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THE EUROPEAN MARKET FOR AMERICAN FARM PRODUCTS--
SOME CONCEPTS AND REALITY

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Preface

This paper is presented as a preliminary report and not a statement of completed research. In undertaking this work, two major objectives were sought. These were (1) to provide an overview of the major factors or variables that will influence future exports of American farm products to Western Europe, and (2) to indicate the relevant conceptual framework within which more detailed analysis might be pursued. Though detailed analysis on a commodity basis was not possible, commodity data are included wherever this is useful and feasible.

Historically, the level of net food imports into Western Europe has been increasing. Whether this will change due to future growth patterns or as a result of the development of the Common Market is currently a question of prime importance. Some trade diversion will occur due to the formation of the Common Market. This will tend to reduce the need for imports into the area by outside suppliers. There is no clear evidence, however, to indicate that a price policy which establishes a common agricultural price near the mid-point of pre-existing levels will greatly influence imports either positively or negatively. A higher price may reduce import requirements but probably not as much as intuitive analysis based on the American experience with production response to price supports would suggest. Such evidence as is available concerning changes in food consumption due to economic growth and income increases and on changes in production due to structural adjustment and technological innovation do not indicate a rapid reduction in total import requirements. The market for some commodities will be reduced; the outlet for others probably will expand due to long-term growth induced adjustments.

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Introduction

An important question being raised by farm groups and individual businessmen is that of the extent to which Europe will continue to be a major market for American farm products. Future adjustments will be shaped by both economic and political factors. The economic question most relevant to the outlook for American farm products is the rate of growth and development both in the general economy and in agricultural production within Europe. The political force most important to future relations with Western Europe is the movement toward economic integration. This began with the formation of the European Economic Community (EEC) in 1958.[1/] It was followed by the formation of the European Free Trade Association in 1959.[2/] Though recent decisions have postponed major expansion, the EEC may ultimately encompass most or all of the free countries of Western Europe. Formation of an expanded European Economic Community would bring together a population and productive resources exceeding those of the United States, and lay the groundwork for an economic system making possible the production and distribution efficiencies, regional specialization and mass purchasing power which heretofore has been associated only with the United States.

1/Consisting of Belgium, Luxembourg, Netherlands, Germany, France and Italy.

2/Consisting of Great Britain, Norway, Sweden, Denmark, Switzerland, Yugoslavia and Ireland.

The principal focus of this paper is related to the questions of how growth factors and the formation of the Common Market and the implementation of associated price and trade policies will influence the future outlook for American farm products. To deal with these questions, it is necessary first to look at the major economic variables that provide the framework within which the analysis of adjustment due to the Common Market will occur. These variables include the general economic status of the area and growth rates, as well as the balance of production and consumption and trade patterns in agricultural commodities. This is followed by a more specific consideration of the implications of the Common Market on the outlook for American farm products.

Postwar Economic Growth in Western Europe

Economic recovery in Western Europe following World War II was rapid and subsequent growth has been both rapid and sustained. Recovery began with the Marshall Plan which provided between 15 and 17 billion dollars of aid over a 4-year period beginning in 1948. Its purpose was not only to stave off immediate political and economic chaos, but to provide the basis for economic reconstruction in Europe. That these purposes were fulfilled is indicated by the fact that during the three years, 1948-1950, Western Europe increased its total GNP by about 25 percent [3/] and that for most countries the growth that began in 1948-1950 has continued virtually unabated through the 1950's. Table 1 indicates that with the exception of Ireland, GNP has increased by 20 percent or more during the period 1953 to 1960 with a maximum of 61 percent in West Germany. Between 1953 and 1960 the combined GNP of all OEEC countries increased by 37 percent.

3/J. F. Dewhurst, J. D. Coppach, and P. L. Yates, Europe's Needs and Resources, Twentieth Century Fund, New York 1961

Table 1. Volume Indices of Gross National Product at Market Prices
1953 = 100

Country or Area	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
	1	2	3	4	5	6	7	8	9	10	11	12	13
OEEC member countries combined (excluding Spain)	76	81	88	92	95	100	105	111	116	121	124	130	137
EEC member countries combined	69	77	85	91	95	100	106	114	120	126	129	136	145
Belgium	85	88	91	96	96	100	104	108	112	115	113	116	121
Luxembourg	--	--	--	--	98	100	100	104	109	114	116	119	126
France	--	83	89	95	97	100	105	111	116	123	126	128	136
Germany (F.R.)	--	--	78	86	93	100	107	120	128	135	139	149	161
Italy	74	78	84	90	93	100	105	112	117	124	130	140	149
Netherlands	78	85	88	90	92	100	107	115	120	123	125	132	142
Austria	66	79	87	97	97	100	111	123	129	137	141	146	158
Denmark	82	86	93	93	94	100	103	103	106	111	114	121	129
Greece	69	80	79	88	87	100	105	114	121	133	137	142	150
Ireland	87	91	92	94	98	100	102	103	101	103	99	102	106
Norway	--	85	90	93	96	100	104	107	112	114	114	119	126
Portugal	84	85	89	93	94	100	105	110	114	119	121	127	132
Sweden	84	90	94	94	97	100	107	110	114	118	119	125	130
Switzerland	87	82	87	92	95	100	108	115	121	126	128	134	142
Turkey	70	62	72	83	90	100	91	98	105	111	124	126	--
United Kingdom	88	90	94	96	96	100	105	108	110	112	113	117	122

Source: OEEC Statistical Bulletin, General Statistics, July 1961.

The countries of the European Economic Community exceeded this with an increase of 45 percent. Because population expansion has been moderate, the growth in GNP on a per capita basis has also been substantial. The increase has varied from 10 percent in Ireland to 55 percent in Austria. The average per capita increase in GNP for all OEEC countries has been 29 percent and for EEC countries 36 percent.

All major economic sectors have participated in the expansion but that originating in industry has been greatest. During the period 1950-1957, "Gross production originating in industry (including mining, manufacturing, construction and power production) however, increased by about 51 percent over the period. Gross domestic product from agriculture (including forestry and fishing) rose by about 19 percent while that originating in the service sectors (including transportation, communications, trading, banking, commerce, government administration and all personnel services) increased by slightly less than 31 percent."[4/] Though growth has been widespread, the level of GNP per person still varies greatly between countries in Western Europe (Table 2).

A complete and satisfactory explanation for the widespread persistent and rapid postwar growth rates in Western Europe is somewhat illusive. One group of writers suggest that at least three major conditioners of the period--inflation prone governments, large-scale government revenues and expenditures, and the development of a large backlog of new products and methods are of central importance.[5/] Others suggest that a basically dynamic attitude that was borne of the recovery period and has been nurtured by European wide

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4/Ibid., p. 20.

5/Dewhurst, et al., op. cit., pp. 27-31.

Table 2. Per Capita Gross National Product, Private Consumption Expenditure and Ratio of Private Consumption Expenditure for Western European Countries and the United States, 1959, at Current Prices

Country	GNP Dollars Per Person	Private Consumption Exp. Dollars Per Person	Private Consumption as a Percent of GNP
Austria	619.97	458.86	74.01
Belgium	1257.21	878.34	69.86
Denmark	1203.13	801.40	66.61
France	1160.54	757.63	65.28
Germany	1112.40	646.39	58.11
Greece	330.42	273.46	82.76
Ireland	605.27	445.21	73.56
Italy	597.54	385.83	64.57
Luxembourg	1354.92	819.11	60.45
Netherlands	893.17	509.63	57.06
Norway	1163.40	692.64	59.54
Portugal	238.77	186.06	77.92
Sweden	1505.30	907.25	60.27
Switzerland	1500.88	935.84	62.35
Turkey	606.24	455.34	75.11
United Kingdom	1279.38	851.69	66.57
United States	2694.87	1719.70	63.81

Source: Computed from data in - OEEC Statistical Bulletin, General Statistics, July 1961, and Yearbook of National Accounts Statistics, 1960, Statistical Office of the United Nations.

political, economic and intellectual interaction as a result of economic integration and the efforts of the European Productivity Agency have played a central role. Undoubtedly there were many special factors, some of them of a non-recurring nature which have formed the foundation for the postwar expansion. The relevant question now is whether these basic underlying conditions will continue to predispose Europe to rapid continuing growth rates and if not will special factors be sufficient to maintain growth rates in the future.

Any effort to project specific growth rates into the future must, of course, be largely conjecture. However, it would seem that barring the development of

major military conflict or the relapse of the industrial world into economic stagnation that substantial growth will take place during the next decade. Because of modest rates of population increase and increasing time spent in school and shorter working hours, it is probable that future expansion of gross product must come more than in the past from technological progress and higher productivity and less from the actual increase in working hours. However, with a substantial backlog of intellectual skills, the potential attractiveness for investment capital based in part at least on the development of mass markets due to economic integration, and with a relatively favorable ratio of savings to consumption expenditure in many countries (Table 2); the future basis for substantial increase in output per worker and economic growth in European countries seems to be well established.

Growth in Agricultural Output

Although as previously indicated, the growth in agricultural output has been somewhat less than in other sectors; it has followed much the same pattern as over-all economic growth. The immediate postwar period was devoted to the rebuilding of productive capacity which in most countries had been severely affected by wartime destruction. By about 1950, total agricultural output was back to its prewar level. The most rapid recovery took place in the production of crops of all kinds with somewhat slower recovery in the production of meat and milk products. The upward movement of output has continued in almost all countries throughout the 1950's with a continuing growth of about 2.8 percent per year (Table 3). Contrary to the case in general economic growth, it should

be noted that the rise in agricultural production over the past two decades in Western Europe was less than that which occurred in North America during the same period of time.

Table 3. Index of Total Agricultural Production, Livestock Production and Proportion of Livestock and Crop Production 1952/53 to 1956/57 = 100

Year	Total Agricultural[a] Production	Livestock[a] Production	Livestock as a Percent of Total	Crop as a Percent of Total
1952/53	94	92	60	40
1953/54	100	98	59	41
1954/55	100	101	61	39
1955/56	102	103	61	39
1956/57	104	106	62	38
1957/58	107	111	63	37
1958/59	111	112	61	39
1959/60	113	116	62	38

Source: OEEC Statistical Bulletin, Agriculture, Paris, 1961.

[a]Net of imported livestock feedstuff.

As is the case in the United States, the increase in output of agricultural products has been accompanied by a rather stable total quantity of land inputs and a decline in the amount of labor used. Although many elements have played their part in increasing output, ultimately they all stem from one main characteristic which European agriculture and particularly that of the north-western regions has increasingly required in the past decade: a far reaching integration of the sector into the industrial economy around it.[6/] Agricultural

6/FAO European Agriculture in 1965, United Nations, Geneva, 1961, p. 8.

production has become basically market oriented and greater investment and expenditure by producers on the means of production became possible in part because of government support to agriculture and in part because of the expanding and more or less protected market environment for agricultural production.

Further, the outflow of labor from agriculture made greater investment expenditures increasingly necessary. These went not only into land improvement, buildings and other capital items but to the current means of production, in particular, fertilizer, pesticides, tractors, combines, etc. The basic integration of agriculture into farm supply industries and market industries and the development of these industries in such a way that new outlets and new sources of capital inputs become available created a momentum that is reflected in rising and more efficient levels of agricultural production.

Again the question of whether this postwar increase will continue is relevant. The outlook in this case can, in part, be substantiated by a rather extensive effort by the FAO that includes projections of European agriculture to 1965 and 1970. The results of these studies indicate continuing growth potential for most products.7/

Food Consumption in Western Europe

One of the significant consequences of postwar economic progress in Western Europe has been its affect on the demand for farm products. Some increase

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7/FAO, European Agriculture in 1965, United Nations, Geneva, 1961 and Agricultural Commodity Projections for 1970, FAO Commodity Review, 1962, Rome.

in the general demand for agricultural products has occurred but more important, particularly during the 1950's, has been the impact that increases in real per capita income has had on the composition of diets. This change has been the most characteristic phenomena of the European food economy during the postwar period. Figure 1 indicates the general trend of food consumption based on prewar levels. Heavy cereal and potato consumption in the immediate postwar period was soon replaced by more normal trends associated with improved economic status and income levels. Among domestically produced European agricultural products, the greatest increases in consumption have been in eggs, butter, sugar, and above all fruit and meat, particularly poultry and beef. The increase in consumption of dairy products and fats has been somewhat more moderate. In general, the increase in calorie intake from more expensive foods has been offset by the decrease in calorie intake from fish, cereals, potatoes, and vegetables.

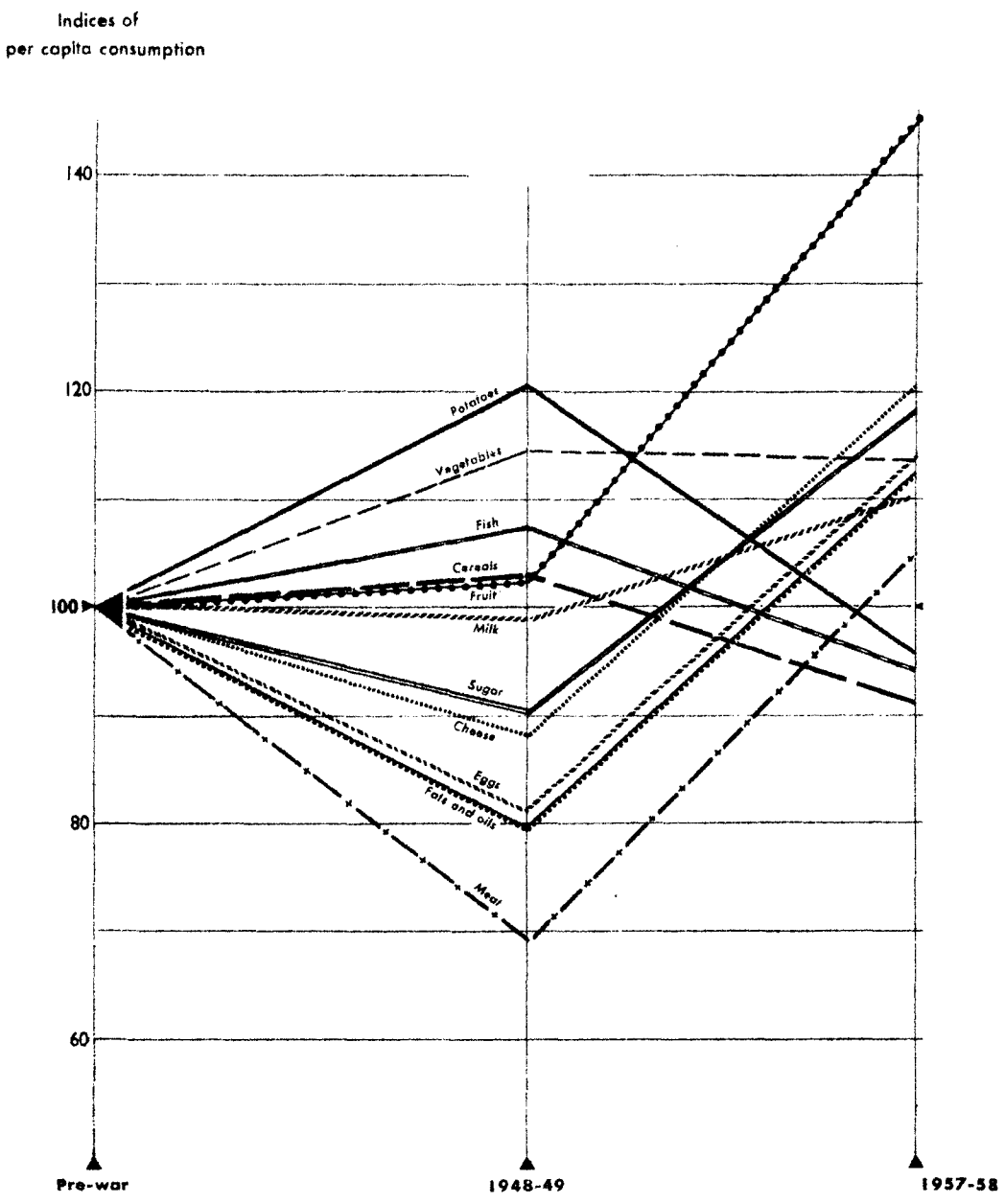
The changing consumption patterns during the 1950's have not been accompanied by major shifts in the retail price level of food.[8/] Although the increasing effect of advertising and quality improvements as well as changes in income distribution may have had some impact on food consumption during the period, these are minor compared with the effect of changes in income.[9/] The over-all adjustment in expenditure patterns indicates a general upgrading of quality in diets. Table 4 indicates, however, that wide variations still exist between countries. In general, higher quality diets exist in the United Kingdom, Sweden, Belgium, Switzerland, Denmark and Norway. Medium level diets exist in Finland, Ireland, Germany, Netherlands, Italy, France and Austria while the lower quality diets exist in Greece, Spain and Portugal.

8/FAO, European Agriculture in 1965, United Nations, Geneva, 1961, p. 33.

9/Ibid., pp. 37-38.

Figure 1

Changes in Structure of Food Consumption - OEEC Countries



Source: Agriculture and Food Statistics, OEEC Statistical Bulletin, Paris, 1959.

Table 4. Consumption Levels of Selected Food Items in Kg. Per Person Per Year 1956/57-1958/59

	Austria	Belgium Luxembourg	Denmark	France	Germany	Greece	Ireland	Italy	Netherlands
Total cereals	116.1	93.3	84.1	108.0	90.5	165.7	120.2	142.3	86.5
Bread grain	105.5	89.0	76.8	101.5	85.7	156.5	113.2	122.9	80.8
Potatoes	94.1	147.0	129.0	114.0	149.0	41.3	144.6	48.0	90.0
Vegetables	64.6	67.6	66.6	127.0	46.7	112.2	61.7	112.8	67.5
Fresh fruit	76.2	57.2	54.4	43.7	71.1	96.5	25.2[a]	67.3	52.2
Meat	50.1	56.3	69.4	70.0	52.0	20.0	57.0	23.3	42.8
Eggs	9.8	14.9	8.6	10.3	11.8	5.2	15.0	8.3	11.5
Sugar	34.5	31.2	48.5	29.1	29.3	11.3	42.3	18.2	43.2
Liquid milk	168.9	94.2	119.6	94.0[c]	119.1[c]	39.4	192.7	58.0	168.6
Cheese	4.1	5.4	7.0	8.6	6.5	10.5	0.9	6.7	7.0
Butter	3.4	8.4	9.4	6.0	6.1	1.1	15.1	1.3	3.6
Other fats & oils	15.1	12.9	18.5	11.2	19.2	16.6	5.3	13.8	21.0

(continued)

Table 4. Continued

	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	U.S.A.	Canada
Total cereals	85.4	123.7	114.7	75.1	98.6	201.2	85.3	67.5	71.2
Bread grain	80.0	76.4	106.9	70.0	89.4	181.5	78.3	56.3	63.3
Potatoes	104.0	111.3	114.4	100.7	73.0	35.2	94.6	49.2	65.6
Vegetables	37.7	104.6	108.4	27.3	77.4	76.6	60.2	91.2	74.8
Fresh fruit	51.8	65.0[b]	70.2	56.0	88.8	74.9	44.0	102.6	45.6
Meat	37.9	16.3	15.2	51.5	53.9	13.8	65.5	86.5	75.8
Eggs	7.9	2.7	5.1	10.3	9.9	1.7	14.1	21.3	16.6
Sugar	40.2	16.4	15.7	43.8	42.2	11.8	51.6	44.4	43.7
Liquid milk	190.4	16.2	62.5	152.6	195.5	36.0	146.8	158.3[c]	190.9
Cheese	8.4	1.2	1.6	6.6	8.1	5.2	4.3	3.6	3.2
Butter	3.1	0.6	0.1	7.7	5.5	3.3	6.7	3.2	7.2
Other fats & oils	22.5	15.6	16.9	13.1	12.8	4.4	15.4	17.3	14.3

Source: Agriculture, OEEC Statistical Bulletin, Paris, 1961, p. 45.

[a]Including other fruit

[b]Including table olives

[c]Including cream in milk equivalent

The gap between European dietary levels and those existing in the United States is still relatively wide. However, it is significant that the patterns that eating habits have followed with improvement in general economic status are much the same as those that have taken place in the United States. The fact of these similar patterns and the still wide gap between consumption levels in Western Europe and in this country indicate something of the potential adjustment that may occur in food consumption as income levels in Europe continue to increase.

Self-sufficiency in Food

Both production and consumption of food has been changing in Western Europe, but the degree to which a food balance has been obtained varies widely between countries and for specific commodities. Considering Western Europe as a whole, and all foods, the balance between production and consumption has reached the point where approximately 80 percent of all requirements are produced at home. If the United Kingdom, the largest food importer, is excluded, Europe's degree of self-sufficiency rises to nearly 90 percent. The United Kingdom produces only about 60 percent of her supplies while other countries range from approximately two thirds to well over 100 percent and are net exporters. Table 5 indicates the general level of self-sufficiency by countries and by commodities as well as that for Western Europe in total. Self-sufficiency for Europe as a whole is generally low in cereals, sugar, and fats, plus fruits and nuts. A high degree of self-sufficiency tends to exist for meat, milk and milk products, and vegetables. The variation between countries is, of course, great.

Foreign Trade

One way to measure the importance of foreign trade to an economy is the ratio between the value of its foreign trade and its gross national product. In

Table 5. Degree of Self-sufficiency in Selected Food Products, by Country, 1955/56-1957/58

	Wheat & Wheat Flour	Other Cereals	Sugar	Meat	Milk & Milk Products	All Fats	Fruits & Nuts	Vegetables
Western Europe	77	81	68	93	98	53	80	98
Western Europe (excluding U.K.)	86	84	76	105	104	64	86	100
Austria	71	70	91	98	100	50	62	91
Belgium-Luxembourg	62	42	109	95	91	47	57	101
Denmark	53	95	136	265	116	111	89	100
Finland	41	83	15	101	114	70	-	-
France	108	106	107	99	101	55	58	98
Germany	60	80	78	90	96	45	51	78
Greece	82	94	-	86	87	126	119	100
Ireland	79	85	78	266	101	104	53	96
Italy	100	90	101	86	100	70	133	116
Netherlands	28	41	75	132	140	47	72	151
Norway	12	65	-	101	102	179	47	88
Portugal	85	102	-	93	102	84	100	102
Spain	100	99	98	98	102	97	-	-
Sweden	110	87	89	97	100	79	61	89
Switzerland	39	34	13	90	108	42	51	70
United Kingdom	35	66	24	58	88	16	32	80

Source: Dewhurst, op. cit., Europe's Needs and Resources, Twentieth Century Fund, p. 199.

1955 Western Europe's visible and invisible imports and exports amounted to about 21 percent of GNP and accounted for nearly 40 percent of world merchandise imports and nearly as large a proportion of exports.[10/] This compares with about 6 to 8 percent for the United States.[11/] Although as previously indicated, Western Europe has obtained a substantial degree of self-sufficiency for many agricultural products, it is still the principal market for the world's food exports. In 1959 food constituted approximately 28.1 percent of Western Europe's imports of all merchandise, ranging from about 42 percent in the United Kingdom to approximately 8 percent in Turkey.[12/] As shown in Table 6, the total volume of both imports and exports of agricultural products has increased substantially during the 1950's.

Table 6. Foreign Trade in Food and Agricultural Products--OEEC Countries[a]

(Millions of U.S. Dollars)

Year	Imports	Exports	Balance
1950	8,440.1	3,342.1	5,098.0
1951	10,380.4	4,042.0	6,338.4
1952	9,781.7	3,985.3	5,796.4
1953	9,883.0	4,154.6	5,728.4
1954	10,472.4	4,537.9	5,934.5
1955	11,169.7	4,825.4	6,344.3
1956	12,224.5	5,034.0	7,190.5
1957	12,641.0	5,499.5	7,141.5
1958	12,385.7	5,307.8	7,077.9
1959	12,773.1	5,593.7	7,179.4

Source: Agriculture, OEEC Statistical Bulletin, Paris, 1961.

[a]SITC groups 0, 1, 4, 22, 29, 92.

10/Dewhurst, op. cit., pp. 635-638.

11/This comparison is affected by the fact that trade between European states is international trade, while trade between states in the U.S. is domestic trade. Without intra-European trade, the foreign trade ratio of Europe would sink from 21 percent of GNP to approximately 10 or 12 percent but still substantially more than that from the United States.

12/Agriculture, OEEC Statistical Bulletin, Paris, 1961.

Imports have tended to increase more rapidly hence the net balance of imports over exports has widened.[13/] A breakdown of foreign trade in food and agricultural products by areas of origin and destination is shown in Table 7 for the year 1959. The general picture that emerges is that Western Europe is a major trading partner with most areas of the world, with North America as the largest outside supplier. Western Europe is in a deficit trading balance on food with all areas of the world. On a commodity basis, fruits and vegetables represent the largest single import item while cereals and cereal preparations and live animals and meats and fats and oils are next (Table 8). Live animals and meats, milk and milk products, and fruits and vegetables represent the largest export items. These items are important in intra-European trading and hence do not necessarily represent the most important trading items from the viewpoint of the rest of the world.

Table 7. Trade in Major Agricultural Products by OEEC Member Countries with Specific Areas of the World and Total, 1959 (Millions of U.S. Dollars)*

Area	Imports	Exports	Difference
Internal OEEC	3,718.3	3,607.6	110.7
Overseas territories	1,728.8	586.0	1,142.8
North America	2,042.2	593.6	1,448.6
Sterling Non-OEEC	1,851.5	206.1	1,645.4
Latin America	1,527.8	121.0	1,406.8
Eastern Europe (ex. Finland & Yugoslavia)	467.1	170.2	296.9
Other Non-OEEC	1,413.3	298.3	1,115.0
World	12,773.1	5,593.7	7,179.4

Source: Agriculture, OEEC Statistical Bulletin, Paris, 1961.
*SITC groups 0, 1, 4, 22, 29, 92.

13/This net increase has been accounted for, at least in part, by expanding net imports of feed grains and some tropical products.

Table 8. OEEC Trade in Food and Agricultural Products by Groups of Commodities, 1959 (Millions of U.S. Dollars)

Commodity	Imports	Exports	Difference - = net imports + = net exports
Cereals and cereal preparations	1,913.9	450.7	-1,463.2
Live animals and meat	1,683.6	1,027.8	- 655.8
Milk and milk products	1,015.7	804.0	- 211.7
Fats and oils	1,929.6	509.2	-1,420.4
Sugar	429.5	168.9	- 260.6
Fruits and vegetables	2,101.4	888.4	-1,213.0
Fish and fish preparations	393.6	346.7	- 46.9
Beverages	507.3	540.7	+ 33.9
Tobacco	555.0	273.6	- 281.4
Feedstuffs for animals	594.4	159.2	- 435.2
Other	1,649.1	424.5	-1,224.6
Total	12,773.1	5,593.7	-7,179.4

Source: Agriculture, OEEC Statistical Bulletin, Paris, 1961.

The importance of Europe as a market for American farm products is shown in Table 9. European nations absorb close to one half of our total agricultural exports. Approximately half of our exports to Europe, in turn, go to the six nation Common Market group. If the Common Market expands to include Great Britain and several additional smaller countries, 40 percent or more of our total agricultural exports will go into this one market area. As a commercial market, it is even more important since most of the special program local currency exports (P.L. 480) are to other areas.

The importance of European exports as a source of dollar income for American agriculture and in maintaining our balance of payments position is readily apparent. Further because of rapid and persistent industrial growth, the

Table 9. Exports of Specific Agriculture Products by the United States to OEEC Member Countries - 1959

(Thousands of U.S. Dollars)

Destination	Live Animals Meat & Meat Prep.	Dairy Products, Eggs & Honey	Fish & Fish Prep.	Grains & Cereal Prep.	Fruits & Vegetables	Sugar & Sugar Prep.	Feed Stuff for Animals
Germany	22,077	10,310	178	84,843	26,878	594	5,695
Ben-Lux	1,291	2,281	305	66,474	10,756	933	4,175
France	1,048	78	423	7,372	5,353	810	1,331
Italy	220	4,904	28	26,463	1,143	203	5,986
Netherlands	9,587	1,963	484	141,848	13,525	482	10,319
Austria	41	178	-	13,146	439	130	-
Denmark	353	213	4	27,423	3,364	50	3,666
Greece	267	1,475	280	12,595	375	226	117
Ireland	35	6	-	4,145	2,342	21	765
Iceland	1	2	-	1,255	456	62	869
Norway	253	13	11	15,526	2,982	7	876
Portugal	20	1,192	5	2,653	10	6	124
United Kingdom	6,476	7,849	8,766	161,447	34,795	1,928	3,310
Sweden	879	140	152	6,934	10,855	132	178
Switzerland	8,274	657	154	3,831	5,921	545	115
Turkey	2,308	1,325	1	1,330	21	13	-
TOTAL OEEC*	53,130	32,586	10,791	577,285	119,215	6,142	37,526

(continued)

Table 9. Continued

Destination	Misc. Food Prep.	Oil Seeds, Oil Nuts & Oil Kernels	Animal & Vegetable Crude Materials N.E.S.	Animal & Vegetable Oils, Fats and Derivatives	Tobacco	Textile Fibers	Total
Germany	5,226	32,461	2,721	28,409	49,062	35,630	304,084
Ben-Lux	190	10,348	974	4,002	14,489	13,344	129,562
France	315	8,292	1,549	1,439	9,674	32,601	70,285
Italy	198	3,741	2,529	28,346	10,628	52,299	136,688
Netherlands	466	65,403	2,097	39,184	14,284	17,847	317,489
Austria	18	-	267	368	2,207	1,733	18,527
Denmark	39	15,208	594	115	12,637	1,534	65,200
Greece	9	-	212	88	18	127	15,789
Ireland	10	-	167	148	8,511	223	16,373
Iceland	14	-	5	200	831	160	3,855
Norway	43	4,961	160	1,316	5,623	769	32,540
Portugal	6	-	15	4	3,284	700	8,019
United Kingdom	27,686	8,974	4,226	3,684	111,450	58,682	439,273
Sweden	699	67	318	3,270	10,197	6,260	40,081
Switzerland	951	1,392	746	1,380	10,231	7,559	41,756
Turkey	1	19	179	30,447	-	2	35,646
TOTAL OEEC*	35,871	150,866	16,759	142,400	263,126	229,470	1,675,167

Source: OEEC Statistical Bulletin, Series B, Vol. 5, January-December 1959, pp. 66-67.

*Not including Spain.

European market for American farm products has grown substantially from about $500 million annually in the period 1946-48 to its current level approaching $2 billion. Whether this trend continues will first of all be imbedded in continued general growth and prosperity, but will also be influenced by specific institutional and policy adjustments--especially those related to the Common Market. Central to the question of the effect that the Common Market will have is the extent to which tariff adjustments result in a redirection of existing trade patterns and the impact that price policy has on European consumption and production levels for farm products. We turn now to a consideration of these questions.

Economic Union in Western Europe and Its Implications for Realignment of Trade in Agricultural Products

Western Europe as a whole is a highly industrialized region in which agriculture employs a decreasing proportion of the population and contributes a decreasing proportion to the national income. Immediately following the war when most foodstuffs were in short supply increased output was essential. With this need for greater production as a stimulus, almost all Western European countries adopted agricultural policies which had the objective of increasing output. In the early postwar years a shortage of foreign exchange was included as a part of the motive for increased production. The general objective of increased production has not yet been abandoned. The United Kingdom, for example, set an original goal of increasing agricultural output to 60 percent of prewar levels.[14/] France has attempted to decrease its imports of livestock products and increase exports of grains. Western Germany, a normally deficit country, has adopted increased agricultural production as a correlary of the objective of raising agricultural incomes.

14/Dewhurst, et. al., op. cit.

Income support is provided to agriculture in a variety of forms.[15/] In those countries which are net importers domestic price is often maintained by quantitative restrictions on imports or by tariff levies. Where there are net exports, export subsidies are often used. These trade policies, in turn, are combined with different forms of domestic price or income support measures.

The way in which these individual policy positions will ultimately be adjusted to represent a common policy, particularly for an expanded common market cannot be precisely predicted at this time. In shaping a common agricultural policy, European countries are faced with institutions, situations, and trends resulting from long historical development and more immediately the application of national policies which have differed widely. Hence, the task of developing a common agricultural policy will not only be that of enabling agriculture to pass from its individual country basis to that of a common market and competitive structure, it also must endeavor to solve the problems already facing agriculture in the various member countries. In facing these problems the currently constituted six member Common Market has taken a broad approach to the development of common agricultural policies. According to the treaty of Rome which initially established the Common Market the objectives of agricultural policy are:

(a) to increase agricultural productivity by developing technical progress and by insuring the rational development of agricultural production and the optimum utilization of the factors of production particularly labor,

(b) to insure thereby a fair standard of living for the agricultural population, particularly by increasing of the individual earnings of persons engaged in agricuture,

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15/ See Farm Programs of Foreign Governments, Committee Print Committee on Agriculture, 87th Congress, 2nd Session, U. S. Government Printing Office, Washington, 1962, and OEEC Problems in Agricultural Policy, 4th Report on Agricultural Policies in Europe and North America, Vol. 1, March 1960.

(c) to stabilize markets,

(d) to guarantee regular supplies and

(e) to insure reasonable prices in supplies to consumers.

These general guides are to be implemented under three broadly oriented policy frameworks. These are: structural policies, market and trade policies, and social policies in the agricultural field. Structural reform is interpreted broadly to include the expansion of transportation facilities, schools for higher education and the development of service industries. It also includes programs designed to facilitate the creation of larger size more efficient farms in place of small and in some cases scattered holdings that currently exist in many countries. Structural policy in general is designed to improve the mobility of agricultural labor and to improve the basis on which desired capital improvements and individual farm size adjustments can be made. The development of an efficient system of agricultural credit and the coordination of supply, marketing and service sectors with agriculture are emphasized as an integral part of structural adjustment. The long-term implications of these activities will be reflected in the ability of European agriculture to expand output and to compete on an unprotected basis with the agricutlure of other nations.

It is in the development of market and commercial policies that the greatest difficulty and the most controversial areas of concern exist. In general the aim of the EEC is to establish a market with a common level of agricultural prices as soon as operationally feasible. This calls for (1) the progressive elimination of obstacles to trade in agricultural products within the community, (2) the establishment of rules governing competition and in particular the adjustment and progressive reduction of subsidies, reimbursements, or other financial aid in support of prices or of agricultural markets, (3) harmonization of legislation

especially where it affects trade and agricultural products, (4) the coordination of national market organizations, and (5) the coordination of trade policies of member states and the gradual introduction of the common system for external trade.[16/]

In developing its proposals for a common agricultural policy, the commission of the EEC recognized that it would not be possible to follow a price policy consistent with the aims defined in its market policy unless a common trade policy was applied at the same time. It was felt that in order to maintain the desired level of agricultural income, and seek a balance between production and consumption the community could not be fully exposed to competition from world markets, particularly for some products. One important reason given for this is the fact that price conditions in world markets are often considerably distorted from those that apply in the domestic market of export countries. This objective of setting the limits to the influence of international competition on European producers is, on the other hand, combined with the aim of expanding external trade, particularly exports for those commodities that are surplus production. To obtain import protection and facilitate desirable exports, trade policy will be integrated with market and price policy with a considerable degree of flexibility for action and with considerable variation between commodities. Table 10 indicates some of the arrangements for specific products that have been adopted or proposed by the European Economic Commission.

It is apparent that a wide variety of coordinated price, production, and trade policies will be utilized to stabilize European markets and to insulate them from the competition of producers in third countries. The extent to which these will change as a result of British negotiation for entry cannot be foreseen at

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[16/] EEC Commission Report, June, 1960, p. 222.

Table 10. Market Arrangements for European Economic Community

Item \ Commodity	Grains*	Pig meat*	Eggs and poultry*	Fruits and veg.*	Livestock and meat**	Dairy products**	Sugar
Target prices	Y	-	-	-	-	Y	Y
Threshold or Sluice gate prices	Y	Y	Y	-	Y	Y	Y
Stabilization purchases	Y	-	-	-	Y 1/	Y	Y
Export subsidy if needed	Y	Y	Y	-	-	-	-
Import licence quality or other regulation	Y	-	-	Y	Y 2/	Y	Y
Import levy	Y	Y	Y	-	-	-	-
Common external tariff	-	-	-	Y	Y	Y	Y

* Adopted.

** Proposed.

1/ For meat but not live animals.

2/ For live animals but not meat.

this time. It is more likely that British entry will influence implementation of policies, for example, the level at which prices are set, rather than actually change the nature of the policy.

Trade Diversion

The question then is can this maze of institutional patterns and policy arrangements be cut through in order to get some insight into the potential impact of European integration on the market for farm products produced outside of the economic community. The general theoretical framework within which one aspect of this problem fits is that of the theory of customs unions developed by Mead, Viner,

Scitovsky and other current writers.[17] This theory says in essence that: The development of a customs union will have two primary effects on trade; these are trade creating and trade diverting. In the case of a customs union, trade creation and trade diversion usually occur simultaneously. Trade will be created among members of the union but diverted from "third" or outside countries. In the intermediate and longer-run trade may also be created with outside countries through adjustments along demand and supply curves in the integrating countries and from accelerated general economic growth created by union. However, the immediate implications of lowering trade restrictions between members of a customs union while maintaining them against third countries is to divert trade away from third countries. This can be illustrated by reference to the hypothetical data in Table 11.

Table 11. Hypothetical Illustration of the Effect of Economic Union on Trade Patterns

Country	Before Economic Union			After Economic Union By B and C		
	Domestic Producer Price	Quantity Imported	Quantity Exported	Domestic Producer Price	Quantity Imported	Quantity Exported
A	$1.00	0	100	$1.00	0	Less than 100
B	1.50	0	0	1.75	0	A positive quantity
C	2.00	100	0	1.75	100+	0

The following assumed conditions apply prior to integration: Trade exists between A and C, while B is just self-sufficient. Country C has a uniform tariff of $1.00 to protect its producers against prices in the lower cost countries A and B. With uniform individual country tariffs, the import price into country C from country A is $2.00, while from country B it is $2.50. In this situation, Country A

[17] J. G. Meade, The Theory of Customs Unions, Amsterdam, 1955. T. Scitovsky, Economic Theory and Western European Integration, Stanford, 1958. J. Viner, The Customs Union Issue, New York, 1950.

has an advantage and will be the primary exporter to C. The right hand part of the table indicates the situation that would exist after integration by B and C if a uniform price is established midway between that which existed in each country and if internal trade barriers are eliminated. After integration B can sell to C at a price lower than A and still cover costs. B has substantially improved its relative position. This means trade will be diverted from A to B, or from a third country to internal trade within the union.

Some insight can be gained into the potential impact of integration on trade diversion in farm products by looking at the relative trade patterns of European countries involved in integration. As a first condition, member countries must in the aggregate be net importers and in a position to absorb the additional supply that is diverted from other countries. Table 12 indicates the general structure of trade in food commodities in the six member and expanded common markets.

Table 12. Selected Trade Data, EEC, EEC Plus Denmark, Norway U. K. and Ireland, 1960 (000 U. S. Dollars)

Item	EEC	EEC + Denmark, Norway U. K., Ireland
TOTAL IMPORTS	4,823,070	9,195,684
INTERNAL TRADE	1,180,719	2,537,090
Imports from other areas	3,642,351	6,657,594
Exports to other areas	1,358,561	1,171,876
Difference in imports from other areas and exports to other areas	2,283,790	5,485,718

Source: Computed from OEEC Statistical Bulletin, Trade By Commodities, 1960, Series C, Volumes 1 and 2.

Food imports into EEC countries totaled more than 4.8 billion dollars in 1960. Of this amount, 1.1 billion represents internal trade and about 3.6 billion comes from other areas. Exports from EEC to other areas amount to 1.3 billion, approximately one third of total imports from other areas. These exports can be diverted to home consumption and hence reduce the need for imports from "third" countries. If this diversion is complete, the net imports from other areas to EEC countries will be reduced from 3.6 billion to about 2.2 billion.

Comparing the data for EEC as it exists today with the possible expanded EEC, some interesting general conclusions arise. Because exports to other areas decrease as the assumed size of the union increases, the potential for trade diversion decreases with an expanded economic community. Total imports, on the other hand, continue to increase. Imports into the Common Market from third countries increase substantially when Denmark, Norway, U. K. and Ireland are added to the union. This results from the large flow of food commodities into the U.K. from other areas of the world.

The extent to which trade diversion will actually occur and what its meaning will be to the U.S. if these different levels of integration result is not immediately apparent. Some insights into the form and limits of diversion can be obtained by reference to Table 13. On a region by region basis, the following kinds of adjustments would tend to occur with implications for U.S. exports.

Trade between West European Countries

If the Common Market remains at its current six members, a substantial reduction in trade with other West European countries could occur. The basic flow of trade between the EEC and the rest of Western Europe is that of fruits and vegetables and prepared meats, milk and grain exported in return for live animals

Table 13. Export by Six and Ten Member Common Market
Selected Commodities to Specific Areas (1960)
(000 U. S. Dollars)

Commodity \ Exported To	Other OEEC	Canada	U. S.	British A.O.C.	French & Other A.O.C.	East Europe	Africa and Near East not A.O.C.	Latin America	Far East Not A.O.C.
	(Six member Common Market)								
All food	566,312	15,412	108,715	56,089	313,578	41,553	146,849	40,107	62,909
Food grains	33,223	831	4,640	13,340	55,946	3,685	43,841	3,014	3,679
Rice	11,952	1,057	223	433	2,975	621	2,385	754	1,652
Feed grains	33,604	18	167	-----	140	203	268	-----	-----
Meat	98,665	468	65,691	4,019	51,747	8,841	2,212	3,540	496
Eggs	6,942	17	12	172	2,263	-----	-----	-----	-----
Dairy products	49,716	2,941	17,376	25,390	54,894	1,264	21,105	18,629	33,430
Animal & vegetable oils	18,457	491	13,840	2,534	12,178	4,768	3,004	1,985	992
Oilseeds, nuts, kernels	2,051	240	579	-----	2,250	750	108	-----	105
Sugar	18,891	836	6,646	2,968	61,520	-----	28,924	-----	1,054
Vegetables	111,531	2,914	16,286	5,106	27,050	2,051	9,841	2,284	3,782
Fruits and nuts	102,990	3,046	7,316	985	10,506	14,210	2,909	620	893
	(Ten member Common Market)								
All food	226,170	37,371	200,548	141,009	311,890	81,690	162,498	74,382	78,176
Food grains	19,717	5,636	7,630	20,803	56,066	3,789	46,636	6,209	7,047
Rice	6,936	1,057	223	433	2,975	621	2,385	754	1,652
Feed grains	17,665	18	429	-----	140	321	911	488	-----
Meat	42,265	1,968	153,070	12,130	53,027	19,286	5,893	9,368	2,820
Eggs	7,413	17	13	172	2,263	342	140	1,613	-----
Dairy products	22,494	4,497	21,533	40,291	57,264	8,249	28,045	28,893	54,727
Animal & vegetable oils	17,175	2,680	16,778	4,792	12,178	5,860	3,404	2,423	2,068
Oilseeds, nuts, kernels	1,080	243	1,267	-----	2,448	1,038	108	-----	105
Sugar	16,980	5,338	13,043	23,062	61,900	-----	48,420	-----	10,624
Vegetables	56,284	3,090	16,357	7,978	27,159	3,207	12,298	3,475	4,019
Fruits and nuts	61,073	4,202	8,477	2,216	10,506	15,837	3,480	620	1,770

Source: Computed from OEEC Statistical Bulletin, Trade by Commodities, 1960. Series C, Volume 1.

dairy products and fish. With the expanded Common Market, exports to non-member countries in West Europe would be greatly reduced but still substantial. Part of the loss in exports by the U.S. to the Common Market could be recouped in other countries in Europe, but probably not all of it. The composition of products involved is sufficiently different that substitution of U.S. products for those formerly obtained from the Common Market would not be complete in non-member European countries.

Trade with East European Countries

Some exports to East European countries would be diverted to internal use and tend to reduce U.S. markets in Western Europe. Since this market is generally not open to U.S. exporters for political reasons, and in any event is not a cash market, this would represent a net loss to the U.S. The total trade involved is not great. Exports tend to concentrate in food grains, fruits and nuts, and dairy products. Imports from that area include substantial quantitites of live animals and smaller amounts of a wide variety of other temperate zone agricultural products.

Trade with Associated Overseas Territories

This is an important trading group for EEC countries. Exports to associated overseas countries of the six member Common Market include a wide variety of products but with concentration in food grains, meat, dairy products and sugar. Imports include tropical beverages and spices plus substantial quantities of fruits and nuts, vegetables, tobacco, fats and oils, hides, skins and furs and feed stuff for animals. If the Common Market is expanded, the pattern of exports remains substantially the same but the composition of imports changes substantially. If these countries maintain preferential treatment within the Common Market, European exports to these countries should not decrease. This will apply regardless of the composition of the Common Market. However, preferential treatment within

the expanded Common Market will mean that major exporters of temperate zone commodities such as Canada, Australia and New Zealand will have an advantage not alone in the U.K. but in other major European importing countries. In this case the U.S. will lose due to preferential treatment of other countries but not because diversion occurs. If associated overseas countries do not maintain preferential treatment with the EEC, European exports will be reduced and these areas will be open to some expansion by the United States and other exporters of temperate zone agricultural commodities. The extent of diversion will depend on political as well as economic factors and competition will be strong from other exporters of temperate zone commodities. The U.S. would likely be a net loser in its dollar market but could increase outlets through P.L. 480.

Trade with Underdeveloped Areas--Not A.O.C.

Some European exports to Asia, Africa, the Middle East and possibly minor quantities to South America would be diverted. In general, the kinds of products are such that they could be replaced by U.S. exports. The ability to enter these markets, however, would depend on exchange problems and the extent of dollar reserves. Competition in capturing these markets will arise from Canada, Australia, New Zealand and Argentina, the other major exporters of temperate zone agricultural commodities.

Trade with the United States

Because most European exports to the United States are high value specialty items, it is unlikely that much decline will result regardless of institutional or price level adjustments in Western Europe. Some diversion of processed meat products may occur, but very little, if any, would be expected in alcoholic beverages or specialty cheeses, the other two major items. This diversion, if it occurred, could improve the domestic U.S. market for livestock producers but in turn would be offset by losses in the foreign market by other commodities.

The export data in Table 13 indicate potential adjustments only and the inferences drawn from them are highly tentative. What actually happens will depend on a number of factors. A fairly complete commodity by commodity study which takes into account political as well as economic conditions is needed to provide the basis for conclusive statements about the nature of diversion that will occur. The following generalizations, however, would seem to be valid.

1. High Common Market prices and a divergence from world prices will increase the tendency for withdrawal of European export commodities from world markets to internal trade and consumption.

2. Reduction in trade is most likely to occur on products that are unprocessed hence undifferentiated when they enter world markets. For example, certain quantities of French barley move currently to African countries largely for food purposes. Since French barley is not unique as a commodity, this can easily be replaced by barley from other areas of the world. Importers will not pay the premium European price needed to divert it from internal consumption. The same may not be true for at least certain classes of French wine or Danish cheese.

3. Trade diversion will be reduced to the extent that political, technical and exchange problems interfere with trade readjustment. These factors may be particularly relevant in the case of associated overseas countries.

In summary then, it can be assumed that economic integration will tend to cause some loss of U. S. markets in Western Europe by diversion to home consumption of European products going to East Europe, Africa, the Middle East, the Far East and South America. This loss due to diversion will be even greater if associated overseas territories are not given preferential treatment. On the other hand, if the U. K. enters the Common Market and associated overseas territories are given preferential treatment, large quantities of temperate zone agricultural commodities could move into European markets on a preferential basis.

The loss due to deterioration of our competitive position, vis-a-vis Canada, Australia and New Zealand, would probably exceed that which could be brought on by diversion. A purely selfish position for the U. S. to take probably should be to encourage preferential treatment for associated overseas countries if the Common Market remains the current six but to argue against preferential treatment if the U. K. enters.

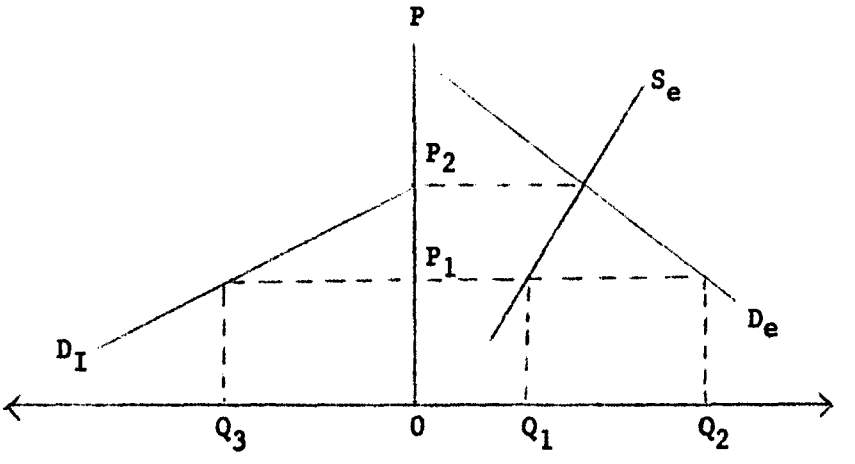
Production-Consumption Adjustment-- The Future Trade Gap

The above analysis is static in the sense that it attempts to look at trade readjustment with a given level of total production and consumption with the European Economic Community. The conclusions concerning trade diversion in Western Europe can, of course, apply only as long as it is assumed that the west European market can absorb all of the domestic production diverted from other areas. Though trade diversion will have some impact on the market for American farm products in Western Europe, the more fundamental questions are those centered around future changes in consumption and production levels within Western Europe.

The extent to which Western Europe will require imports can be viewed within the context of what might be termed an "import gap." This can be illustrated by the use of standard domestic supply-demand relationships as shown in the right quadrant and the import demand relation shown in the left quadrant of Figure 2.[18/] Import demand is measured by the extent to which domestic production and consumption is out of equilibrium. At price P_1 domestic demand exceeds domestic supply by the quantity $Q_2 - Q_1$ hence the quantity demanded for imports at that price is $0 - Q_3$. At price P_2 domestic equilibrium exists and no imports are needed. In this framework the import demand (D_I) is a derived demand and its shape and position will be determined jointly by the shape and location of the domestic demand and supply curves.

[18/] For further development of this analytical structure including its extension to take into account competing suppliers and derivation the West European demand curve facing U. S. suppliers see J. Graves, The West European Market for U. S. Feed Grains, Ph.D. thesis in process.

Figure 2. Hypothetical Domestic Supply-Demand Curve and Import Demand Curve



Hence in evaluating probable change in import demand in the short-run the relative domestic supply-demand elasticities are data of crucial importance. In the longer-run, growth factors and the extent to which the position of domestic demand and supply curves shift are more important.

Short-Term Response to Price

Though specific price elasticities are generally not available for western Europe some indication of the possible direction of short-run adjustment to price can be obtained. Returning to the hypothetical situation in Table 11 above, the implications of price elasticities can be viewed as follows. Considering consumption first, it can be assumed that if elasticities are equal and reversible and if prices are averaged between the two members of the community then if C, where price declines, is the larger market consumption will expand. On the other hand, if B, where price rises, is the larger market total consumption will contract. This follows from the fact that price increases in C and decreases by an equal amount in country B. Whether total internal supply in countries B and C expands depends on the relative elasticity of supply and size of production in each area.

amount in country B. Whether total internal supply in countries B and C expands depends on the relative elasticity of supply and size of production in each area. Output should increase in country B where price increases and decline in country C where price declines. The level at which price is set, of course, will greatly influence the actual adjustments that occur. If, for example, equalized price is set at the higher of the two levels or $2, all consumers will face a price equal to or greater than that which existed prior to economic union. The net effect would be to decrease total consumption. At the same time, all producers would face a price equal to or greater than that which existed and total production would increase. A price approaching the lower of the two pre-existing levels would have the opposite effect.

In reality the hypothetical situations expressed above would be complicated by a number of factors including the fact that supply curves are not reversible hence output will expand along a more elastic supply function than in its contraction phase. Similar "kinking" may exist in demand curves. Despite this, and other complicating phenomena, one basis for gaining some insight into the impact of price adjustment on the balance of consumption and production and hence the "trade gap" is to relate price to the size of consumer and producer markets that will be affected. If prices are averaged for the community as a whole, some consumers will face higher prices and others lower. Likewise, some producers will have higher prices and others lower prices.

Using some broadly drawn comparisons based on prices reported by the FAO, Table 14 indicates something of what can be expected in percentage of production and consumption that will be faced with a higher, lower, or a relatively unchanging price if prices are set at what appears to be an approximate average

European level.[19/]

Table 14. Percent of Production and Consumption Faced with Different Price Situations Six Member and Expanded Common Market (Assuming Prices are set at Average European Level)

Commodity Effect of Price Averaging	Six Member Common Market		Six Member + Denmark Ireland, Norway & U. K.	
	Production	Consumption	Production	Consumption
	%	%	%	%
Food grains				
Price rise	37.7	36.5	45.1	50.3
Price decline	58.7	58.7	51.8	45.9
Little or no change	5.6	4.9	3.9	3.8
Coarse grains				
Price rise	49.2	43.5	44.4	37.8
Price decline	26.2	29.7	36.7	42.9
Little or no change	24.6	26.8	19.9	19.3
Livestock products				
Price rise	17.0	12.8	35.4	36.9
Price decline	38.2	36.2	30.5	26.9
Little or no change	44.8	51.0	44.1	36.2

The significant patterns that emerge from the above comparison are as follows:

1. Only a very small percentage of food grain is free of a major change in price either in the case of production or consumption. This compares with a range of approximately 19 to 27 percent for feed grains and 36 to 51 percent for livestock products.

2. A price rise will apply to a higher proportion of production than consumption for all commodities in the six member Common Market. This is true only in the case of coarse grains in the expanded Common Market. A price rise will apply to a larger proportion of consumption than production in food grains and livestock products.

19/For the price data used see FAO Production Yearbook, Vol. 15, Rome 1962, pp. 292-380. Production and utilization data were obtained from Agriculture, OEEC Statistical Bulletin, Paris, 1961.

Price data are for 1960. Prices are not reported for all countries for any given commodity hence average price judgments are in effect made on a sampling basis. Problems of price specification exist for all commodities due to subsidies, taxes, quality, etc. hence a further element of judgment is required. Nonetheless it is believed some reflection of the actual adjustment is embedded in the data in Table 14. Production and utilization data used for the computations are annual averages by countries 1956-57 - 1959-60.

3. A price decline applies to approximately the same proportion of production as consumption in the six member Common Market. In the expanded Common Market a price decline will apply to a greater proportion of production than consumption of food grains and livestock products, but a smaller proportion of coarse grains.

These relationships in total suggest that with price-averaging there may be a slightly greater output increasing and consumption reducing effect in the expanded economic community than in the six member Common Market.

The proportions of the market that will be influenced by a price rise or decline are nearly offsetting factors for the six member Common Market. For example, in the case of food grains, 58.7 percent of both production and consumption will be effected by a price decline. At the same time, approximately 37 percent of each will experience a price rise. Because these market proportions are offsetting, the net adjustment that occurs will depend entirely on the relationship between the elasticity of demand and supply. Since supply and demand elasticities probably are not reversible, e.g. are different when prices rise or fall the interrelationships indicated in this analysis are rather complex. A price rise of 37.7 percent of the wheat production might, for example, result in a greater expansion in those countries where this part of the crop is grown than the decline in production in those countries producing 58.7 percent of the total output. Though the basis for following these estimates through in empirical detail are not available for this paper, the effect of short-term price response should not be overlooked in attempting to make judgments of the impact of agricultural policy in the Common Market on the outlet for American farm products. Price elasticities and the relative proportions of production and consumption to which price increases and declines apply are important empirical data that should be brought to bear on the analysis.

Though price elasticity of demand estimates for Western Europe countries are scarce, there is some evidence to indicate that they follow much the same pattern as those in the United States. This means that elasticities are very low for grain and cereal products, potatoes, and certain fruits and vegetables. Price elasticity for meat may be about -.5 and for some meat products as high as 1.0. Price elasticity for dairy products can be expected to be low. Data on short-run supply response to price is as in the United States essentially unobtainable.

Long-Run Adjustment

The longer-run adjustments that will determine the level of U. S. markets in Western Europe will be those based on growth factors. Expansion of demand for food will be based largely on industrial growth rates and its impact on personal income level. The extent to which this is translated into demand for food is reflected in relative income elasticities. The results of recent empirical studies on the income elasticity for selected food commodities in European markets is shown in Table 15.

Table 15. Income Elasticities for Selected European Commodities

Commodity Group	Estimate Set I[1]		Estimate Set II[2]
	Using Cross-Sectional Data	Using Time Series Data	
Beef and veal	.81	.86	-
Poultry	.88	.89	-
All meat	.72	.68	-
Eggs	.74	-	.8
Liquid milk	-.06	.30	-
Fats and oils	.55	.18	.16
Sugar	.53	-	-
Cereals	-.26	-.42	-.3
Potatoes	-.34	.15	-
Fruits and vegetables	-	-	.6
Milk and milk products	-	-	.3
Meats	-	-	.7

[1]/Obtained from European Agriculture in 1965, FAO, Geneva, 1961.

[2]/Obtained from Agricultural Commodities-Projections for 1970, FAO Commodity Review, 1962, Rome.

These are of much the same pattern as those existing in the United States with relatively high elasticities for animal products, except milk, and for all fruits and vegetables. Hence, it can be assumed that the patterns of consumption adjustment shown in Figure 1 above will continue into the future. Some estimates of the magnitude that these adjustments will take between now and 1970 are shown in Table 16. These, in turn, will be associated with estimated production adjustments as shown in the same table.

Table 16. Estimated Annual Percent Change in Production and Consumption of Selected Commodities, Western Europe 1957-59 to 1969-71

	Consumption	Production
Wheat	- .25 to - .16	1.8
Rice	.05	.05
Coarse grains	-	2.5
Milk and milk products	1.8 to 1.6	2.3
Eggs	3.7 to 3.0	N.A.
Fats and oils	1.7	2.1
Beef and veal		
United Kingdom	1.10 to 1.13	1.2
EEC	1.7 to 4.4	4.6
Other	2.8 to 3.5	2.8 to 3.2
All meat		
United Kingdom	1.12 to 1.6	1.7 to 1.8
EEC	3.4 to 4.1	3.7 to 4.0
Other	2.8 to 3.5	2.7 to 3.0

Source: Computed from Agricultural Commodities-Projections for 1970, FAO Commodity Review, 1962, Rome.

The demand estimates are based largely on the assumption that prices will not change materially, hence they reflect estimates of the influence of population and income growth only. The population growth rate is assumed to be 0.7 percent per year. The high income projection is based on an average increase in G.N.P. for all countries of 5.2 percent while the low income projection is based on a

growth rate of 4.2 percent. Estimates of change in output in turn reflect potential shifts in the supply curve due to structural and technological change in the absence of any major price shifts.

These projections indicate a rapid closing of the production-consumption gap only in the case of cereal products. The indicated increase in the output of coarse grains is less than the estimated increase in either livestock production or consumption. Hence, import needs for coarse grains may continue to increase unless large-scale diversion of wheat for feed purposes occurs. This is consistent with the results of work recently done at Michigan State University.[20/]

The projected increase in meat consumption and production indicates that the gap will remain substantially the same as during the period 1957-59. Western Europe in total will be only slightly if at all less dependent on outside imports of meat. The projected percent increase in rice consumption is equal to that for production. The trade gap will remain nearly constant. The now nearly balanced production-consumption pattern for dairy products will become over-balanced and Europe will have surplus production of dairy products by 1970. Projected percentage increase in consumption of fats and oils is somewhat less than projected increases in European output. However, total imports requirements will increase. A 1.7 percent annual increase in consumption represents a greater absolute change than an increase of 2.1 percent of production.

These projections do not take into account the implication of price policy that may develop due to Common Market negotiations. Doing this is a necessary part of both short and long-run evaluation. However, because they are based on

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20/ J. Graves, The West European Market for United States Feed Grains, Ph.D. Thesis in process.

historical trend values and assume a historical price base for individual countries, they do imbed a support price structure for virtually all commodities. This has two important implications. The first of these is that if prices in the Common Market are in fact established at a mean or average level the effect of price rises in some countries will be partially offset by price decreases in other countries. Since prices have been established at these historical levels for a long enough period for farmers to become adjusted to, the "two way" supply curve will become extremely important in making judgments about the extent to which adjustment can be expected both in the short run and in the longer run. If prices are averaged both parts of the two way supply curve will be relevant to evaluating the rate at which locational specialization and overall production adjustment will occur. If prices are set at very high levels the elasticity of supply to a price decline is not relevant. If they are set at very low levels the elasticity of supply to a price increase is not relevant. The latter is so unlikely to happen, however, that serious evaluation of it as an alternative probably need not be considered.

The second important thing to remember in evaluating price response is that because prices have historically been supported in most countries there will be very little risk response regardless of where Common Market prices are set. The changes in output that occur will be largely in response to price level and not to change in price certainty. The evaluation of output response to price support measures in the United States have in several cases emphasized the significance of risk. It would not be an important factor in evaluating the impact of Common Market price policy on output of farm products in Western Europe. Hence, though price policy needs to be considered in evaluating future consumption-production balances in Western Europe care needs to be shown in interpreting its significance. The historical pattern of response by farmers to price policy either

in the U.S. or Europe will not necessarily be relevant to evaluating the effect of a common agricultural policy. Using historical patterns probably will lead to a tendency to overemphasize price as a factor in increasing output.

Summary

In total then, taking into account the question of trade diversion, short-run supply-demand response and the longer-term growth factors, some summary evaluation can be developed. All of the conclusions are, of course, tentative yet can provide some useful guide to consider the impact of European integration on the export market for American farm products.

1. Trade diversion can potentially be a significant factor influencing the outlet for American farm products in Western Europe. Some of our cash market likely will be lost in the short run. Some, but probably not very much, of this may be gained elsewhere.

2. Based on the data that are available, it would appear that if the common agricultural policy results in a price approximately at a mid-point of those existing in Western Europe in 1960, the production-consumption balances in the six member Common Market will change very little in the food grains and in the livestock feed economy. Price averaging, however, will cause feed grain prices to rise slightly relative to livestock and wheat prices. A price averaging process in the expanded community may tend to have a greater negative impact on consumption and a somewhat greater positive impact on production. Higher prices will, of course, exaggerate each of these tendencies but the extent to which consumption and output will respond to higher prices cannot be precisely evaluated in the absence of meaningful elasticities.

3. Longer-run adjustments indicate a closing of the production-consumption gap for dairy products, and food grains while there will be a widening of the gap for feed grains and fats and oils. No clear closing or widening of the gap is indicated for meats.

The preceding analysis of short-run adjustment to price serve to indicate a process whereby judgments concerning price response can be made even without complete data on elasticities. The longer-term analysis partially substantiates intuitive analyses that are being presented with great frequency in the literature and also substantiate a trend projection previously made for feed grains. The longer-term projections used here, however, do not take into account the possible impact of price adjustments that might occur due to common agricultural policy, nor do they account for possible regional specialization that may occur in the Common Market. They are based on trend analysis of historical rates of structural adjustment and technological innovation in individual countries. If the development of the Common Market results in substantial regional specialization this factor in itself will probably tend to increase the rate of innovation and structural change. Farm supply industries particularly will have larger markets to sell in and might accelerate their activities in providing higher quality and lower cost inputs for agriculture. Larger farms in turn may increase the ability to absorb new technology at a more rapid rate. The potential for this occurring needs to be evaluated in detail before more reliable long-term projections can be made.

An additional significant factor in making long-run projections is the level of economic growth and its implication for expanded incomes. Table 4 indicates a very wide gap between the per capita consumption of many food commodities in the United States and in Western Europe. Major potential exists for expanded

consumption of certain products. However, differences in existing consumption levels between countries and long standing cultural differences would indicate that income increases may have rather widely differing impacts in different countries. Consumption projections at least on a regional basis will be required for effective evaluation.