supply Protection rate	.25	.25	0	base	.25	.25	0	base	.00	.00	0	0
Demand Protection rate	.10	.10	0	base	.10	.10	0	base	0	0	0	0
Supply (000 t)	2276	85	3981	2627	2276	83	3979	2628	0	-2	-2	1
Demand (000 t)	3004	146	2415	3311	3007	142	2416	3308	3	-4	1	-3
Trade Balance (000 t)	-728	-61	1566	-684	-731	-59	1563	-679	-3	2	-3	5
Budget Impact (MioEcu)	126	3	0	0	129	3	0	0	3	0	0	0
Producer surplus (MioEcu)									0	0	-4	-3
User Surplus (MioEcu)									4	0	3	4
Economic Welfare (MioEcu)									1	0	-2	1
TOTAL OILS AND FATS												
Supply (000 t)	7189	908	16434	31627	7189	1144	16440	31517	0	236	6	-110
Demand (000 t)	10867	1281	9442	34244	10867	1335	9450	34314	0	54	8	70
Trade Balance (000 t)	-3678	-373	6992	-2617	-3678	-191	6990	-2797	-0	182	-2	
Budget Impact (MioEcu)	3452	-156	15	0	3413	1719	15	0	-39	1875	0	
Producer surplus (MioEcu)									0	1131	-0	-201
User Surplus (MioEcu)									2	224	34	292
Ec. Welf. impact (MioEcu)									41	-520	33	91

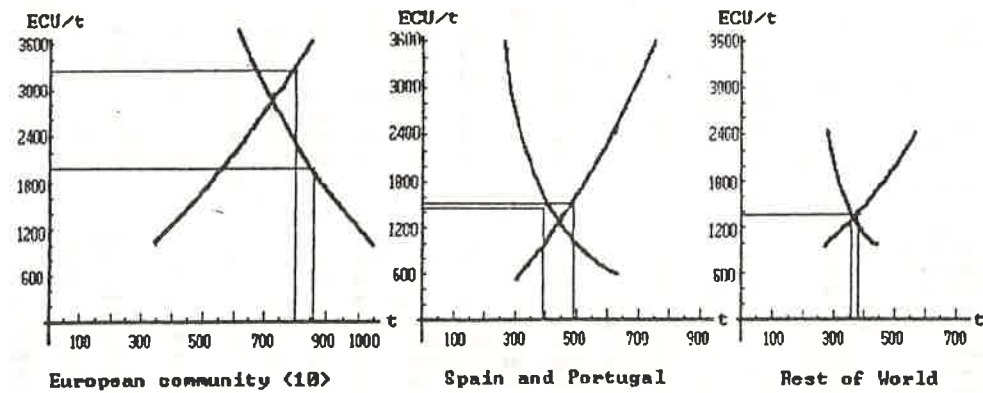
Table 4 The effects of EC proposal in GATT negotiations

Unit	EC10 Iberia	USA	RoW	EC10 Iberia	USA	RoW	EC10 Iberia	USA	RoW	EC10% Iberia	USA	RoW
	(Reference scenario)			(New scenario)			(Change vs. reference)			(% Change vs. reference)		
OLIVE OIL												
Supply Price (Ecu/t)	3226	1544	1387	3226	1544	1387	0	2678	2678	1126	1126	-548
Demand Price (Ecu/t)	1986	1520	1387	1986	1520	1387	0	1805	1805	1126	1126	-181
Supply Protection rate	1.33	.11	0	base	1.38	1.38	0	base	0	1	0	0
Demand Protection rate	.43	.10	0	base	.60	.60	0	base	0	1	0	0
Supply (000 t)	800	490	1	359	708	643	1	303	-92	153	-0	-56
Demand (000 t)	860	390	40	340	907	304	44	379	47	-86	4	39
Trade Balance (000 t)	-60	100	-39	19	-199	339	-44	-76	-139	239	-5	-95
Budget Impact (MioEcu)	956	25	0	0	483	791	0	0	-473	766	0	0
Producer surplus (MioEcu)									-413	642	0	-86
User Surplus (MioEcu)									160	-99	11	94
Economic Welfare (MioEcu)									220	-223	11	7
OTHER VEGETABLE OILS												
Supply Price (Ecu/t)	1280	872	366	366	1007	1007	370	370	-274	135	4	4
Demand Price (Ecu/t)	366	831	366	366	392	392	370	370	26	-438	4	4
Supply Protection rate	2.50	1.38	0	base	1.72	1.72	0	base	-.78	.34	0	0
Demand Protection rate	0	1.27	0	base	.06	.06	0	base	0	-1	0	0
Supply (000 t)	2416	318	11982	26427	2208	322	12081	26540	-208	4	99	113
Demand (000 t)	5449	724	6532	28283	5337	862	6512	28285	-112	138	-20	2
Trade Balance (000 t)	-3033	-406	5450	-1856	-3129	-540	5569	-1745	-96	-134	119	111
Budget Impact (MioEcu)	2208	-176	0	0	1286	186	0	0	-922	361	0	0
Producer surplus (MioEcu)									-632	43	51	112
User Surplus (MioEcu)									-143	348	-28	-120
Economic Welfare (MioEcu)									147	29	23	-8

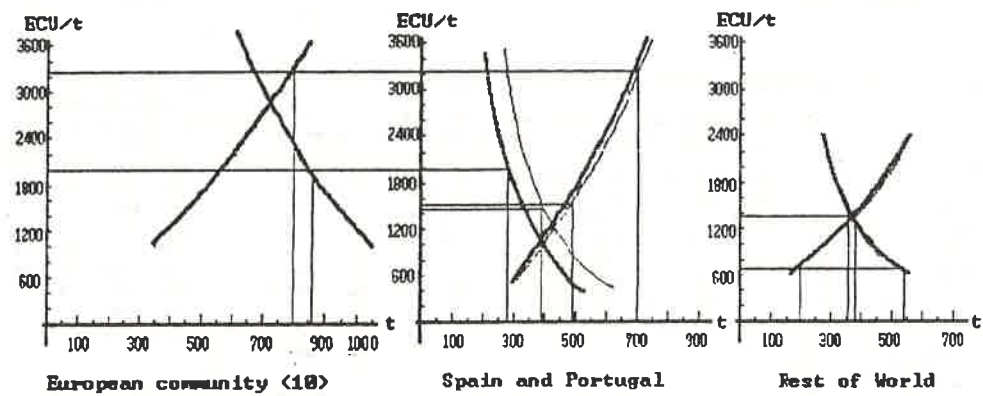
Table 5 Offsetting EC enlargement on olive oil foreign trade

Unit	EC10 Iberia	USA	RoW	EC10 Iberia	USA	RoW	EC10 Iberia	USA	RoW	EC10% Iberia	USA	RoW
	(Reference scenario)			(New scenario)			(Change vs. reference)			(% Change vs. reference)		
OLIVE OIL												
Supply Price (Ecu/t)	3226	1544	1387	1387	2360	2360	1392	1392	-866	816	5	5
Demand Price (Ecu/t)	1986	1520	1387	1387	1805	1805	1392	1392	-181	285	5	5
Supply Protection rate	133%	11%	0%	base	70%	70%	0%	base	-1	1	0	0
Demand Protection rate	43%	10%	0%	base	30%	30%	0%	base	-0	0	0	0
Supply (000 t)	800	490	1	359	648	603	1	359	-152	113	0	0
Demand (000 t)	860	390	40	340	907	304	40	341	47	-86	0	1
Trade Balance (000 t)	-60	100	-39	19	-259	299	-39	18	-199	199	-0	-1
Budget Impact (MioEcu)	956	25	0	0	253	458	0	0	-703	433	0	0
Producer Surplus (MioEcu)									-627	446	0	2
User Surplus (MioEcu)									160	-99	-0	-2
Economic Welfare (MioEcu)									236	-86	-0	0
OTHER VEGETABLE OILS												
Supply Price (Ecu/t)	1280	872	366	366	1007	1007	371	371	-273	135	5	5
Demand Price (Ecu/t)	366	831	366	366	393	393	371	371	27	-438	5	5
Supply Protection rate	250%	138%	0%	base	172%	172%	0%	base	-.78	.33	0	0
Demand Protection rate	0%	127%	0%	base	6%	6%	0%	base	0	-1	0	0
Supply (000 t)	2416	318	11982	26427	2212	325	12085	26543	-204	7	103	116
Demand (000 t)	5449	724	6532	28283	5337	862	6523	28289	-112	138	-10	6
Trade Balance (000 t)	-3033	-406	5450	-1856	-3125	-537	5563	-1746	-92	-131	113	110
Budget Impact (MioEcu)	2208	-176	0	0	1289	188	0	0	-919	364	0	0
Producer Surplus (MioEcu)									-632	43	55	121
User Surplus (MioEcu)									-145	347	-30	-130
Economic Welfare (MioEcu)									143	27	25	-8

Figure 2.

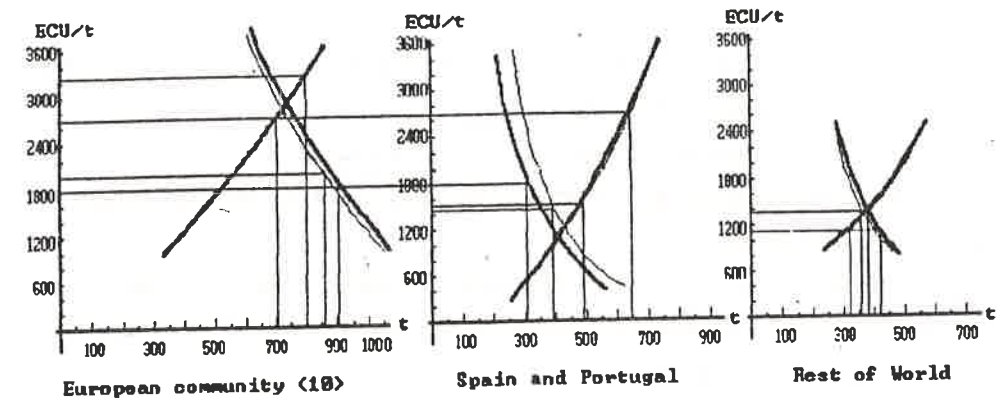


Scenario 0: Before EC enlargement to Spain and Portugal

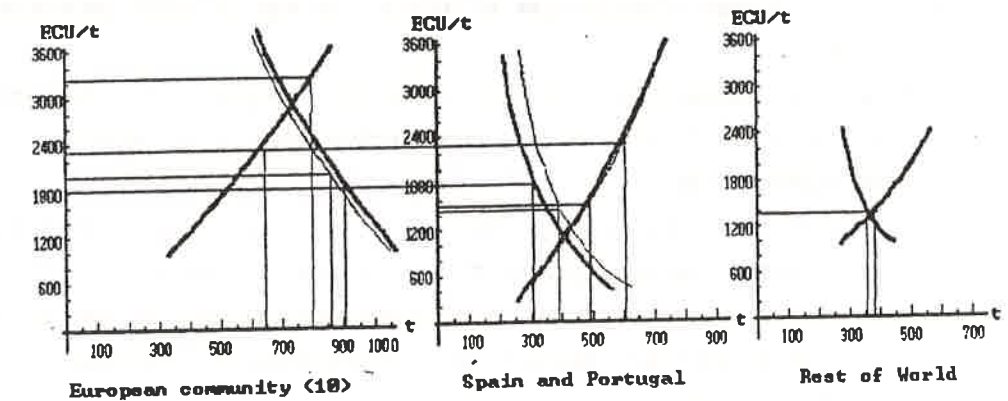


Scenario A: After EC enlargement, unchanged EC price policies

Figure 3.



Scenario B: EC12 reduction in support and rebalancing



Scenario C: Offsetting EC enlargement impact on external trade

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