

The Role of the European Union in Fruit and Vegetable Trade

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The EU is the largest importer of fruits and vegetables in the world, even when intra-EU trade is excluded. In 2000, the EU imported \$12.2 billion in extra-EU fruits and vegetables and had a \$7 billion trade deficit. EU production is seasonally limited by its climate. With its large and relatively affluent population, and that population's demand for high-quality fresh fruits and vegetables year-round, the EU is dependent on imports.

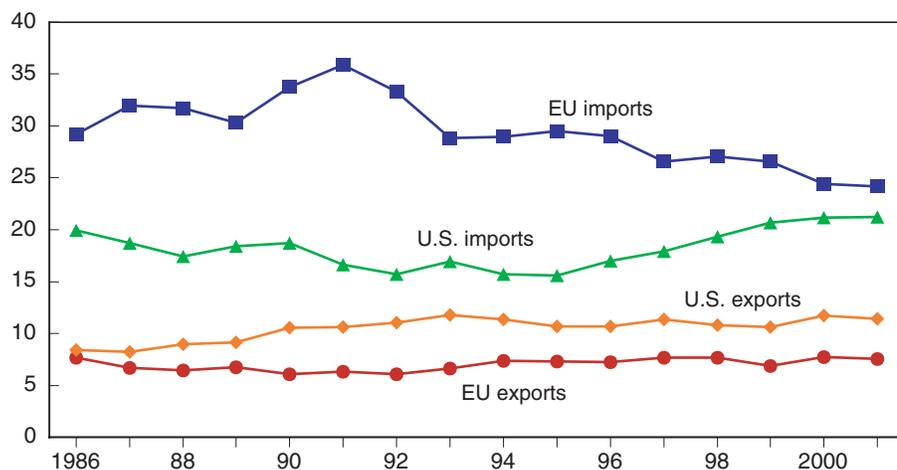
The EU, however, is a customs union (a grouping of countries that have a common tariff for third countries), and the fruit and vegetable sector has a common market organization (CMO) with policy mechanisms and trade agreements in place to stabilize markets. This chapter discusses how these policies effectively manage the flow of produce to EU markets without upsetting the domestic demand and supply balance and how EU producers are protected by this import regime. Although EU average bound tariffs appear relatively low by world standards, the seasonal nature of tariffs and trade arrangements have serious implications for U.S. fruit and vegetable exports to the EU.

The EU accounted for about 25 percent of world import value and 8 percent of world export value in 2000, if intra-EU trade is excluded (fig. 4.1). Intra-EU

Figure 4.1

EU* and U.S. value share of world trade in fruits and vegetables

Percent



* excluding intra-EU trade.

Source: FAOSTAT database by Food and Agriculture Organization, United Nations.

trade by itself accounted for 28 percent of world import volume in 2000 and 31 percent of export volume. In comparison, the United States had a share of about 21 percent of world import volume in 2000 if intra-EU trade is excluded from world trade figures. The United States imported 19 percent of the world's fruit and vegetable value in 1990, while the EU imported 34 percent; since then, the net import value gap between the EU and the United States has narrowed from \$9.3 billion in 1990 to \$4.1 billion in 2000. (All trade data referred to in this chapter exclude intra-EU trade unless otherwise stated.)

EU imports are diverse, and they are important to numerous exporters. For example, bananas, oranges, orange juice, apples, and fresh grapes in 2000 or earlier comprised about 28 percent of EU fruit and vegetable imports by value (table 4.1). But the EU also imported over \$100 million in each of the following commodities from external markets: apple juice, almonds, avocados, olive oil, grapefruit, lemons and limes, mangoes, pears, pineapples, pistachios, potatoes, raisins, and tomatoes. To underscore the global importance of EU imports, the EU accounted for over 50 percent of the world's import value of almonds, apples, grapefruit, lemons, oranges, orange juice, olive oil, pears, pistachios, potatoes, raisins, tomatoes, and peeled tomatoes.

EU exports in 2000 were dominated by olives (olive oil and preserved olives comprise about 20 percent of EU exports by value), tomatoes (tomato paste, tomatoes, and peeled tomatoes comprise 12 percent), and oranges (8 percent). In the same year or earlier, EU potatoes, apples, peppers, grapes, onions, and peaches each had over \$100 million in exports. Olives and olive oil account for about \$1 billion in exports and tomatoes and tomato products for about \$600 million.

The United States imported nearly \$1 billion of EU fruits and vegetables in 2000, led by olive oil, olives, citrus juice, apple juice, tomatoes, and peppers. It exported over \$1.2 billion to the EU, led by almonds and raisins. The U.S. trade surplus with the EU in horticultural products in the early 1990s—about \$500 million—shrank over the decade to less than \$200 million in 2001 (table 4.2). The EU shipped increasing quantities of fresh and processed produce to the United States, while U.S. exports to the EU largely stagnated. Devaluation of the euro¹ by over 40 percent relative to the U.S. dollar from 1995 to 2000 led to more price-competitive EU products in U.S. and world markets

EU import value of fruits and vegetables remained steady in the 1990s, while intra-EU trade was up 17 percent. Import volume reflects the trend more dramatically: intra-EU trade was up 35 percent, while extra-EU imports fell by nearly 12 percent. Over the same period, world trade increased 36 percent vs. 46 percent for U.S. imports. EU world export volume increased by 161 percent, narrowing the EU's trade gap from \$9 billion to \$7 billion from 1990 to 2000, while the U.S. deficit increased from \$1.3 billion to \$2.7 billion. EU export value was up 75 percent compared with a world export increase of 40 percent during the period. EU export increases were broadly based, led by apples, oranges, tomatoes, potatoes, olive oil, preserved olives, and grapes. The relative weakness of the euro and strong world demand for fruits and vegetables led to the increase in EU exports.

¹ The euro is the single currency in circulation among 12 of the 15 EU member states that are the subject of this report (Sweden, Denmark, and the United Kingdom do not participate). One euro equaled 0.875 U.S. dollars in 2002.

Table 4.1—Major extra-EU trade in fruits and vegetables, 1992-2000

	1992	1993	1994	1995	1996	1997	1998	1999	2000
	<i>\$ million</i>								
Imports:									
Total F&V imports	13,824	11,072	12,764	14,153	14,459	12,947	13,231	13,437	12,154
Bananas	2,495	1,984	2,287	2,392	2,366	1,977	1,880	1,917	1,749
Orange juice	980	682	812	966	1,021	689	914	998	791
Oranges, tangerines, clementines	693	548	608	709	760	665	601	592	442
Grapes	332	311	345	401	366	395	449	460	435
Apples	919	403	472	598	684	568	559	621	422
Almonds	378	340	491	478	714	547	460	405	354
Apple juice	259	185	181	307	309	302	238	259	339
Olive oil, total	167	156	307	443	299	335	192	431	302
Raisins	323	331	329	344	353	336	323	318	288
Pineapples	178	150	157	199	205	200	194	192	216
Pineapples, canned	304	236	235	200	267	243	252	258	212
Grapefruit	277	230	240	283	266	213	238	218	193
Pistachios	330	263	241	273	299	279	137	198	188
Pears	323	199	188	236	214	209	227	212	184
Tomatoes	165	155	130	152	152	120	162	155	147
Avocados	141	113	125	153	135	122	112	139	128
Potatoes	197	152	167	356	254	106	171	195	113
Lemons and limes	98	69	132	166	173	124	115	142	108
Exports:									
Total F&V exports	3,286	3,514	4,471	4,989	5,107	5,185	5,301	4,830	5,134
Potatoes	549	462	497	642	935	843	702	629	981
Chilis and peppers	254	303	415	397	407	407	387	382	420
Tomatoes and products	296	255	295	327	389	413	389	377	402
Oranges, tangerines, clementines	133	148	192	224	229	244	277	270	287
Pears	79	114	142	154	178	201	186	198	253
Dried mushrooms	191	196	194	281	254	247	295	235	239
Olive oil	123	110	164	146	171	122	104	81	226
Olives	48	89	138	241	306	243	203	181	218
Lemons and limes	185	177	223	294	199	226	251	240	209
Orange juice	83	118	184	227	235	267	260	213	189
Apple juice	67	76	110	115	139	140	107	148	184
Grapes	174	189	273	243	229	206	200	184	166
Peaches	73	102	93	102	115	127	139	156	133
Apples	54	86	91	86	104	114	108	86	97
Potatoes, frozen	28	39	57	63	61	81	108	78	91

Source: FAOSTAT database by Food and Agriculture Organization, United Nations.

The EU import results are partly due to Spain's full integration into the EU's CMO for fruits and vegetables by 1995, along with the abolition in 1993 of internal EU borders that significantly lowered shipping time and costs of perishables between EU member states. The Spanish share of exports to the EU increased substantially during the 1990s (fig. 4.2). Spain had captured about 16 percent of the EU fruit and vegetable import market by 1989 and increased its share to 22 percent in 2000, 4 years after full EU integration. The EU had to modify its trading arrangements with the Mediterranean basin countries in North Africa and the Middle East to accommodate Spain in the EU without disrupting Mediterranean trade entirely (Grethe and Tangermann, 1998b).

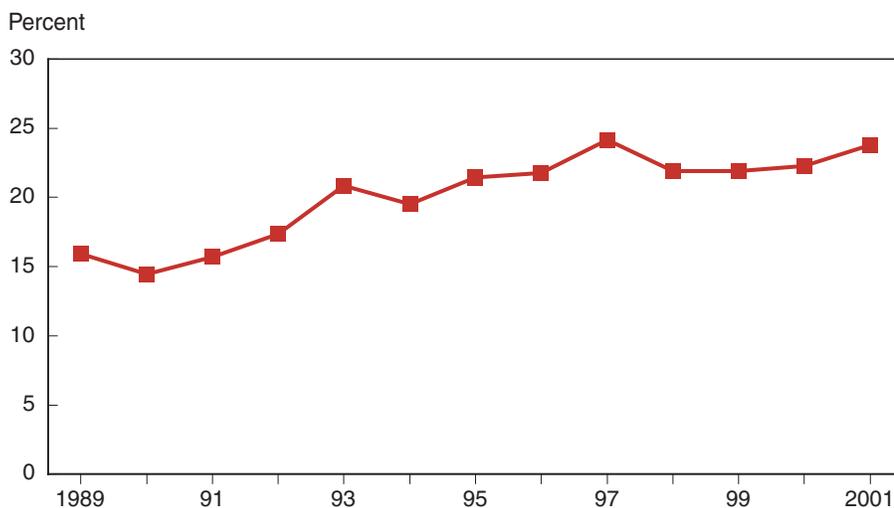
Table 4.2—EU/U.S. trade in fruits and vegetables, 1991-2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	<i>\$ million</i>										
U.S. exports to EU:											
Fresh fruit	177	181	145	143	151	164	173	172	165	151	134
Fresh veg.	29	28	20	24	21	25	33	35	31	30	23
F&V prep.	499	488	485	533	487	533	431	434	379	313	344
F&V juice	49	69	89	101	116	110	140	133	154	147	129
Tree nuts	338	345	348	441	613	749	580	597	472	480	493
Total	1,093	1,112	1,088	1,242	1,388	1,581	1,357	1,372	1,201	1,120	1,123
U.S. imports from EU:											
Fresh fruit	29	17	21	26	27	41	67	67	157	120	130
Fresh veg.	78	84	121	138	157	189	218	272	239	129	208
F&V prep.	313	384	316	382	399	410	415	446	492	436	491
F&V juice	140	134	130	137	119	146	147	111	91	94	65
Tree nuts	30	16	12	13	11	13	18	11	12	9	12
Total	590	635	600	696	713	799	865	907	991	788	906

Source: FAOSTAT database by Food and Agriculture Organization, United Nations.

Figure 4.2

Spain's export value share of intra-EU fruit and vegetable imports



Source: FAOSTAT database by Food and Agriculture Organization, United Nations.

The import dependency of the EU in fruits and vegetables is 10 to 11 percent of what it consumes. Demand factors in the EU have helped lead it to this trade position. The EU population of 377 million is relatively elderly (23 percent over 60 years of age, compared with 16 percent in the United States), highly urbanized (78 percent, compared with 76 percent in the United States), and relatively affluent (EU purchasing power is equal to 72 percent of U.S. purchasing power). Therefore, per capita demand for fruits and vegetables is high in the EU. However, population growth and economic growth are low, and with fruit and vegetable output expanding in the EU, demand for fruit and vegetable imports from external sources is likely to increase only marginally.

Future imports will most likely come through preferential agreements with other Eastern European countries, the Euro-Mediterranean agreements, and the Cotonou Agreement (replacing the Lome Convention with 77 countries), and perhaps through the newly signed “everything but arms” (EBA) agreement with 48 of the least-developed countries (LDCs). The agreement with the LDCs allowed fruit and vegetable imports to enter the EU without any tariff or seasonal restrictions from March 1, 2001. Most important, perhaps, all products must meet strict EU sanitary and phytosanitary measures that could prove restrictive (Hasha, 2001).

Internal Organization of the EU Market

The EU Commission, through its Agriculture Commissioner, determines the market policy of fruits and vegetables. Management of markets is carried out by the commission in accordance with EU rules and with the advice of the Management Committee for Fresh Fruits and Vegetables. The CMO for fruits and vegetables is principally implemented through producer organizations (POs), especially since the policy reform of 1996 and modifications in 2000 (Commission of the European Communities, 2000). The common policy and market management applies to all fruits and vegetables except the following: olives, potatoes, wine grapes, bananas, and sweet corn. These commodities have their own regimes, but the basic principles of the Common Agricultural Policy (CAP) still apply: to protect domestic markets and producers’ income while satisfying demand.

Bananas and olives are commodities that have required special programs—bananas because of the EU’s dependence on banana imports and its formal ties to former colonies, and olives because of agroclimatic conditions and excess supply. A contentious banana dispute was resolved in the WTO in 2001 after years of litigation between the EU and U.S. companies and Latin American exporters, with the EU trying to protect imports of former colonies. The olive oil regime costs the EU budget more than all other fruits and vegetables combined. The olive sector is treated particularly well because of its contribution to employment in labor surplus regions and because of the environmental role that olive trees play in the Mediterranean region of Europe. Wine is not considered a part of the fruit sector in this article—suffice it to say there is an expensive CAP program for wine grapes and wine (estimated at \$1.4 billion in 2002).

The EU reformed the CMO for fruits and vegetables in 1996 and reinforced that reform in 2000 by simplifying the regime and allocating more finances and responsibility to the POs. Council Regulation 2699/2000 grants the POs additional flexibility in spending and timing, enabling them to manage the intervention system for more adequately responding to market volatility. It remains to be seen whether the most recent changes will be effective (*AgraEurope Weekly*, November 2000). The commission would like to reduce dependence on intervention, but it may find success elusive because of the reliance of Mediterranean regions on withdrawal funds for income. With the exception of apples and cauliflowers, the intervention system for fruits and vegetables is geared almost completely toward Mediterranean products.

The EU establishes rules for withdrawing of fresh products from markets (they are either distributed to institutions that would not affect markets or are

destroyed) and providing financial aid for processed products for growers that have contracts with POs. Both fresh and processed products must meet EU quality standards or payment will not be made. Compensation for withdrawal of produce from markets is made if prices are deemed too low by the POs, and processing aid is also available to divert fresh produce. However, threshold volumes that determine penalties based on volumes withdrawn or processed are established and were set at national levels in 2000. If the threshold volume is exceeded for a given commodity, then compensation for withdrawal or processing aid is reduced the following year. Threshold volumes vary by commodity and by country (table 4.3).

For example, processing aid for 2001-02 was set at 34.50 euros/metric ton for tomatoes, with a community threshold of 8.25 million tons. Payment is made by the PO to the grower and the price of tomatoes for processing is negotiated between the PO and the processor. For peaches, the aid was set at 47.70 euros/metric ton, with a community threshold of 539,000 metric tons, while aid for pears was set at 161.70 euros/metric ton with a community threshold of 104,617 metric tons.

Withdrawals from the market have been ratcheted down from as high as 50 percent of the marketed volume and were scheduled to reach lower limits by annually reducing thresholds from 1996 to 2002. The thresholds are based on the average annual quantity marketed over the previous 5 years. For 2002-03 the limits are 5 percent for citrus, tomatoes, and cauliflowers, 6 percent for table grapes, 8.5 percent for apples, and 10 percent for other products. For some commodities (citrus, tomatoes, and pears), threshold levels were raised by 10 percent in order to meet increased demand, but production aid for these products was reduced to maintain budget neutrality (table 4.4). The EU still has fixed time periods for when processing aid is available and when products can be delivered to the processors.

Nonmembers of POs have access to withdrawal compensation, but compensation is reduced by 10 percent and handling costs are deducted. Since all production of PO members must go through the PO, it is easy to apply the trictions on compensation and financing. The PO is also to ensure that the grower adheres to good environmental practices.

Table 4.3—EU and national processing thresholds¹

	Tomato	Peach	Pear	Orange	Lemon	Grapefruit	Small citrus ²
	<i>Metric tons</i>						
EU	8,251,455	539,006	104,617	1,500,236	510,600	6,000	384,000
Greece	1,211,241	300,000	5,155	280,000	27,976	799	5,217
Spain	1,238,606	180,794	35,199	600,467	192,198	1,919	270,186
France	401,608	15,685	17,703	nr	nr	61	445
Italy	4,350,000	42,309	45,708	599,769	290,426	3,221	106,428
Holland	nr ³	nr	243	nr	nr	nr	nr
Austria	nr	nr	9	nr	nr	nr	nr
Portugal	1,050,000	218	600	20,000	nr	nr	1,724

¹Each EU member state is assigned a threshold quantity of produce that can be removed from the market, after which a penalty is applied to further withdrawals from the market.

²Includes tangerines, clementines, mandarins, and satsumas.

³nr = not relevant.

Source: Official Journal of the European Communities. Annex III, L 311/16. Dec. 12, 2000.

Table 4.4—Fruit and vegetable withdrawal compensation and processing aid*

	2000/01	1999/2000	1998/99	1997/98
	<i>Euros/Metric ton**</i>			
Withdrawal:				
Cauliflowers	79.4	84.1	88.8	93.4
Tomatoes, field-grown	54.7	58	61.2	64.4
Oranges	141.3	142	142.6	143.3
Mandarins	142.6	148.9	155.2	161.5
Lemons	131.5	132.2	133	133.7
Table grapes	90.8	96.2	101.5	106.9
Apples	95.6	99.4	103.2	106.9
Pears	91.0	94.6	98.2	101.8
Peaches	124.5	131.2	139.2	146.5
Processing aid:				
Pineapple, preserved	1,119.27	1,400.26	1,441.14	1,539.17
Peaches, preserved	41.34	61.03	60.65	81.28
Prunes	683.89	799.76	813.60	802.61
Figs	266.30	293.35	277.57	279.86
Dried grapes (euros/hectare)	27.85	27.85	27.85	27.85

* Withdrawal compensation is a fixed amount of funds available to a Producer Organization (PO) that is to be used to take produce out of the market to stabilize prices. Processing aid is used by a PO to remove a product and cover the cost of a product that can be processed and stored to stabilize prices.

** One euro equaled 0.90 U.S. dollar in 2002.

Source: *CAP Monitor*, Agra Europe, London.

Financing of the intervention system derives from PO operational funds paid by grower-members and limited funds from the commission. A limit on funds available to growers is effectively set by the commission as follows: An operational program must be submitted by the PO and approved by the commission, and 50 percent of the operational funds must derive from the EU, up to a budget limit of 4.5 percent of a PO's turnover in the previous year and an EU spending ceiling of 2.5 percent of the total turnover of all POs.

By 2001, there were over 1,400 POs in the EU, handling over 40 percent of its fruit and vegetable production. However, the number and size of POs varies widely, as well as the amount marketed by the member states: POs in Belgium and the Netherlands each market about 70 percent of all fruits and vegetables in their countries, while France and Spain market only 50 percent and Italy only 30 percent. The commission hopes to increase the proportion of fruits and vegetables handled by POs through increased funding.

The financial aid to EU processors is intended to allow them to be competitive on world markets. Products eligible for processing aid are tomato products, peaches, pears, prunes, and dried figs. Canned pineapples also qualify, but under a special provision. Trends in world prices and costs are taken into account, and processing aid for tomatoes, peaches, and pears was reduced by 50 percent in 2000 compared with the mid-1990s because the global cost of raw materials had risen and because of the decrease in the euro exchange rate. Processors must have a contract with a PO to receive the production aid.

Withdrawal from the market is principally used for tomatoes, citrus fruit, peaches, and pears of marketable quality. Withdrawal can also be used for

apples, apricots, melons, nectarines, table grapes, watermelons, eggplants, cauliflowers, figs, and prunes. However, it is not used on a large scale because these are not perceived as Mediterranean products and hence do not receive the same political pressure for market support. This is a particularly sensitive issue in the EU because grains and animal products from northern members of the EU take up the majority of CAP funds. Northern member countries' support for Mediterranean products from southern members, in the form of fruits and vegetables and regional aid, is the quid pro quo for the southern support of northern products in CAP budget expenditures.

Peaches have had the highest withdrawal, at nearly 17 percent of EU's 1996 production; when measured by country rather than for the EU, over 40 percent of peaches was withdrawn in Greece in various years. If national threshold levels are enforced, then Greece could receive a much lower withdrawal rate over time and less financial aid unless it restricts production.

Processing aid reached 707 million euros (\$660 million) in 2000, while withdrawal funds reached 800 million euros (\$748 million) the same year. Overall intervention anticipated in 2002 was \$1 billion for fresh produce and \$828 million for processed products. Citrus is the primary recipient of processing aid by virtue of contracts with processors, comprising over one-fourth of the total aid allowed for processing. Processing aid is particularly important for tomato production; the EU paid aid money on 6.3 million tons of the 6.6 million tons processed in the 1998-99 season. Peaches have been canned under the processing aid scheme that led to numerous trade disputes with the United States and other peach exporters. Pears are also canned and benefit from processing aid.

Export Subsidies, Promotional Aids, and Other Financial Aid

The EU also provides export subsidies (principally for fruits), promotional aids for apples and citrus to alleviate market pressures, and structural funds to cut costs through modernizing and consolidating of fruit and vegetable markets. There are also small amounts of aid for storage for dried figs and sultanas, cultivation aid for grapes intended for dried grape production, and specific measures for products of regional importance that face international market pressure. For example, white asparagus for processing is currently receiving 500 euros/hectare, or \$180/acre, for up to 9,000 hectares.

Export subsidies are used principally for fresh fruit and vegetables to alleviate internal market pressure, though they are used to a lesser degree than processing aid or withdrawal funds. Export subsidies were 98.4 million euros (\$123 million) in 1996, and only reached \$25 million in 2000, as reported to the WTO—the EU is allowed to spend up to \$48 million on fruit and vegetable export subsidies according to WTO limitations. With the exception of some tomatoes, all export subsidies were used to move fruit onto the world market. The products eligible for export refunds in the EU are fruits (apples, lemons, oranges, peaches, nectarines, and table grapes) and some nuts, with tomatoes the only eligible vegetable. The EU has not come close to exceeding the quantity or value limits on export subsidies for fruits and vegetables according to its WTO commitments. Export refunds are allowed to compensate for the differ-

ence between world and EU prices, but subsidized exports had to be reduced by 21 percent by volume or 36 percent by value by 2000 from the 1986-90 level because of WTO commitments. The EU is evolving into a tendering system for fruits and vegetables, with a fixed budget amount for export refunds that would better reflect the different costs that operators incur.

Other support consists of promotional and restructuring funds. Promotional funds are reserved for EU apples and citrus, while restructuring funds largely go to Mediterranean countries to modernize their marketing structure. Expenditures on promotional and restructuring measures (such as grubbing up old olive and orange trees and consolidating marketing channels and wholesale markets), as well as other aids mentioned above, amounted to 312 million euros (\$343 million) in 1998.

Standards Important in the EU

The standards set by the EU consist of three classes for all fruits and vegetables, from highest to lowest acceptable quality: Extra, Class I, and Class II. The standards include specifications for quality, size, labeling, packaging, and presentation. If produce does not meet these standards, then it is not allowed to be sold in the market, although enforcement of these standards is the responsibility of each member state. Farm-gate sales and products used for processing do not have to meet the standards. Standards used to be the principal instrument of market management in the EU before the reinforcement of the POs. Although standards continue to be instrumental in managing produce markets, grouping of products has a more dominant role.

Imports must also meet the classification standards set by the EU. EU inspectors are dispatched to the country of origin to inspect the facilities to ensure that EU sanitary and phytosanitary standards are met. In many cases, this has led to upgrading the produce sold in local markets (interview with Dr. Mordecai Cohen, Agricultural Affairs Counselor, Embassy of Israel). There are five large trading companies in the EU that dominate EU trade in fruits and vegetables and frequently have multiyear contracts with Mediterranean exporters. These EU trading companies are instrumental in insuring that produce destined for EU markets meets all EU standards during the EU's off-season and at the price and volume that will not trigger the prohibitive tariffs the EU has in place.

External Market Organization

The EU had to change its fruit and vegetable CMO to comply with the Uruguay Round Agreement on Agriculture (URAA; for a detailed account see Grethe and Tangermann, 1998a and b). The principal goal of the EU in the fruit and vegetable trade regime (and in all CAP regimes) was to protect its domestic producers by controlling import access and thus domestic prices. The EU effectively managed supply through preferential trade agreements and arrangements that allowed access through quotas with relatively low in-quota tariffs. The remaining market was managed through restrictive tariffs, mostly seasonal, with the Most-Favored-Nation (MFN) tariff rendered prohibitively high. In January of 1996, the new CMO for fruits and vegetables was introduced to implement General Agreement on Tariffs and

Trade commitments and prepare the EU for a more competitive international environment in the long term (Martin and deGorter, 1998).

The new entry price system essentially replicates the previous trade regime with mechanisms that have changed the names but not the functions. The EU's current entry price and tariff equivalent system is intended to meet the URAA commitment to replace the former reference price system and its variable levies. The new system uses tariff equivalents that are applied to the entry price, which effectively functions like the reference price, while the tariff equivalent functions like the variable levies utilized in the pre-URAA period.

The entry price system is similar to the pre-URAA EU reference price system because the EU used the highest weighted reference prices (arbitrary prices) during the 1986-88 base period as its "internal" price. The EU then used the intra-EU market price as its "external" price (less export refunds, if any were used) to determine the maximum tariff equivalent (MTE). This combination of "external" and "internal" price measurement is a method that allows tariffication to occur at high rates. The EU also established the internal price in this calculation as its minimum entry price (MEP), thus reflecting the reference prices that existed before the URAA. If the import price is at or above the MEP, the common customs tariff (CCT) is applied. If the import price is 92 percent or more of the MEP, a tariff equivalent will be applied to bring the import price up to the MEP plus the CCT (the tariff equivalent thus becomes a variable levy, as in the old system). If the import price is 91 percent or less of the MEP, the MTE will be applied on top of the tariff equivalent and the CCT. The imposition of the MTE would effectively prohibit any imports. (see www.taric.com for detailed EU tariff rates.)

Another complication in the new import system is that all calculations are made on a shipment-by-shipment basis. This could lead to problems of a practical nature in establishing a price, which means that invoices become more important than in the old system (Tangermann, 1997). In addition, an importer may choose one of three methods to calculate the entry price of the import to match against the MEP:

1. The standard import value that is calculated on a daily basis, by product and by origin, and published in the Official Journal of the EU,
2. The f.o.b. price of the products in their country of origin, and
3. The effective resale value of the shipment.

It is likely that EU importing companies will continue their role of calculating the best time and price for entry of imports into the EU just as they did under the old regime, because the new entry price system is even more complex than the reference price system.

Despite the new import system, it is unlikely that the volume of fruit and vegetable trade in the EU will be much changed, although rents derived from what is an effective quota system could be reallocated between importers and exporters (Grethe and Tangermann, 1998a). The effective quota system is most active during the EU off-season production, when imports are largely covered by agreements with other countries and groups

of countries who compete on the basis of quality for a given volume. These agreements contribute greatly to the apparent low tariff rates of the EU, but they occur within a quota with a low tariff, while out-of-quota tariffs are prohibitive. The average EU in-quota tariff was 6.2 percent for fruit tariff rate quotas (TRQs) and 5.2 percent for the vegetable TRQs, while the average over-quota tariffs were 42 percent for fruits and 56.4 percent for vegetables. However, these rates do not take into account the seasonal nature of the tariffs that greatly determine fruit and vegetable trade in the EU. Nevertheless, the EU looks to be more open than it is in reality because it had the lowest average bound tariffs of any region in the world with the exception of North America, but its imports are subject to severe seasonal restrictions to insure that EU internal prices are not affected.

Average annual bound tariffs were 21 percent for EU fresh fruits and 16 percent for fresh vegetables in 2000, compared with world averages of 56.1 percent for fresh fruits and 64.4 percent for fresh vegetables (USDA, ERS, Agricultural Market Access Database). Tariff exceptions are made for the 42 LDCs in the EBA initiative that have duty-free access to the EU year-round for fruits and vegetables and for the numerous preferential trade agreements and arrangements the EU has with neighboring countries and former colonies.

A more competitive EU fruit and vegetable sector may be emerging, as evidenced by the sector's declining use of export subsidies even while its exports grow. WTO notifications show that the EU spent \$35.4 million on fresh fruits and vegetables and \$5 million on processed fruit and vegetable export subsidies in 1998. The quantity subsidized was 763,000 tons, while the WTO limit was 820,000. The EU accounted for 50 percent of world export subsidies on fruits and vegetables that year. WTO commitments established the quantity and value of subsidized exports of fruits and vegetables the EU must meet from 1995 to 2000, and the EU easily met its commitments (World Trade Organization, 1999, 2000). The export quantity subsidized had to decrease to 753,400 tons in 2000, while the amount spent on export subsidies had to decline by nearly \$28 million to \$49 million in 2000, but the EU actually spent only \$42 million. WTO notifications show that the EU spent \$40.4 million on fruit and vegetable exports in 1998, half of what they were allowed to spend under WTO commitments in that year. By 2001, EU export subsidies to fruits and vegetables were \$32.5 million.

Estimated total budget expenditures on the EU fruit and vegetable regime amounted to slightly more than \$5.3 billion in 2001 (USDA, FAS, GAIN #E21046). However, over two-thirds of that budget is accounted for by olive oil and wine. The effective cost of the regime to consumers is very difficult to compute because of the difficulty in establishing a world price for each commodity over the entire year in order to calculate a price gap for all fruits and vegetables. Nevertheless, an attempt was made by Donovan and Krissoff (2001), who calculated EU support to fresh and processed fruits and vegetables (wine excluded) at \$8.7 billion for the 1998-99 season.

Prospects for EU Policy and Trade

While the EU is the world's largest importer of fruits and vegetables, its imports are largely circumscribed by preferential trade agreements and

arrangements with other countries or groups of countries based on season and quality. The EU's large consumption of fresh fruits and vegetables will likely continue because of high income levels, a highly urbanized and aging population, and health concerns. Import access could be enhanced by WTO commitments but will likely be filled by countries in the Mediterranean agreements, candidates for EU enlargement, former colonies, and perhaps some of the 42 least-developed countries that were included in the recent EBA agreement with the EU. However, the recent trend in extra-EU imports is slightly negative, and extrapolation out to 2010 shows EU imports from outside the EU down by 10 million tons.

Internal changes in EU domestic policy have attempted to reduce reliance on its intervention system, particularly with regard to the condition that allows withdrawal of produce from the market. More flexibility has been introduced into the intervention system to make it more competitive, with less emphasis on intervention and more on processing the surplus produce.

EU exports of fruits and vegetables are not likely to be restricted by WTO volume or value limits on subsidized exports, since they have been considerably below their limits and are unlikely to exceed them. Imports into the EU will not likely increase much from those countries not included in trade agreements with the EU (such as the United States), as WTO market access commitments are easily met without including new trade partners. While EU average bound tariffs appear relatively low by world standards, the seasonal nature of tariffs and trade arrangements poses severe restrictions on increasing exports to the EU. Furthermore, MFN tariffs are mostly prohibitive, in light of the preferred access allowed those countries with special arrangements and agreements with the EU. Internal political pressure from the EU's Mediterranean member states to limit imports will remain intense.