The Entrance of Spain and Portugal Into the European Economic Community: Some Impacts on Their Agriculture, on the Common Agricultural Policy, and on Trade With Third Countries

John H. Sanders
James K. Binkley
Marshall A. Martin

January 1986
Revised

Introduction:

In January 1986, the European Common Market (EC) expanded to twelve members with the entry of Spain and Portugal. This is the culmination of nearly ten years of planning and difficult negotiations. There has been concern on both sides over the impacts of the expansion on particular sectors of the economy, with much of the attention centered on agriculture. In particular, there was much opposition within the EC-10 to the entry of Spain due to the large size of its agricultural sector, especially its irrigated area.

The purpose of this article is to provide a preliminary assessment of some likely impacts of the accession on agriculture within Spain and Portugal and the rest of the Community and on the pattern of trade in agricultural products. It contains four sections. In the first, the recent performance of agriculture in Spain and Portugal is compared and contrasted. The second makes

Recent Performance of Iberian Agriculture:

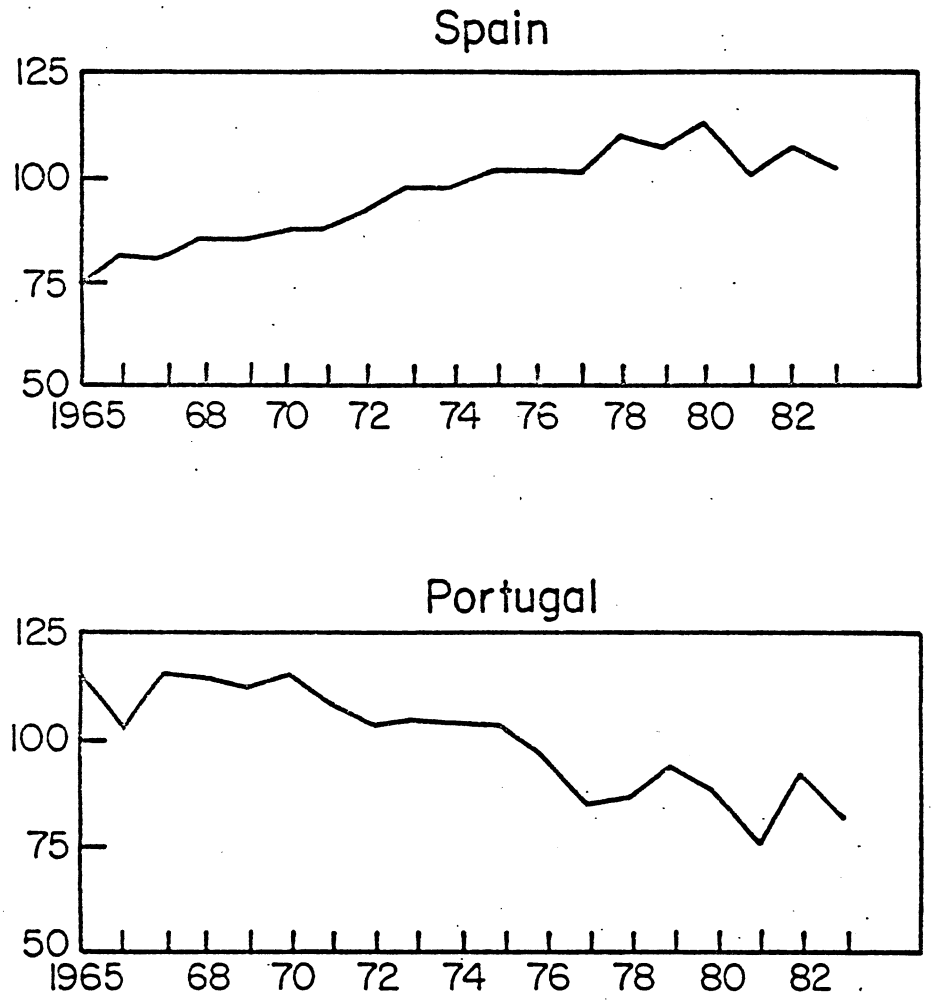
In Spain there has been a fairly steady increase in agricultural production per capita since 1965 with occasional dips, as from the drought of 1981. In contrast, Portuguese per-capita agricultural production stagnated up to the 1974 revolution and 1974-75 land reforms and has sharply declined thereafter (Fig. 1). Why have there been such large differences in agricultural performance between these two countries?

In general, the domestic and trade policies of both countries in the Fifties and Sixties were very similar. In the Fifties, both countries pursued autarkic policies, emphasizing import substitution and insulation from world markets.[1] During the Sixties, both countries became more open to the world economy and experienced very rapid industrial expansion and substantial emigration to other Western European countries. This boom period lasted until the energy price increase of 1973-74 and the subsequent European recession of 1974-75.[2]

From the Fifties to the present, Spain made substantial investments in the agricultural sector while Portugal concentrated on industrialization and until the revolution of 1974 on the agricultural development of Angola and Mozambique. The Spanish tractor stock increased from 16,000 to almost 600,000 from 1950-1983 (Fig. 2). Portuguese mechanization also proceeded rapidly in the Sixties and Seventies but the tractor-labor ratio grew less rapidly in Portugal. Spain made very large investments in irrigation, doubling irrigated area from 1950 to 1982 (Fig. 3). In Portugal

some inferences concerning the impact of entry upon these sectors. In the third section, attention is focused on adjustments likely to occur in the agricultural sectors of the EC-10 countries, both as a direct result of the expansion and due to the possibility of induced changes in the Common Agricultural Policy (CAP). The final section considers some of the adjustments and prospects for third-country trading partners with the EC-10 and the Iberian countries.

Figure 1. Agricultural production per capita indices in Spain and Portugal, 1965-1983.

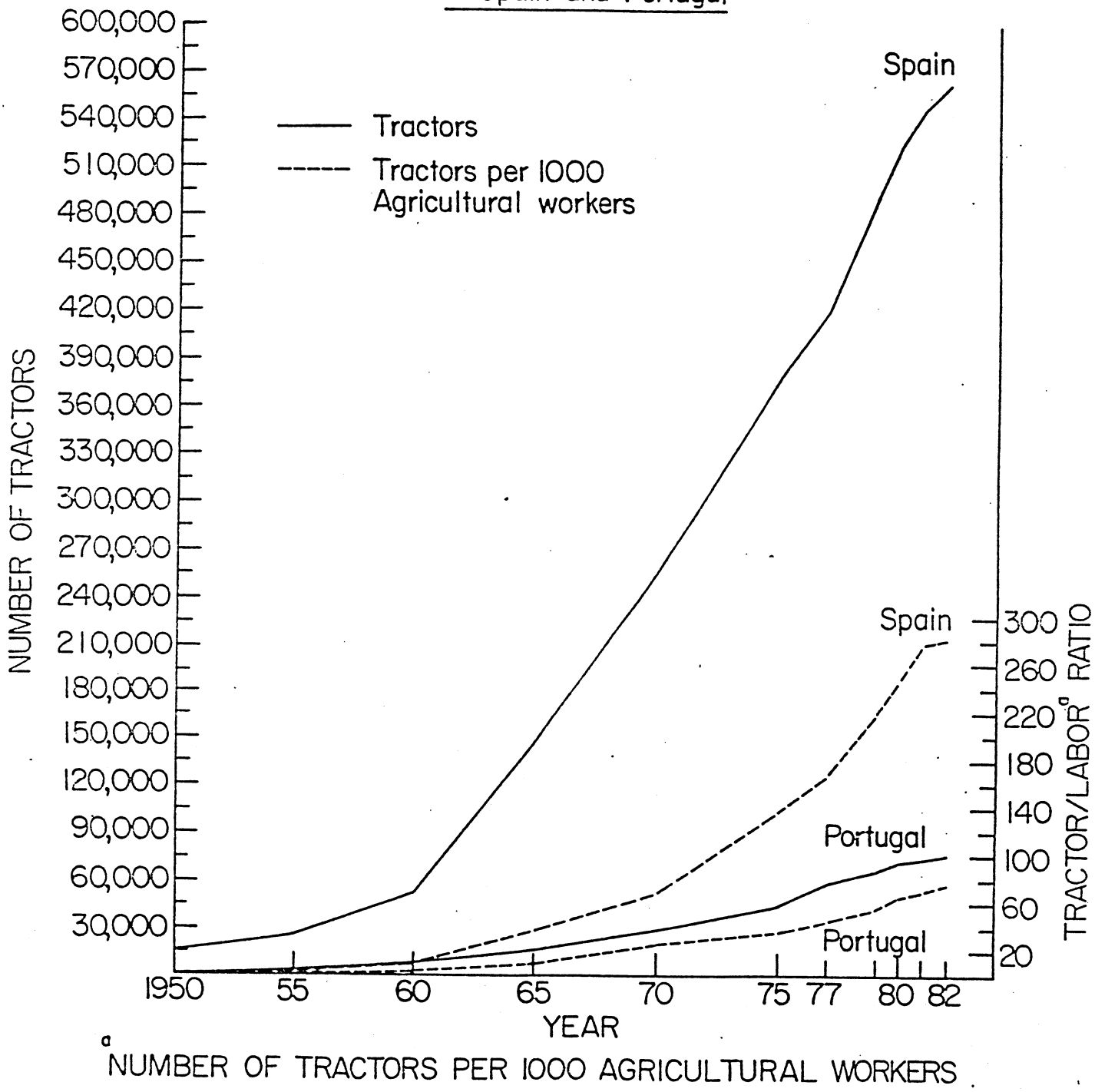


Source: Food and Agriculture Organization of the United Nations, Production Yearbooks, Rome, various issues.

Note: 1974-1976 is equal to 100 on these indices.

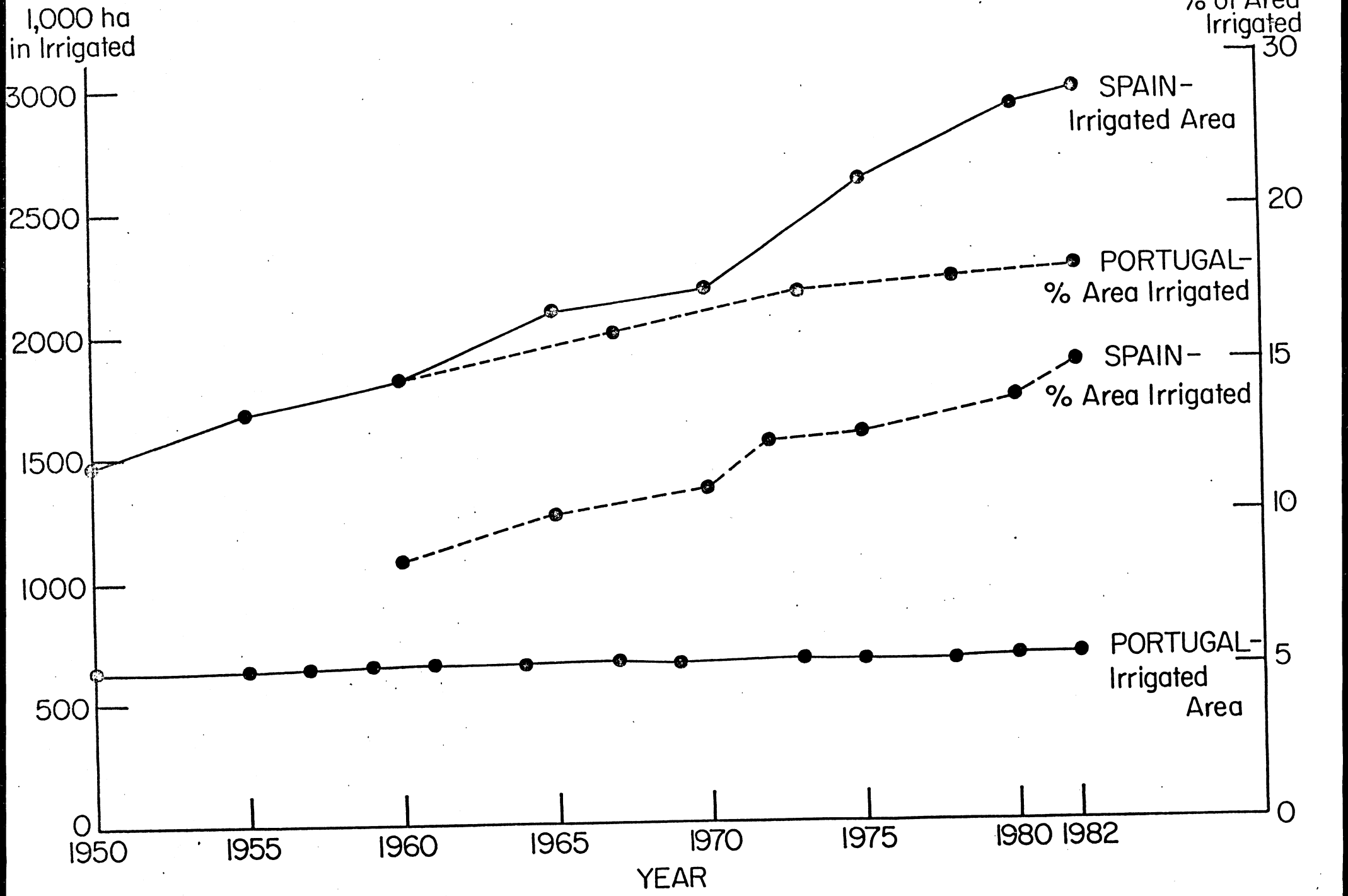
Figure 1

Growth of Tractor Stocks and Tractor-Labor Ratios in Spain and Portugal



[a] NUMBER OF TRACTORS PER 1000 AGRICULTURAL WORKERS

FIGURE 3. 'IRRIGATED CROP AREAS AND PERCENTAGE OF CROP AREA IN IRRIGATION IN SPAIN AND PORTUGAL, 1950-1982.



over the same period, increases in the public irrigation system were largely offset by the declining viability of the traditional private irrigation systems of the north. Hence, the net effect was a very slow growth in irrigation. As a percentage of total crop area, irrigation in Portugal is still more important than in Spain.

The structural transformation of the two economies from agrarian to industrial societies has also occurred at a more rapid rate in Spain than in Portugal (Fig. 4). From 1950 to 1983 the Spanish agricultural labor force decreased from 42% to 15% of the total labor force. The corresponding figures for Portugal are 47% and 20%. Spain has had more rapid industrial growth over a longer period than Portugal[3] and Spain has put much more emphasis than Portugal on creating economic incentives for land consolidation of the very small holdings of the north.

Differences in investment in agriculture and in the decline of the agricultural labor forces in the two countries were reflected in different agricultural productivity growth rates. In Spain, agricultural labor productivity accelerated in the Seventies, increasing the ratio of agricultural productivity to that of the rest of the economy from one-third to one-half (Fig. 5). In contrast, the productivity gap widened in Portugal, falling from 39% in 1970-72 to 27% in 1980-81.[4]

Agricultural development is not a costless process and the Portuguese overemphasis on industrialization led to stagnation of the agricultural sector. Portuguese colonial policy of stimulating agricultural development in Mozambique and Angola and controlling

Figure 4. AGRICULTURAL LABOR FORCE IN THE EC-10, SPAIN, AND PORTUGAL, 1970-1983.

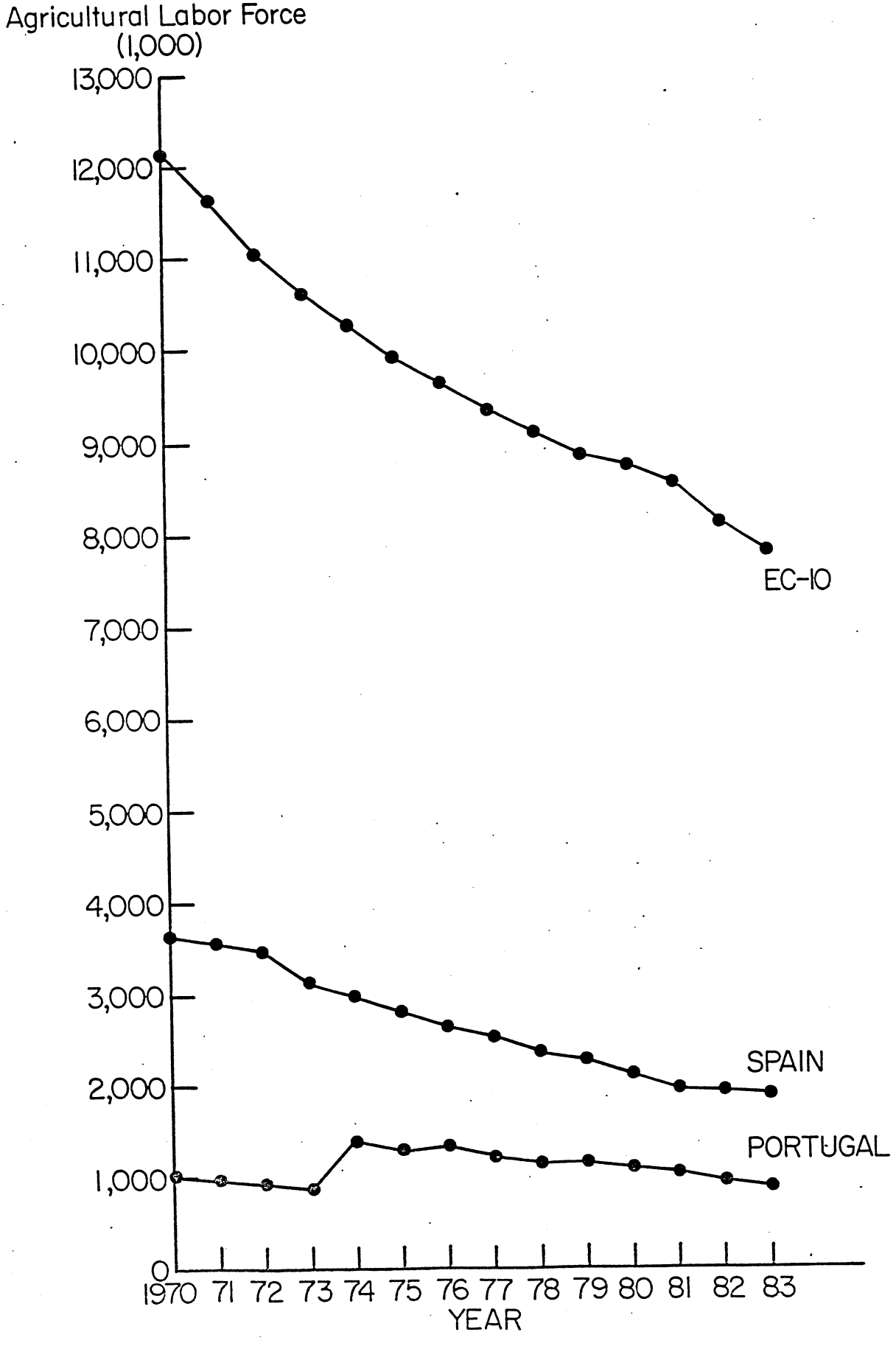
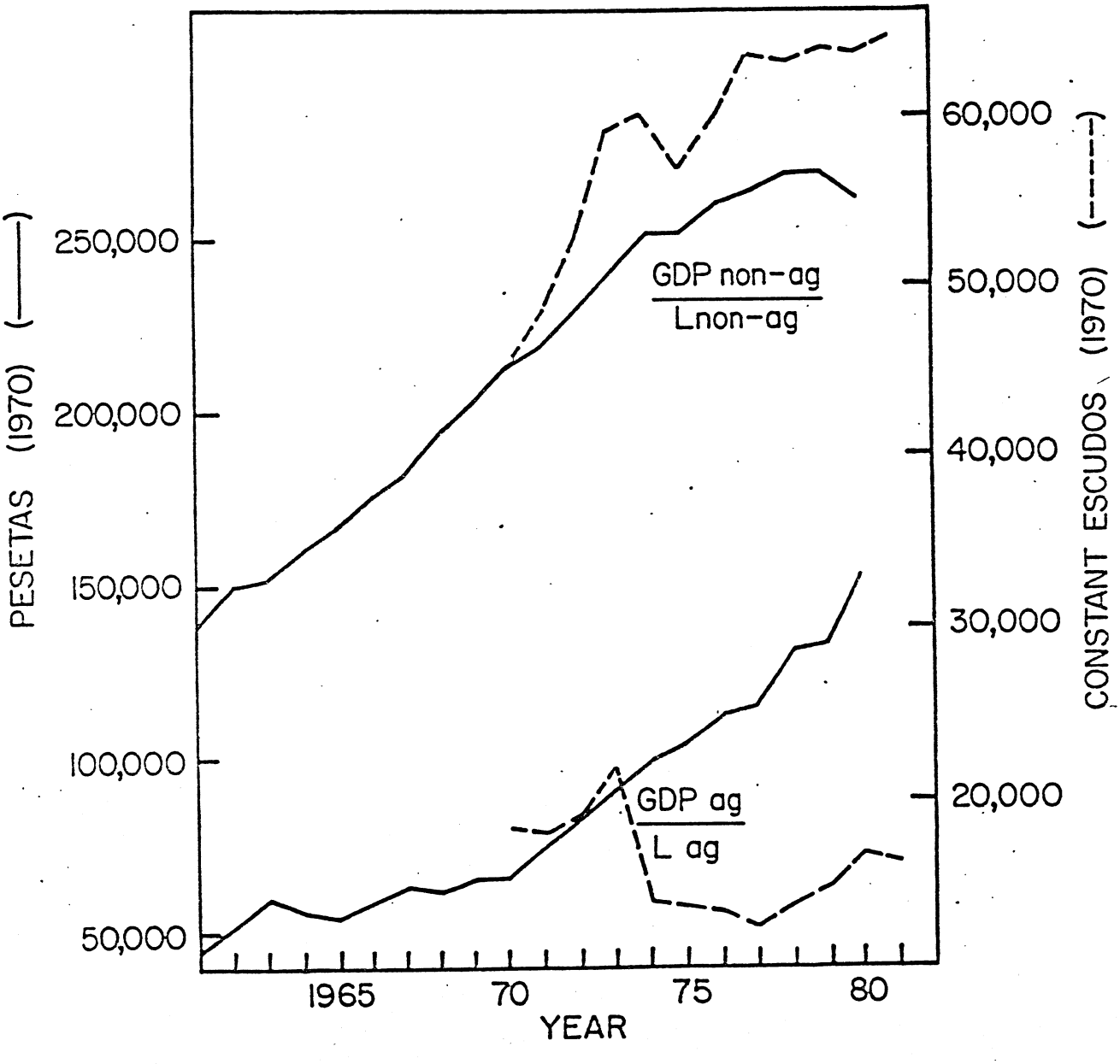


Figure 5 Average labor productivities in the agricultural and non-agricultural sectors of Spain and Portugal.



Sources: For Spain the data were taken from L. Garrido E., "Efficiencia y Competitivided de la Agricultura, La Evolucion de la Agricultura Espanola en el Periodo, 1961-1980," Revista de Estudios Agro-Sociales, 123(1983):69-113. The data on Portugal were taken from World Bank, Portugal Agricultural Sector Survey, a Near-Term Action Program for Agriculture, Vol. II, Statistical Appendix (Washington, DC, 1984):3 for the agricultural and non-agricultural GDPs. The labor force estimates were taken from International Labor Office, Yearbook of Labor Statistics (Geneva, International Labor Organization, various issues).

their industrialization and trade provided a rationale for the lack of investment in Portuguese agriculture during the Fifties and Sixties. In the Seventies, Portugal lost its major colonies, underwent large-scale land reform, and experienced very rapid food-demand growth. Portuguese agricultural stagnation and inadequate investment in the agricultural sector has continued to the present.

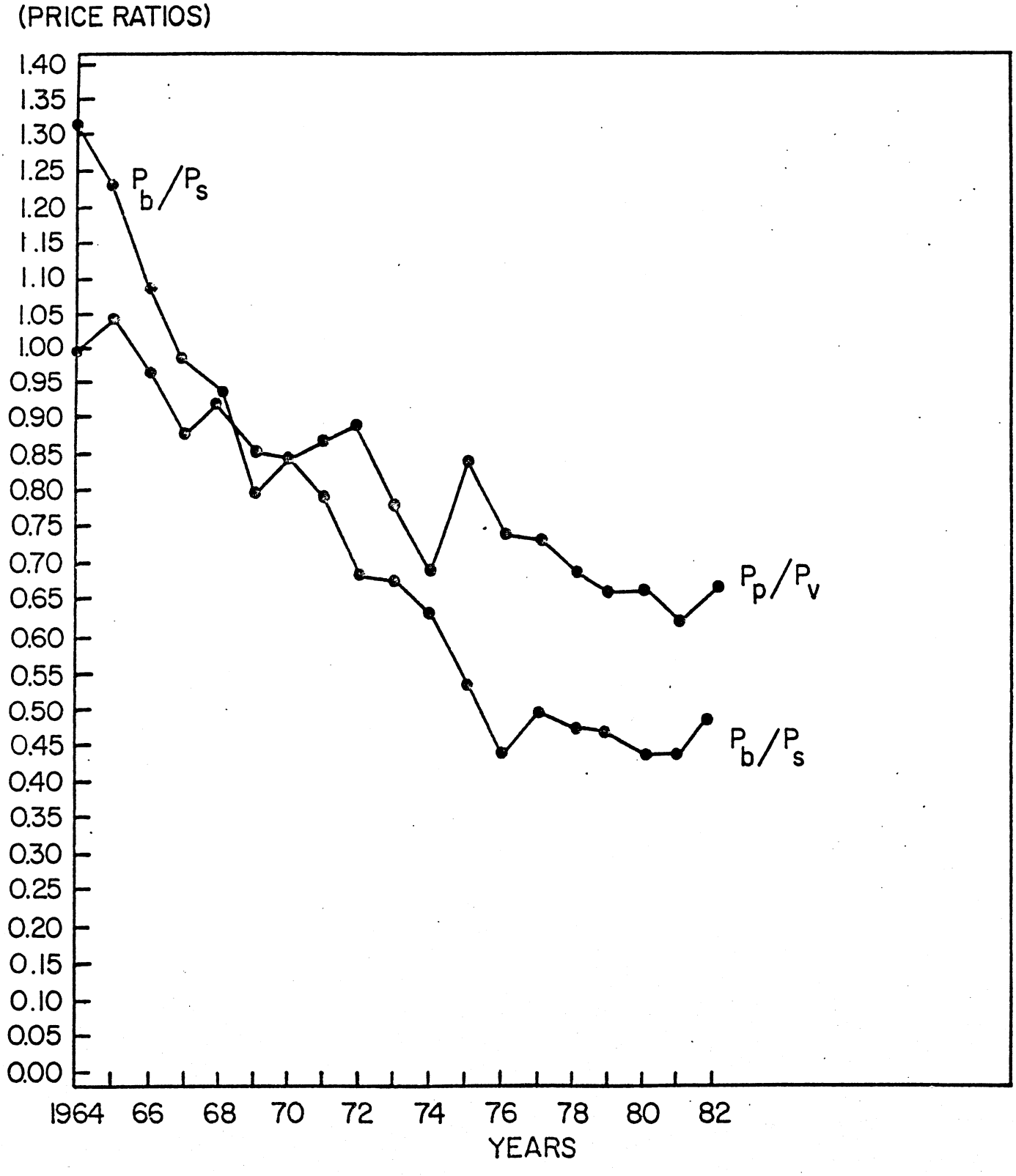
In Spain a different problem resulted from the choice of investment. Both a higher labor productivity growth in agriculture and a more rapid non-farm labor demand growth have encouraged rapid structural transformation of the economy, shifting labor out of agriculture. The substitution of machinery for labor in Spanish agriculture may have been too rapid as the Spanish unemployment rate in 1984 was 20% compared to 10% in Portugal (1984).[5]

A major transformation in Iberian agriculture has been a shift from extensive livestock production (grazing) of cattle and sheep to an intensive grain-feeding system. The lower costs associated with the modern systems have had a pronounced effect on relative meat prices and thus on the pattern of consumption. In Spain, the ratio of the broiler price to the lamb price fell from 1.3 to 0.45 from 1964 to 1976 (Fig. 6). In the Seventies and early Eighties, Iberian poultry consumption accelerated so that Spain became the third highest per-capita consumer of poultry behind only the United States and Canada (Fig. 7)[6]

Large increases in maize and oilseed imports since the early Seventies have been necessary to maintain this intensive feed

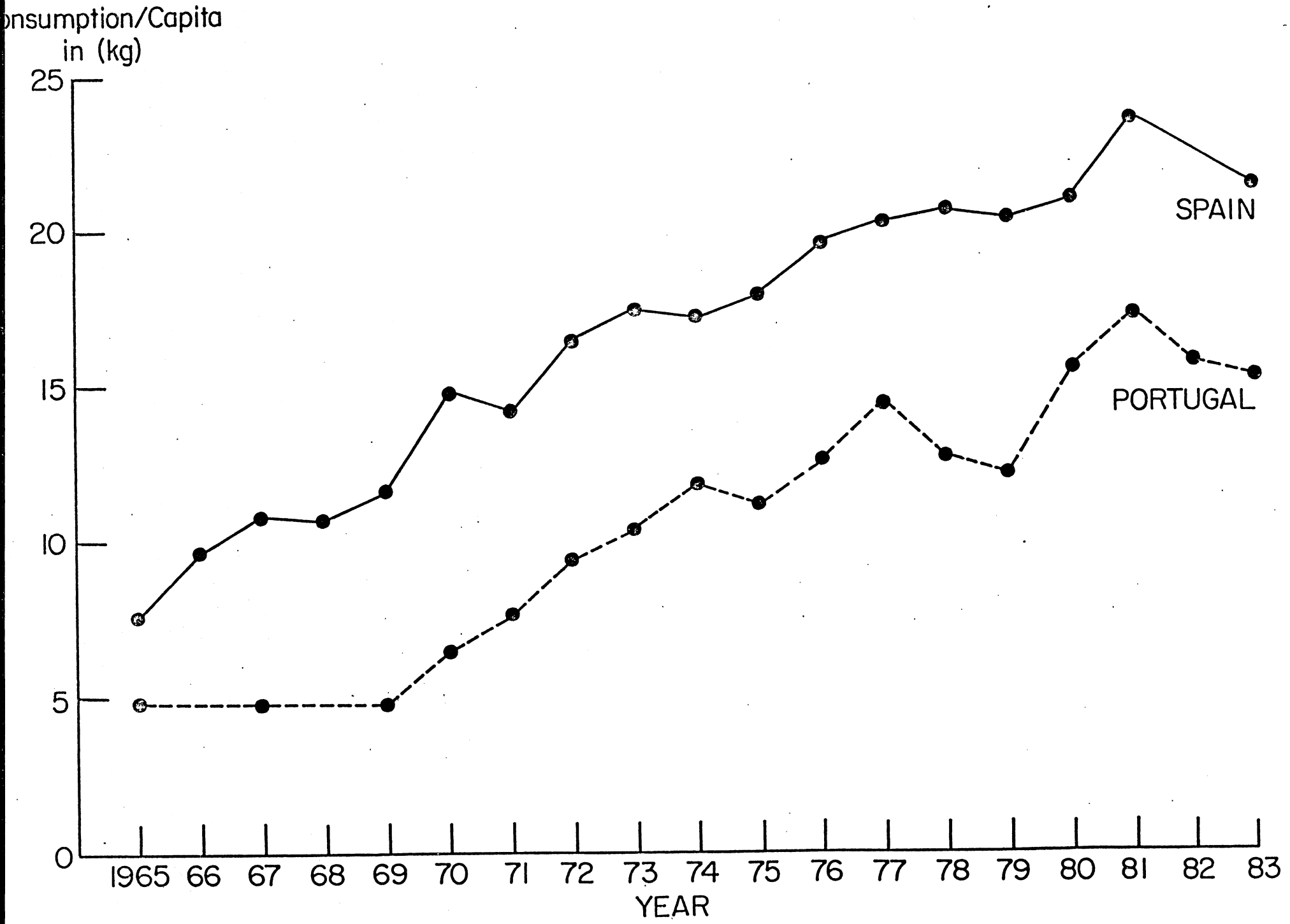
FIGURE 6

Price Ratios of Intensive to Extensive Spanish Livestock Products, Broiler Price Relative to Lamb Price (P_b/P_s) and Pork Price Relative to Veal Price (P_p/P_v), 1964-1982.



Source: Ministerio de Agricultura, Año 1982, pp. 430, 436, 443, 449.

FIGURE 7: SPANISH AND PORTUGUESE PER CAPITA POULTRY CONSUMPTION (kg), 1965-1983.

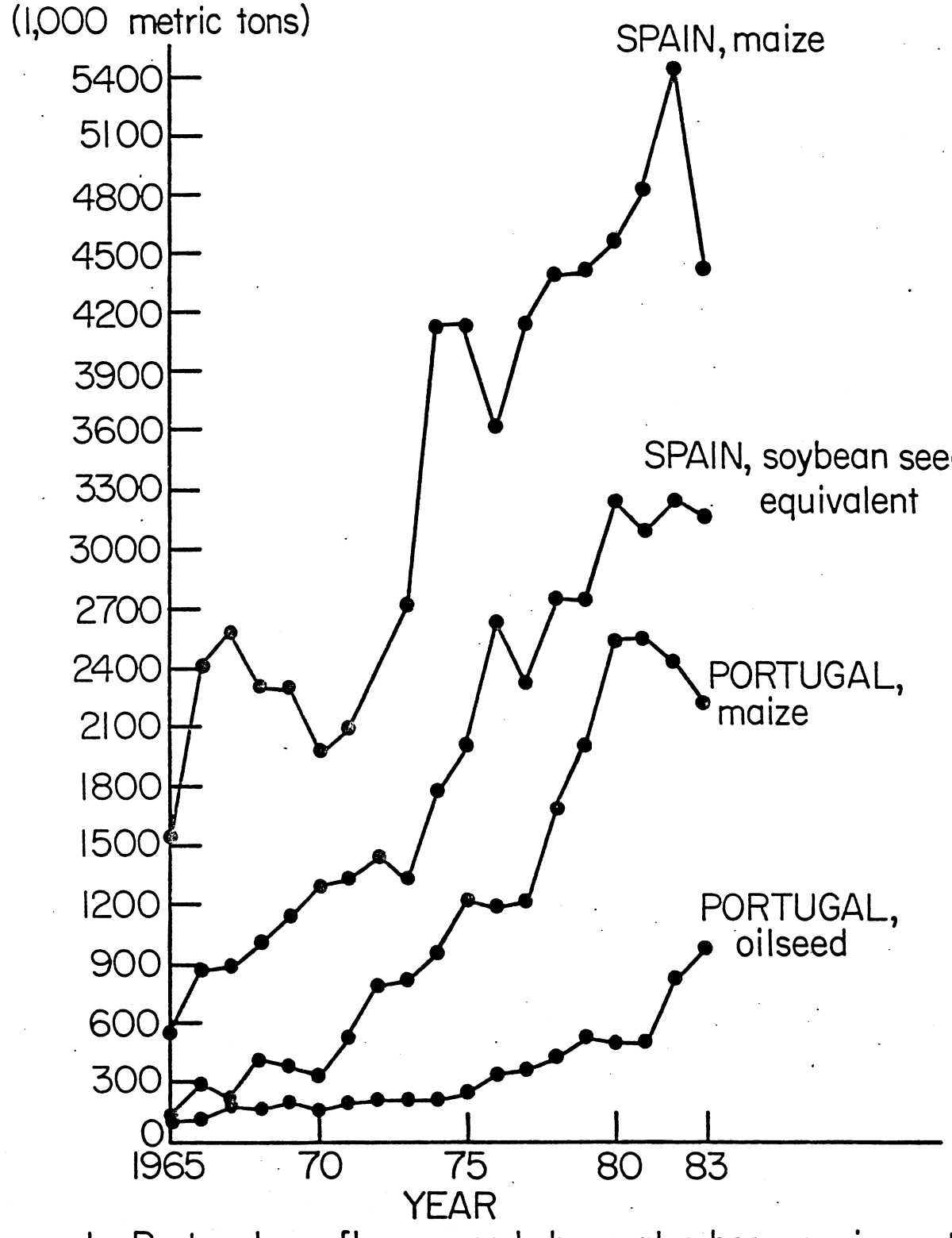


revolution in Iberia. Spanish maize imports were only 68,000 metric tons in 1960 but had increased to 5.4 million metric tons in 1981 (Fig. 8). Relative to its size, Portugal increased imports even more. There has been less production response in the agricultural sector of Portugal to the increased demand for maize and oilseeds than has occurred in the Spanish agricultural sector. In Spain, the self-sufficiency ratio for maize leveled off at 30% but it fell in Portugal to 16% (Fig. 9). Moreover, with the general agricultural stagnation in Portugal, the self-sufficiency ratio for the basic food cereal, wheat, fell to 30% in the Seventies.

Since Spain has become dependent upon imported feedgrains and oilseeds to support its intensive-feeding industries, Spanish agricultural imports have been increasing faster than agricultural exports (Fig. 10). In 1983 the value of Spanish agricultural exports was $2.9 billion with imports valued at $3.83 billion. In Portugal the agricultural trade deficit widened considerably since the revolution. In 1983, the value of agricultural exports was $365 million as compared with agricultural imports of $1.57 billion. In 1983, a drought year, Portugal imported 60% of its food requirements by value, almost 80% of its maize, 95% of its oilseeds, and over 55% of its wheat.[7] The increasing agricultural trade deficit has been an important factor in the deterioration of the Portuguese balance of payments.[8]

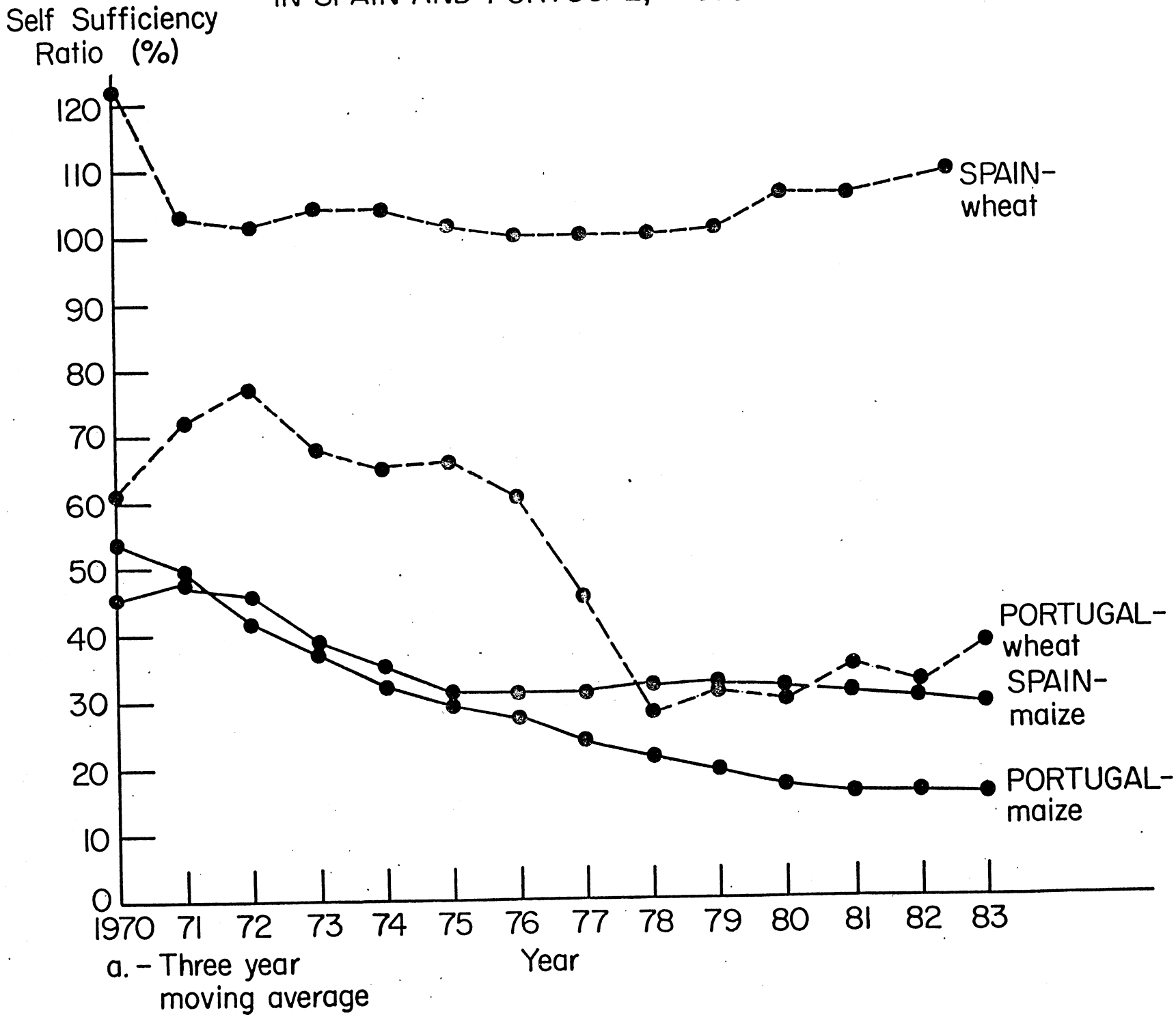
The principal problem of Portuguese agriculture in the Seventies has been that food demand has been expanding much more rapidly than supply, increasing food prices and food imports. With

Figure 8. IMPORTS OF MAIZE AND OILSEEDS[a] INTO SPAIN AND PORTUGAL, 1965-1970.



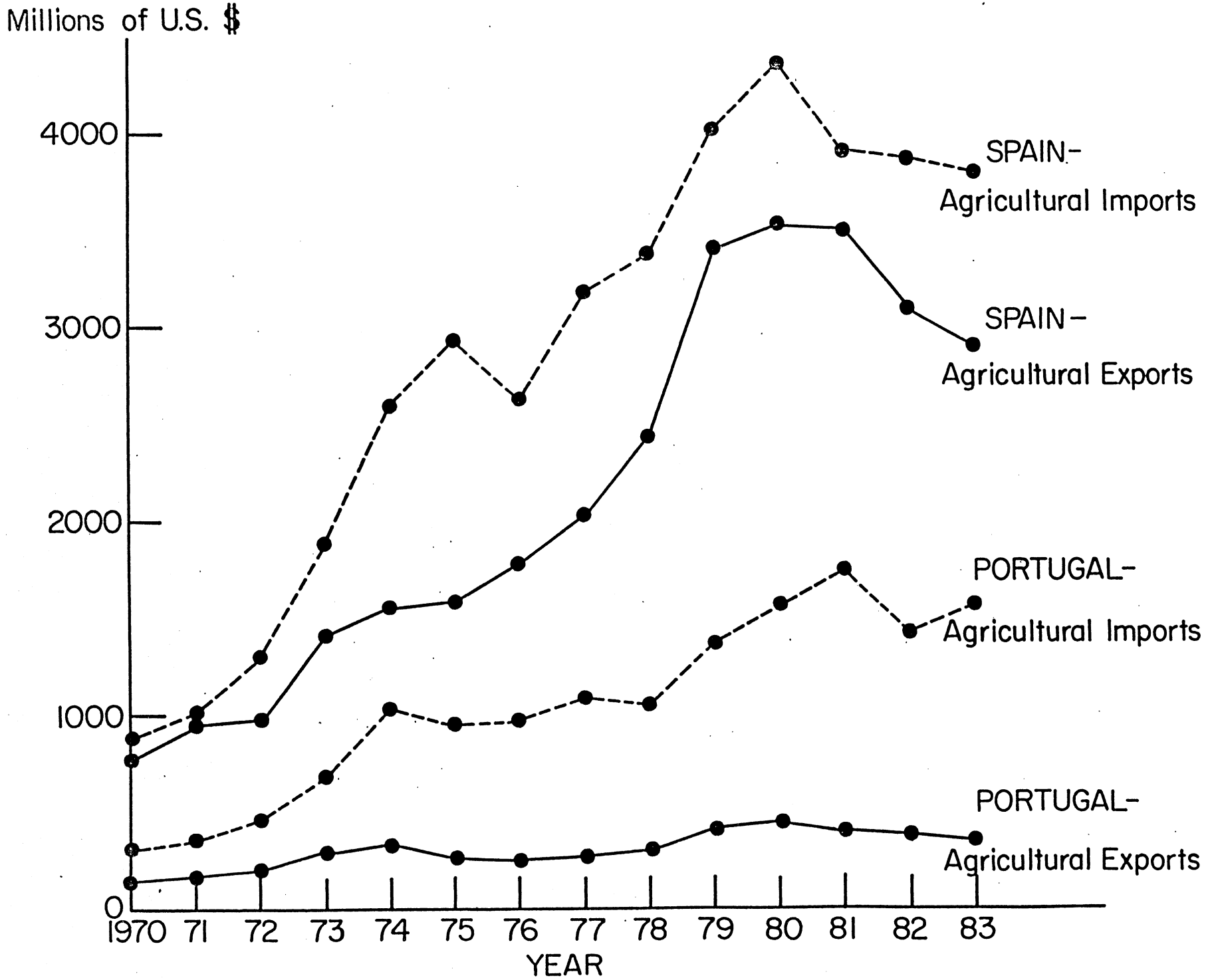
a. In Portugal sunflower seeds have also been an important component of oilseed imports. In Spain 92 to 98% of oilseed imports have been soybeans. Soybean meal was converted to soybean equivalents with an 80% meal taken from seeds.

FIGURE 9. SELF SUFFICIENCY RATIOS[a] FOR WHEAT AND MAIZE IN SPAIN AND PORTUGAL, 1970-1983.



a. – Three year moving average

FIGURE 10. SPANISH AND PORTUGUESE IMPORTS AND EXPORTS OF FOOD, BEVERAGES, AND AGRICULTURAL RAW MATERIALS, 1970-1983.



the end of the colonial wars, 500,000 to 700,000 Portuguese returned. The 1974 revolution led to substantial income redistribution through wage increases and land reform. Since the marginal prospensity to consume food is higher among low-income people, substantial pressure was put on food prices.[9]

To maintain lower food prices and offset the stagnation due to lack of agricultural investment, Portugal subsidized input prices, especially fertilizer and feeds. In 1981, Portuguese agricultural subsidies were equal to 26% of the value of the gross agricultural product.[10] In 1983, under EC-10 pressure, most of these subsidies were eliminated and cereal prices increased to higher levels than in the Community.[11] Thus, the pre-accession adjustments have already had substantial effects on agricultural policy and on consumers.

The intensive feed revolution has rapidly increased livestock consumption in both countries but created a dependence on imported feedstuffs. Spain has shown a greater ability than Portugal to expand the production of feedstuffs and to increase agricultural exports to pay for these imports. Since Portugal already had deficits in wheat, barley, sugar, and some meat products, Portuguese dependence upon food imports and balance of payments problems has been aggravated by the feed revolution.[12]

Impact of EC Entry Upon Iberian Agriculture
and on Trade Diversion:

There are natural complementarities in potential trade flows between the agricultural commodities of northern Europe and the

southern Mediterranean region (Fig. 11). The Mediterranean region can absorb some of the surplus production of winter cereals and livestock products from the north and increase its exports of a wide range of Mediterranean products. However, current production patterns for both regions reflect not only comparative advantage but also the effects of various agricultural policies, hence the transition will cause adjustment problems for both. Furthermore, Spain and Portugal will in some cases be required to import from the Community when cheaper supplies are available on world markets. The agricultural adjustment process for Iberian entry can be separated into three categories: those products for which the EC-10 has a surplus, i.e., winter cereals, sugar, and livestock products; those crops which both Iberia and the EC-10 import, i.e., feedgrains and oilseeds; and the Mediterranean export crops.

In the continental commodities and livestock products, the entry will create some trade diversion to higher-priced agricultural imports from the EC-10, especially for Portugal. Spain is almost self-sufficient in the continental commodities, as are both Spain and Portugal in most livestock products (Table 1). In the Seventies, 11 to 13% of Iberian imports came from the EC-9.[13] This is much lower than their export share to the EC-10 since most agricultural prices tend to be higher in the EC-10 than on world markets. With the entry, Iberia will be forced to obtain many of the higher-priced products or substitutes. Higher-cost agricultural imports will cause further pressure upon the agricultural trade deficits of these two countries, especially for Portugal.

Figure 11. POTENTIAL

NORTH-MEDITERRANEAN AGRICULTURAL TRADE FLOWS

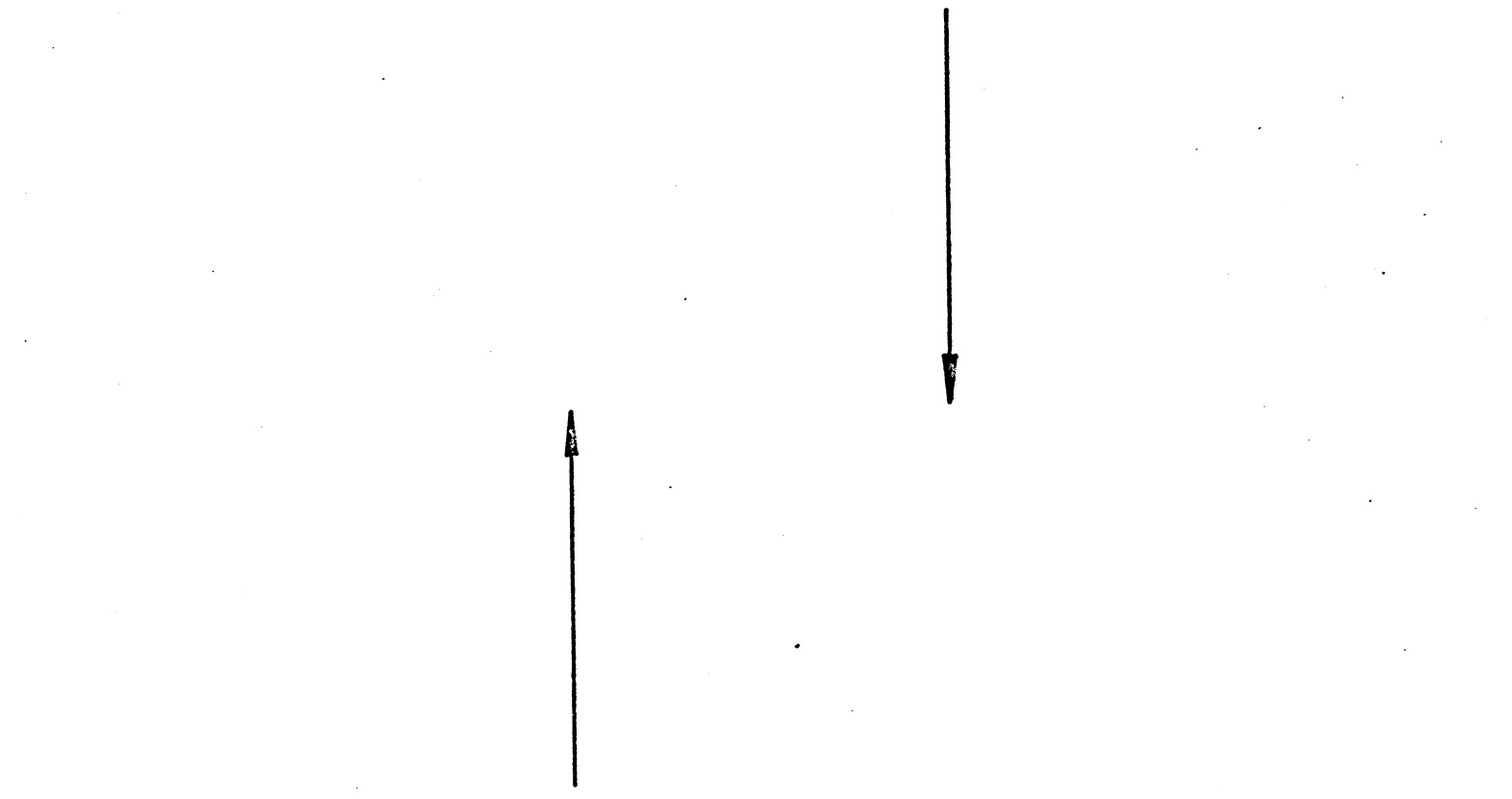


Table 1. Self-Sufficiency[a] Ratios for Agricultural Commodities in Spain and Portugal, 1981-83.

Commodity	Spain (1981-83)	Portugal (1981-83)
	(%)	
Continental Commodities		
Wheat	110	33
Barley	93	56
Oats	100	99
Rye	100	96
Potatoes	100	92
Sugar	95	4
Feedgrains and Oilseeds		
Maize	30	16
Sorghum	17	-
Soybeans	0.2	-
Sunflowerseed	89	6
Meat Products		
Beef and Veal	96	97
Pigmeat	100	98
Sheep and Goatmeat	100	100
Poultry	99	100
Eggs	104	101
Milk	100	100
Mediterranean Commodities		
Olive Oil	122	107
Wine	120	118
Oranges	185	100
Melons	100	100
Tomatoes	119	120
Onions	134	99
Rice	107	62

---

a. Self-sufficiency is defined as

$$\frac{\text{Domestic Production}}{\text{Domestic Consumption}} \text{ or}$$

$$\frac{\text{Domestic Production}}{\text{Domestic Production + Imports - Exports}} \times 100$$

The assumption is made that no stocks are held between years.

Source: FAO, Production Yearbook, various years, Rome, for for domestic production. The export and import data came from FAO, Trade Yearbooks, various years, Rome.

The primary agricultural imports for both Iberia and the EC-10 are the feedgrains (or cereal substitutes) and oilseeds. Since the objective of a trade union is to encourage trade with its members and feedgrains are subject to the variable levies, Iberia will face higher prices for outside imports of feedgrains. Hence, it will become more profitable to increase maize production in Iberia and to substitute some of the winter cereals in surplus in the EC-10, such as barley and feed wheat for corn and sorghum.[14] Higher feedgrain and livestock prices are likely to encourage more livestock imports from the EC-10. In many of the northern European countries, livestock is a much more important component of the agricultural sector than in Iberia.

Higher feedgrain and livestock prices are expected to encourage technological change in extensive livestock systems. In the dryland sector, comprising approximately 86% of the cultivated area in Spain, winter-cereal yields are low and the fallow rotation grazing system generally does not involve fertilization or seeding of improved legumes. The price effects of the EC entrance will provide incentives for adaptation and adoption of the Australian technologies. Substantial gains in livestock productivity and some savings in fertilizer and land-preparation costs and improvements in long-term winter-cereal yields have been obtained in Australia under conditions similar to much of Mediterranean Iberia. With supporting research and good livestock management, similar results are expected in Iberia.

Spain, Portugal, and the EC-10 are dependent upon imported oilseeds, principally from the United States, for their feed industries and have abided by a GATT prohibition on variable levies on oilseeds. Iberia is expected to continue its present policy of promoting the domestic production of oilseeds, especially sunflower seed. With respect to the oil sector, the major concern is the very large budgetary cost for the CAP if the current olive-oil policy is maintained after enlargement. A reevaluation of the oilseeds policy in the EC-12 is discussed below.

Approximately 50% of Iberian agricultural exports already go to the EC-10.[15] For Spain, fruits (especially citrus), nuts, vegetables, and wines are the principal exports. For Portugal, after cork the principal agricultural exports are wines and tomato products. As in California and Israel, Mediterranean climates with the potential for irrigation have a comparative advantage in fruit and vegetable production. In Iberia there is a longer growing season, absence of most disease organisms in the dry summers, and low labor costs compared with most of the EC-9. Thus, irrigated systems in Iberia produce many high-value crops, especially fruits and vegetables, but also are used for lower-valued activities such as rice and maize and forages such as alfalfa.

Expansion of production of high-value crops depends upon market access for exports or rapid domestic income growth. For fresh fruits and vegetables there will be a long transition period for both countries and thus little market access will be gained in the first periods of four and five years for Spain and Portugal,

respectively. Moreover, the specific details for wine, tomatoes, and olive oil are still to be negotiated. Without this increased market access for the fruits and vegetables, there is expected to be little economic incentive to continue the expansion of irrigation in Spain. Two exceptions to this will be rice and maize production. In Spain both are important irrigated commodities and rice is a very important activity in Portuguese irrigated projects. Due to the more favorable EC-10 price policy and market access for these commodities, there will be increasing interest in irrigated production of both in Iberia. Portugal also will be trying to speed the introduction of hybrid corn in the rainfed northern coastal strip.

In summary, in the commodities in which the EC-10 presently has a surplus, a fairly rapid adjustment to EC prices and free market access within the community will take place with some allowances for Portugal's lower level of economic development. This trade diversion will increase the cost of agricultural imports for Iberia and cause some regional adjustment problems among the small, traditional producers, especially in the northern regions of Spain and Portugal. In the feedgrains-oilseeds sector, the EC-10 is also a large importer. However, the costs of support and the accumulated surplus stocks will both be strong factors in encouraging revision of their cereal substitutes and oilseeds policies. Iberia will need to pay more for its maize and will be encouraged to substitute cereals in surplus for maize and other cereal substitutes. For the Mediterranean commodities, the EC-10 has conceded very little in

increased market access and has put off a decision on the really difficult issues of the olive oil and wine policies.

In the short run, both countries, especially Spain, will be making adjustments in absorbing more EC-10 surplus commodities without getting much more market access for their Mediterranean commodities. Why did Spain and Portugal agree to this? First, Mediterranean agriculture now has two more votes in the decision-making process of the EC-12 to combine with Greece and major regions of France and Italy. So there will be an increasingly strong lobby to push for increased coverage of the CAP for Mediterranean commodities and for structural investments in the low-income agricultural regions in the EC-12. In the long run after the transition periods, the assured price supports and the higher prices for the export crops with the increased market access should make much of Iberian agriculture more profitable and encourage rapid technological changes, as has occurred in the EC-9.[16] The more fundamental explanation for the entry of Iberia into the European Economic Community at this time may be political. The European Economic Community is a democratic club with a strong aversion to authoritarian governments.

Impact of Iberian Agriculture Upon EC Agriculture and the CAP:

For most agricultural commodities, self-sufficiency ratios are high in the EC-10. Exceptions are maize, oilseeds, tropical goods, and many Mediterranean products. This section first considers the impact of the enlargement on the EC-12 agricultural sector and then

reviews some implications of the enlargement for the costs and structure of the price-support system.

The entrance of Iberia increases the EC-population by 18% to 318.7 million (1982). In spite of more rapid growth in these countries since 1960, they are much poorer than most of the EC-10; however, the per-capita dollar comparisons need to be adjusted for differences in internal purchasing power.[17] Agriculture is much more important in both of these countries than in the EC-10 as a percentage of total output and employment. The expansion to the EC-12 increases the cultivated area by 44% and the agricultural labor force by 37% (Table 2). Most of the land-area change results from Spain. Portugal adds another one million and Spain almost 2 million to the 8 million agricultural labor force of the EC-10. A further reduction of the agricultural labor force in the Iberian economies is expected once the non-farm demand for labor increases again after the present European recession.

In summary, substantial increases in land area and agricultural labor force will occur with the entrance of Iberia into the EC. Outside of the irrigated areas, productivity is low in Iberia so it will be difficult for it to compete in EC markets for most agricultural commodities. Exceptions are the particular Mediterranean commodities in which lower labor costs are important, such as wine and olive oil, irrigated commodities, and some other fruits, vegetables, and tree crops particularly suited to a Mediterranean climate.

Table 2. Comparison of Economies and Agricultural Sectors of EC-10 and Iberian Countries.

	EC-10[a]	Spain	Portugal
Total Population (1982 - Millions)	270.7	37.9	10.1
Gross Domestic Product Capita (1982 dollars)	10,037	5,430	2,450
Growth of Gross Domestic Product Capita (1960-1982)	3.1%	4.0%	4.8%
Percentage of GDP from Agriculture (1982 - %) - b	4.0%	6.0%	12.0%
Percentage of Labor Force in Agriculture (1982 - %) - c	7.6%	18.3%	25.9%
Total Agricultural Labor (1,000 workers - 1982) - c	8,042	1,990	1,025
Total Agricultural Area (1982 - million ha.)	101	27	4
Cultivated Area (1982 - million ha.)	54.8	20.5	3.6

a. Excludes Luxembourg since these data were not reported in most of the sources unless stated otherwise.

b. Did not include either Luxembourg or Ireland.

c. Includes Luxembourg and Ireland.

Sources: World Bank, World Development Report, 1984 (Washington, DC, Oxford University Press, 1984):219,223; for land area, FAO, Production Yearbook (Rome, 1983); for the agricultural labor data, see the International Labor Organization, Yearbook of Labor Statistics (Geneva, International Labor Organization, 1983).

One critical issue with the enlargement is the treatment of the Mediterranean crops. A comparison of guarantee expenditures is not entirely relevant because the guaranteed prices function differently for imported and self-sufficient commodities. The price of imported commodities is guaranteed by the variable levies, whereas the FEOGA expenditures are necessary for those commodities in surplus holdings. Moreover, the highly perishable fruits and vegetables are much more difficult to store, hence the mechanics of price support are more expensive.

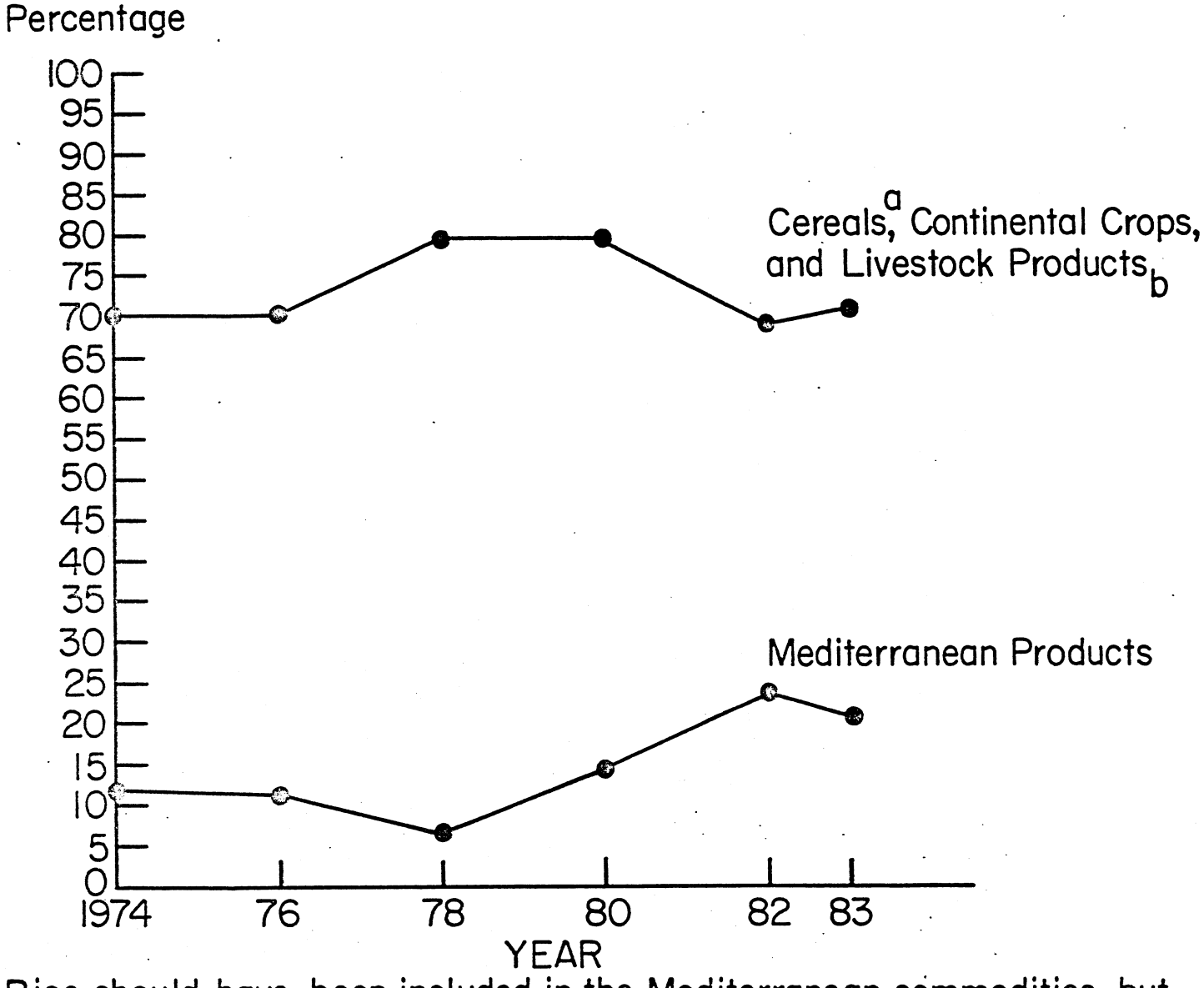
In the late Seventies, the French and Italian governments began pushing for more support of their Mediterranean products, especially wine and olive oil, as a precondition for Iberian entry. They were joined by Greece in 1981 and the percentage support of Mediterranean products more than doubled (Fig. 12).

There is increasing concern within the EC-10 about the high guarantee costs and the accumulation of surpluses of Mediterranean products after enlargement. Olive oil and wine will both pose serious surplus problems if the present price levels were to be extended to Spain. There will be pressures both to reduce the price supports and to implement various types of supply controls for these commodities.

What will be the static (constant prices) effect of Iberian entry upon the major agricultural commodities? Portugal has a minimal impact. The Spanish impact is much larger, ranging from 15 to 20% increases in many commodities (Table 3). Spain will help the EC countries become self-sufficient in several Mediterranean crops and even create surpluses. The support costs of fruits and

Figure 12.

THE EUROPEAN ECONOMIC COMMUNITY SUPPORT OF CONTINENTAL AND MEDITERRANEAN COMMODITIES.



a - Rice should have been included in the Mediterranean commodities, but it was also included here; however, it is a very small percentage of the cereals.

b - Excluding sheepmeat, which is grouped with Meditteranean Products.

Table 3. Increases in EC-10 Production of Agricultural Commodities With Spanish and Portuguese Entrance, 1981-83.

Commodity	Percentage of Increase in Supply Spain x 100 / EC-10 (1980-83)	 Portugal x 100 / EC-10 (1979-83)
	(%)	
Continental Commodities		
Wheat	7	0.6
Barley	14	0.1
Oats	7	1.0
Rye	7	5.0
Potatoes	16	3.0
Sugar	16	0.1
Feedgrains and Oilseeds		
Maize	11	2.0
Sorghum	31	-
Soybeans	9	-
Sunflower seed	74	2.0
Meat Products		
Beef and Veal	6	2.0
Pigmeat	11	2.0
Sheep and Goatmeat	19	3.0
Poultry	19	3.0
Eggs	17	2.0
Milk	5	1.0
Mediterranean Commodities		
Olive Oil	48	5.0
Wine	22	6.0
Oranges	71	4.0
Melons	112	3.0
Tomatoes	28	6.0
Onions	63	26.0
Rice	33	11.0

Sources: Food and Agricultural Organization of the United Nations (FAO), Production Yearbook, various years, Rome; also for Portugal unpublished data from the Ministry of Agriculture, Lisbon.

vegetables have been increasing. For these commodities, the trade-diversion issues from the third-country present suppliers are especially serious and will be considered in the next section.

In summary, the pressure to reduce costs and stock holdings has increased in the EC-10 during the Eighties. Milk products no longer take up almost one-half the guarantee expenditures but the cereals and other continental crops and livestock products still are about 70% of total expenditures. The increased revenue collection from the 1.4% value-added tax (formerly 1%) will make possible higher-guarantee expenditures. Nevertheless increasing pressures from consumers about the costs of the programs and from third countries about the subsidized disposal of the stocks are expected to put some downward pressures on real prices and guarantee expenditures.

The EC-12 and Third Countries

The largest agricultural exporter to the EC-10 and to Iberia has been the United States. With continuing growth of the budgetary costs and of surplus stocks, the EC-12 will be reevaluating many of its policies. Several could have large implications for the United States.

The European Economic Community has become the largest importer in the world of feedgrains and oilseeds, principally maize and soybeans (Fig. 13). However, maize imports peaked in 1977 and have been steadily declining thereafter with the rapid growth and substitution in feeds of the cereal substitutes (Fig. 14). These cereal substitutes in contrast with maize and sorghum are not

Figure 13. MAIZE AND SOYBEAN EQUIVALENT NET IMPORTS INTO THE EUROPEAN ECONOMIC COMMUNITY, 1970-1983.

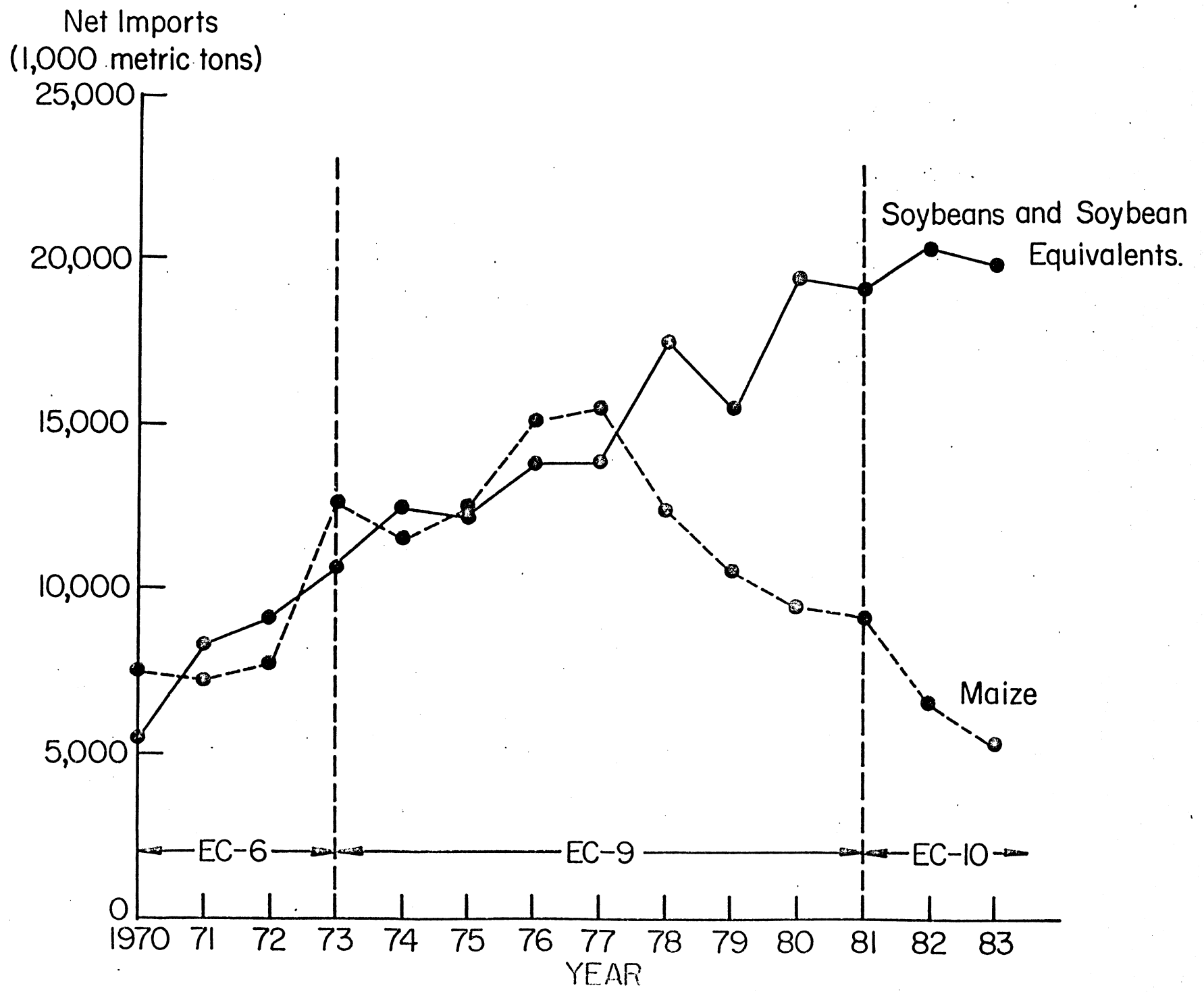
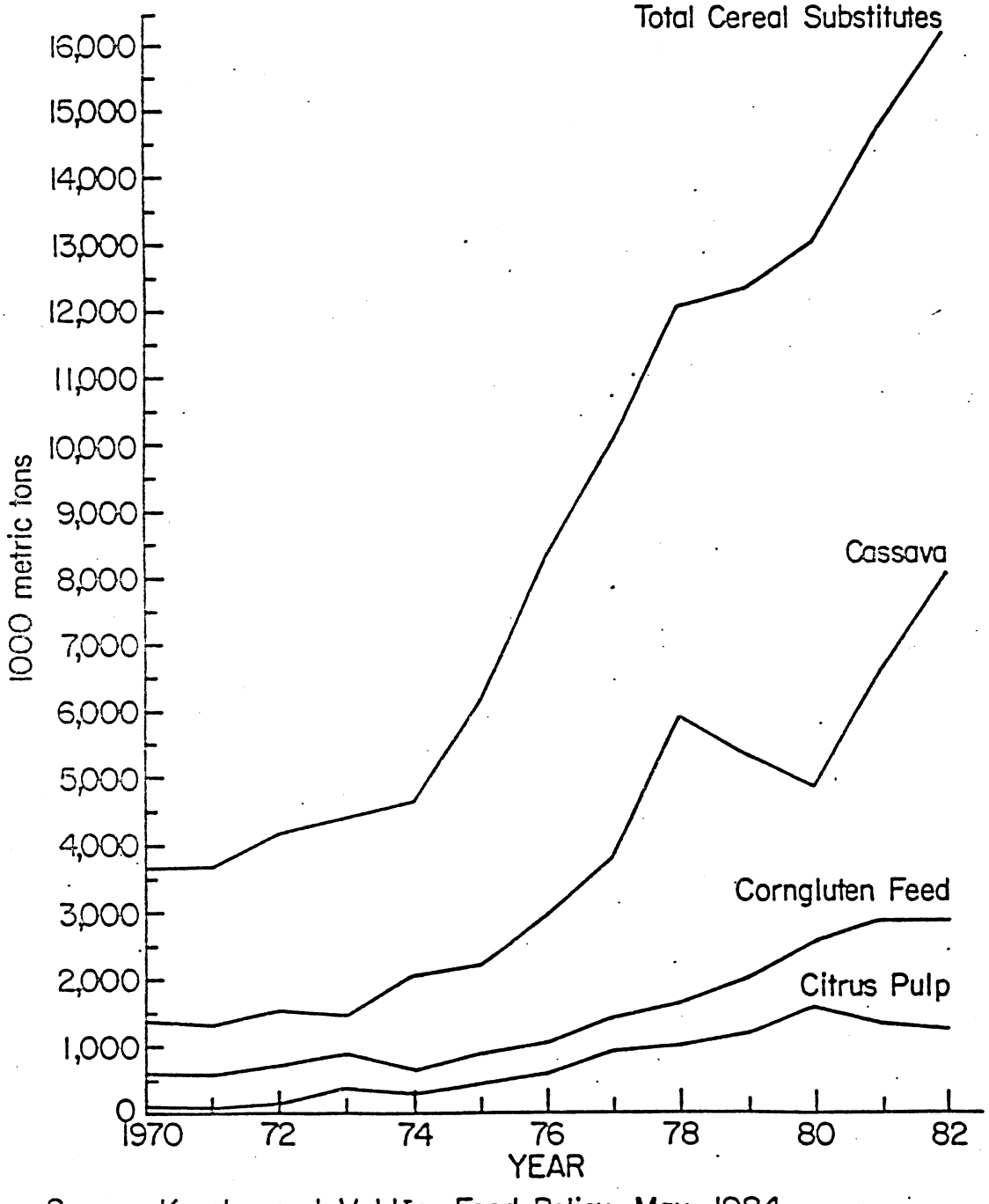


Figure 14

Imports of Cereal Substitutes into the EC-9, 1970-82



Source: Koester and Valdés, Food Policy, May, 1984

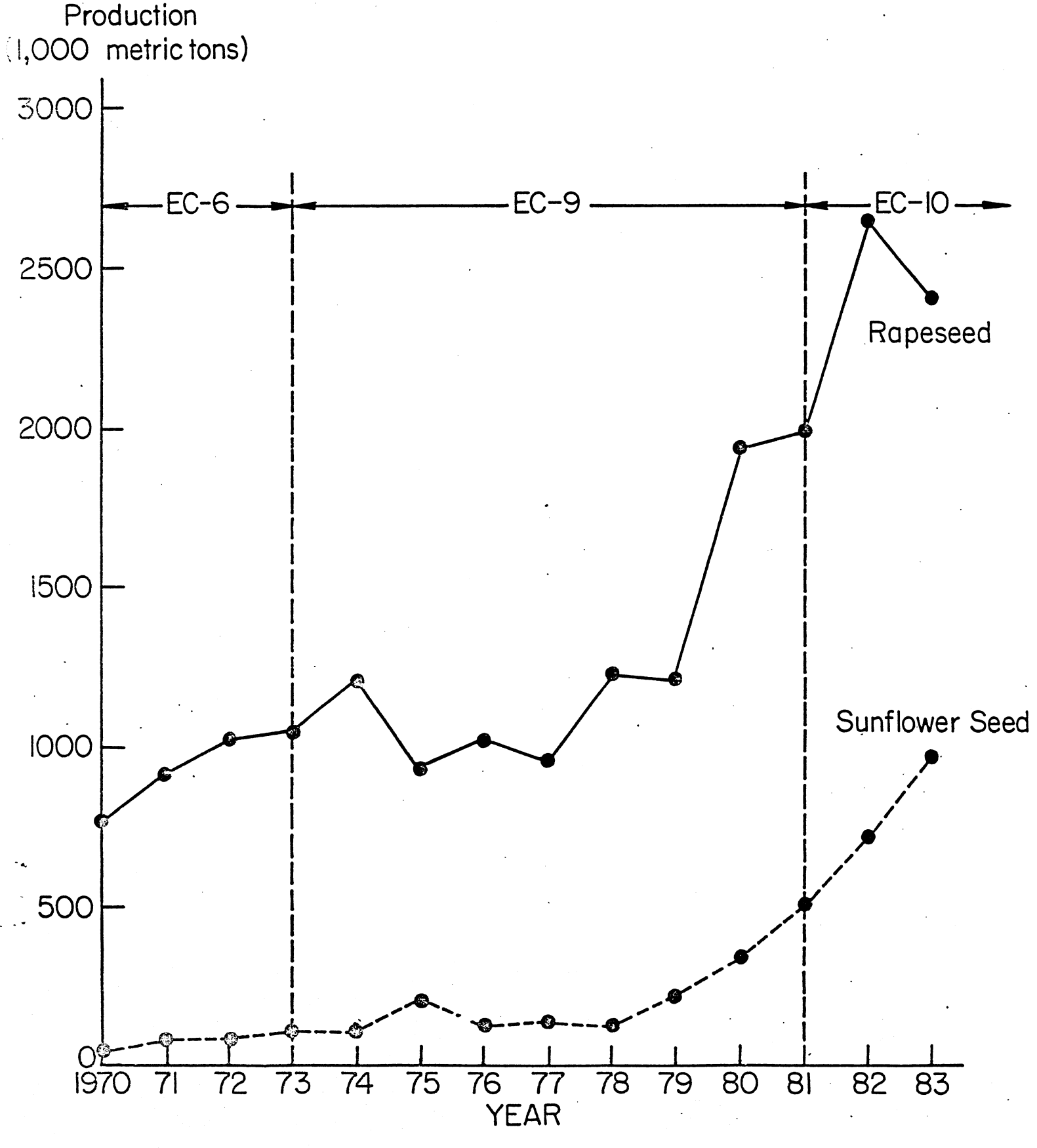
subject to the variable levies. Hence, it has become increasingly profitable to substitute them for the feedgrains subject to the variables levy. The primary exporter to the EC-10 of soybeans and soybean meal, maize, corn gluten, and citrus pulp has been the United States. With the accumulating stocks of winter cereals, there will be increasing pressures within the EC-12 to limit the growth of cereal substitutes either with new variable levies or with quotas. This will bring the EC-12 into further trade conflict with the United States.

The EC-10 has abided by a GATT agreement not to impose a variable levy on soybeans. Imports of soybeans and equivalents have continued to increase during the Seventies and Eighties. However, it is clear that the EC-10 would like to do more about import substitution. Since 1979 the domestic production in the EC-10 of rapeseed and sunflower seed has increased rapidly (Fig. 15). Both oilseeds are still less than 16% of soybean equivalent imports but their exponential growth is probably indicative of the type of import substitutions which the EC-12 will continue to actively promote.

The enlargement to the EC-12 is expected to lead to a thorough revision of both the feed substitutes and the oilseeds policies. Since this is a trade bloc designed to increase trade among its members, further protection and stimulation of domestic feedgrain and oilseed substitutes is expected.

The EC-10 has been importing Mediterranean commodities from a large number of small countries with which traditional ties have long been important to different EC-10 countries. With the entry of

Figure 15. RAPESEED AND SUNFLOWER SEED PRODUCTION EUROPEAN ECONOMIC COMMUNITY, 1970-1983.



Iberia, the EC-10 importer of these commodities will become the EC-12 exporter. There are eleven other Mediterranean countries which will be affected by the enlargement. These countries have generally had more favorable access to the EC-10 markets than Spain. The present policy has been to require Spain and Portugal to move very slowly in obtaining market access. However, Spain is now inside the EC-12 and can pressure for increased market access. Over time this advantage will disappear and the variable levies and/or minimum prices are expected to be extended to the Mediterranean agricultural products. For many of these countries, these exports to the EC-10 were an important component of export earnings[18] and there are no comparable markets with the access conditions they enjoyed. Policies to diversify these economies and facilitate the adjustments to the inevitable trade diversion are necessary.

In summary, the EC-12 is a trade bloc with an objective to increase trade with its members. As agricultural program-support expenditures increase, there will be increasing trade diversion through substitution and higher variable levies. There will be strong pressures within the EC-10 for basic revisions in both the oilseeds and cereal substitutes policies in spite of the anticipated conflict with the United States. There has already been substantial progress in domestic production in imported substitutes for maize and attempts to produce more domestic oilseeds. Further movement towards self-sufficiency in both feedgrains and oilseeds is expected.

The economic adjustments of the traditional Mediterranean exporters to the EC-10 will be a serious political problem for the EC given their needs to import petroleum and their traditional ties to these countries. Moreover, the export dependence of some of these countries on the EC-10 has been high. So far, the EC-10 has put off the Spanish accession in most Mediterranean products for at least five years, so there will be a time for transition and adjustment in the region.

NOTES:

* Associate Professors, Department of Agricultural Economics, Purdue University. An earlier version of this paper was presented at a symposium on the Entrance of Spain and Portugal into the Common Market: The Impact on Agriculture at the annual meetings of the American Association of Agricultural Economists, Ames, Iowa in August 1985. This research project was financed by a small grant from the State Department. Sanders also spent two years at the University of Evora in the Alentejo of Portugal, 1981-83. Joyann Binsley and Mohamed Habash helped in the data gathering.

1. J.B. Donges, C. Krieger, R.J. Langhammer, K.-W. Schatz, C.S. Thoroe, The Second Enlargement of the European Community, Adjustment Requirements and Challenges for Policy Reform (Mohr, West Germany, Fubingen Pub., 1982):33.

2. Ibid., p. 39.

3. From 1953-77, 937,000 farmers were affected by the Spanish consolidation program to unify small parcels, principally in the north. From 1962-72, 152,000 farms with less than 1 ha. disappeared. See M. Guedes, "Recent Agricultural Land Policies in Spain," Oxford Agrarian Studies 20(1981):26-43 and S. Lieberman, The Contemporary Spanish Economy: A Historical Perspective (Winchester, MA: Allen and Unwin, 1982):93.

During the Sixties, Spain had the most rapid economic growth in Western Europe at a 7.4% annual rate of real GNP increase. The

Portuguese economic growth of 5% to 6% from the late Fifties to the late Seventies was also very respectable. Besides industry, the number of tourists traveling to Spain increased from 4.2 million in 1959 to 41.2 million in 1983. See J. Harrison, An Economic History of Modern Spain (New York: Holmes and Meier Pub., 1978):156 and J.M.C. Rollo, "The Second Enlargement of the European Economic Community - Some Economic Implications With Special Reference to Agriculture," Journal of Agricultural Economics 30(3)(Sept. 1979):337.

4. There is a measurement problem here with the labor data due to the redefinition of the Portuguese agricultural labor force in 1973. See the jump in Figure 5. However, excluding this redefinition, the gap between labor productivities in Portugal was not closed.

5. Attache Report, "Spain: Annual Agricultural Situation Report" (Madrid: Foreign Agricultural Service, U.S. Dept. of Agriculture, Feb. 19, 1985); Attache Report; "Portugal: Agricultural Situation" (Lisbon: Foreign Agricultural Service, U.S. Dept. of Agricultdure, Mar. 12, 1984).

6. From 1960 to 1981, Spanish broiler production increased from 13,000 to 884,000 metric tons. Ministerio de Agricultura, Pesca, y Alimentacion, Anuario de Estadistica Agraria, Ano 1982 (Madrid: 1984):671-2.

7. The United States has been the dominant supplier of wheat, maize, and oilseeds for Portugal. Portuguese Agricultural Attache, "Summary Agricultural Fact Sheet," unpublished mimeo, Lisbon, 1985.

8. The agricultural deficit averaged 15-20% of the total trade deficit over the period 1980-82. Organization for Economic Cooperation and Development (OECD), Economic Survey, Portugal (Paris, June 1984):16,20,37.

9. Thirty-eight percent of the average budget was spent on food in Portugal in 1982 as compared to 32% in Spain in 1984. Attache reports for Spain and Portugal, op. cit.

10. T.V. Truong and T.E. Josling, "Agricultural Subsidies in Portugal, Their Impact on Farm Income and Consumer Cost in the Context of Accession to the European Community," Economic Research Service Staff Report No. AGES 830720 (Washington, DC, Aug. 1983):v.

11. Consumer prices for wheat, rice, and milk increased by 39%, 47%, and 83% in 1983. World Bank, Portugal, Agricultural Sector Survey, A Near-Term Action Program for Agriculture, Vol. I (Washington, DC, July 1984):24.

12. With approximately one-quarter of the Portuguese work force in agriculture, this sector produces only 8.5% of the GDP and agricultural exports pay for less than half of food imports. OECD, Portugal, June 1984, p. 54.

13. For further detail on Spanish and Portuguese agricultural policies, exports and imports in the Seventies, see L. Tsoukalis, The European Community and Its Mediterranean Enlargement (London: George Allen and Unwin, 1981):208,211.

14. Cassava imports have increased substantially into Portugal so the feed industry has already demonstrated an ability to shift between feed sources. Attache Report, "Portugal: EC Accession Conditions" (Lisbon: Foreign Agricultural Service, U.S. Dept. of Agriculture, Aug. 8, 1985):5.

15. Tsoukalis, 1981, pp. 208,211.

16. With the high price supports, EC-9 wheat yields increased 20% from 1976-81 and milk production per cow by 16%. From 1974-75 to 1980-81, the EC-9 shifted from 87% self-sufficiency in cereals to a 5% surplus. The Community shifted from a net importer of 13.3 million tons of cereals in 1974-75 to a net exporter of 5.7 million tons in 1980-81. Production increased by 27% and usage by 5%. The most significant changes were the growth in wheat and barley exports and the decline in maize imports. See C. Caspari, The Common Agricultural Policy: The Direction of Change, Special Report No. 159 (London: The Economist Intelligence Unit, Dec. 1983):6-8, 19.

17. Utilizing purchasing power parities, the EC Commission calculated Spain and Portugal's per-capita incomes as 65 and 42% of the EC-9 average in 1976. C.J. Redston, "The Impact of EC

Membership on Portugal and Spain," Intereconomics (Sept./Oct. 1983):207.

18. Certain countries, including Morocco, Tunisia, Cyprus, and Israel, have specialized in production for the EC-10 and their export earnings are especially vulnerable to decreased market access to the new EC-12. The EC-9 imported from one- to two-thirds of the total exports of Algeria, Morocco, Tunisia, Egypt, and Israel. Most of these imports would be agricultural products. See P.O. Koliris, "Global Mediterranean Policy Implications in View of the New EEC Enlargement," Journal of Agricultural Economics 35(3)(Sept. 1984):323.

Also see S.A. Musto, "The Mediterranean Policy of the EC -- The Case of Agriculture," Intereconomics (May/June 1983):103-110; J.M.C. Rollo, "The Second Enlargement of the European Economic Community -- Some Economic Implications With Special Reference to Agriculture," Journal of Agricultural Economics 30(3)(Sept. 1979):337-339; R. Pasco, "Mediterranean Agricultural Trade Problems and the Effects of the EC Policies," European Review of Agricultural Economics 5(3/4)(1978):221-254.