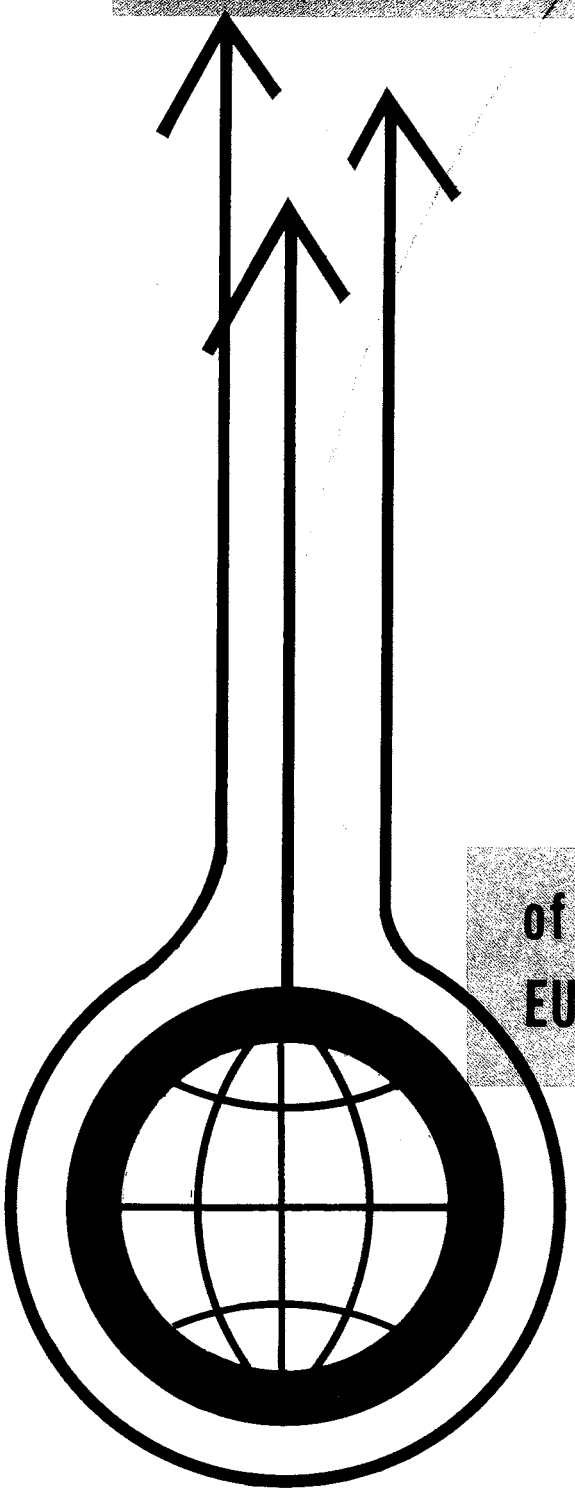
MEAT IMPORT PROSPECTS



of the EUROPEAN ECONOMIC COMMUNITY

ECONOMIC RESEARCH SERVICE U.S. DEPARTMENT OF AGRICULTURE ERS FOREIGN 139

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SUMMARY

Meat imports of the European Economic Community (EEC) increased abruptly in 1963. Since 1956, they had been gradually rising, and, in 1962, they amounted to an estimated 688,000 metric tons. Partial estimates for the next 2 years indicate that they rose to 871,000 metric tons in 1963 and reached 1.4 million in 1964. If the internal economies of the EEC countries continue to grow with the vigor they have shown in recent years, if EEC meat production develops as projected in this study, and if EEC meat imports continue to be used as instruments of internal price policy, meat imports of the Community are expected to be 1.5 million metric tons in 1966. This reflects a gap between the Community's production and consumption of meat (the trade gap) of 1.3 million metric tons, more than three times what it was in 1962.

Meat production in the EEC leveled off after reaching 9.7 million metric tons in 1962, which was 96 percent of Community consumption. In 1964, it was still at the same approximate level, but amounted to only 89 percent of Community consumption. Important factors in this change of trend were a 1963 cyclical downturn of beef and veal production and the below-trend output of pork, both of which continued into 1964. The rise in poultry production only partly offset their combined effects.

Pork production in 1965 is expected to show a sharp rebound from the 1964 level and to continue at a relatively high rate of growth into 1966. This, combined with a continued increase in the output of poultry meat (10 percent per annum compound, since 1955), is expected to turn the trend of total meat production upward again this year and to bring a further increase in 1966 to 10.4 million metric tons. Preliminary indications of herd build-up point to a bottoming out of the beef cycle in the Community in 1965, with the possibility of a recovery in beef production appearing in 1966. The cyclical movement in beef production dominates the present meat production situation.

Meat consumption in the EEC is expected to continue the steady advance which has characterized Europe's postwar years. From 10.1 million metric tons in 1962, EEC meat consumption moved to about 10.4 million in 1963 and to a partially estimated 10.9 million in 1964. Prospects are good that the EEC will consume 11.3 million metric tons of meat in 1965 and 11.7 million in 1966.

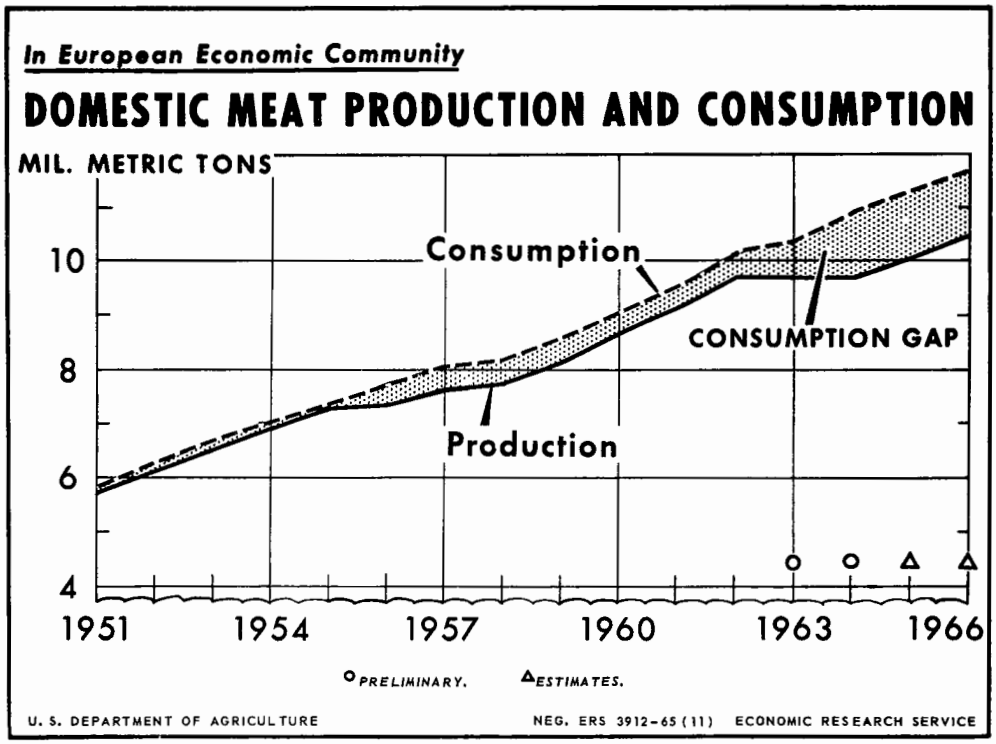
Increases in population and income in the EEC are expected to continue to stimulate further increases in meat consumption. Total per capita consumption in 1965 is estimated to be 25 percent higher than in 1960, with some variation among the countries. From the equivalent of $800 in 1964, it is expected to rise further, to an average of $850 in 1966. Population increased about 10 percent from 1952-62 and is estimated to have accounted for 16 percent of the increase in EEC total meat consumption in that decade. Annual per capita meat consumption rose from 53 kilograms of carcass weight in 1960, to 57 in 1962, reached an average of 60 kilograms in 1964, and is expected to attain 64 kilograms in 1966. Dependability of the consumption estimates hinges, in large measure, on the success of the EEC countries in maintaining high rates of expansion of real per capita income.

The commodity composition of EEC meat trade has changed during the past decade. Beef and veal accounted for over 80 percent of the trade gap in 1956, but dropped gradually to 43 percent in 1962; poultry meat, during the same period, increased its share from 6 to 28 percent. Since 1962, poultry meat has sunk to about 8 percent of net EEC meat imports, while beef and cattle have rebounded to an estimated 59 percent and are expected to maintain or augment this in 1966.

The U.S. share in EEC gross imports of meat (including EEC intratrade) rose from 10 percent in 1959 to 22 percent in 1962 as expanding poultry exports carried U.S. meat exports to a high of 115,000 metric tons. The subsequent drop in EEC poultry imports reduced the U.S. share of EEC gross meat imports to slightly over 10 percent. Edible offals is the only other important category of meat imported by the EEC from the United States; its annual volume has risen steadily to over 40,000 metric tons, and it now outranks poultry.

EEC--Meat production, foreign trade, and consumption

Period	Production	Imports	Exports	Consumption
	1,000 metric tons			
Average:				
1952-54	6,525	272	148	6,649
1957-59	7,839	594	168	8,265
1962-64	9,705	986	218	10,473
1963	9,715	871	201	10,385
1964	9,700	1,400	200	10,900
1965	10,040	1,460	200	11,300
1966	10,380	1,520	200	11,700



MEAT IMPORT PROSPECTS OF THE EUROPEAN ECONOMIC COMMUNITY

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INTRODUCTION

This study attempts to formulate a view of what the meat imports of the European Economic Community (EEC) will be in the near future. This view will give an indication of the prospects of the United States to sell meat and livestock in the EEC countries.

The EEC countries--France, West Germany, Italy, Belgium, Luxembourg, and the Netherlands--are the largest single outlet for commercial exports of U.S. farm products. In recent years, these countries have purchased over a billion dollars annually of U.S. farm production exports and have thereby made an important contribution to the U.S. balance of payments. Internal policy of the EEC, however, is aimed at stimulating domestic production of many farm products including meat and threatens to limit imports from third country suppliers such as the United States.

The difference between the domestic production of meat and its consumption within the Community is the net trade in meat, including the carcass weight equivalent of livestock. EEC meat production and consumption are studied independently, and estimated for 1965 and 1966. Finally, the consumption gap is measured, and from it inferences are made as to EEC trade in meat for the coming years.

MEAT PRODUCTION IN THE EEC

Recent Changes in Meat Production

Meat production from domestic animals in the EEC rose without interruption from 1950 to 1962 by almost 75 percent, from 5.7 to 9.7 million metric tons.[1] During this same period, pork output increased from 2.2 to 3.9 million metric tons; and beef production, from 2.3 to 4.2 million. Together, they have consistently accounted for 83 to 86 percent of the total output. Poultry production during these years tripled, reaching 921,000 metric tons in 1962, or 10 percent of total meat produced. Other meats as a group declined in relative importance, from 10 to 6 percent (fig. 1).

Although the overall trend in the volume of meat production in the individual EEC countries has risen steadily, Belgium alone showed continuous gains. In the other countries, production declined slightly on one to three occasions, but in no two countries simultaneously. The relative shares of total output of the individual EEC countries scarcely altered during the 12 years. During the whole period, France accounted for about

[1] Meat production is the carcass weight of locally slaughtered domestic animals including their offal, less the slaughter fat, and includes the carcass weight equivalent of animals exported live. Meat from animals imported for immediate slaughter is not included. The data do not permit identification of meat obtained from animals imported for feeding-out and for slaughter at a later date when, presumably, they are treated for statistical purposes as domestic animals.

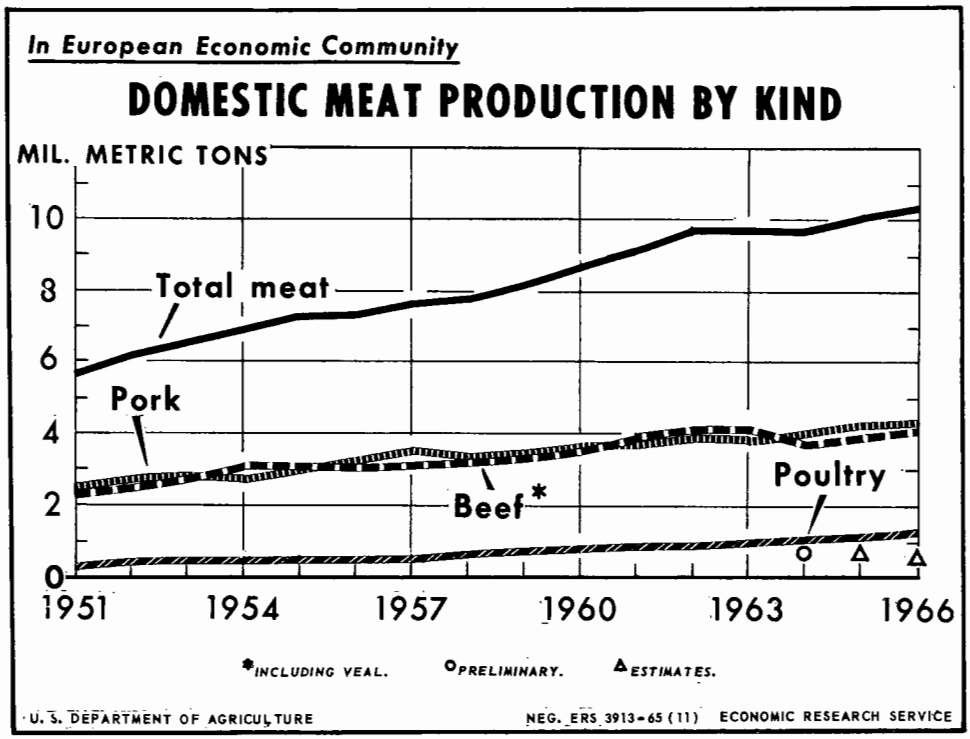


Figure 1

40 percent, and W. Germany, about 33 percent, of total EEC meat. Italy and the Benelux group each turned out about 13.5 percent of the EEC's meat, and the Netherlands outproduced Belgium-Luxembourg (Bel-Lux) in a ratio of about 7 to 5.

In 1963 and 1964, the rise in EEC meat production slowed considerably. Beef and veal production actually declined. Pork production declined slightly in 1963, and then increased in 1964 to 3 percent over the 1962 levels. Poultry production continued to increase sharply in both years.

Analytical Approach

Two methods were employed to estimate EEC meat production: (1) regression analysis and (2) trend and cyclical analysis.

The regression analysis involved the derivation of estimating equations for total meat production of the whole Community. The measurement of structural parameters was considered as important as actual forecasting of output. Because the study was short-run, the variables considered to be relevant were meat and animal prices, feed-grain prices, and animal units. In the absence of data necessary for converting livestock and poultry numbers to feed-consuming units, lagged meat production or "time" was used. The period 1950-62 was analyzed using lagged Community-level indexes of meat and grain prices received by farmers. Coefficients of determination of 98 and 99 percent were obtained, but the most important was the variable "time " or lagged meat production. Extrapolation of the trend projects 1966 meat production at 25 percent above the 1959-61 base and misses completely the developments of 1963 and 1964.

But a projection of the trend is not of itself a clear reflection of the short-run factors which influence the production of meat in the EEC countries. To expose these influences (which collectively apparently offset and partially compensate each other), trends and cycles of the major types of meat were studied separately.

Preliminary computations indicate that the 1964 meat prices had risen, in association with a decline in domestic supplies, 15 percent higher than those prevailing in 1959-61. Beef and mutton had risen highest; pork, somewhat less; and poultry prices had declined slightly.

Even if there should be a further decline in domestic supplies, it is unlikely that the EEC countries would allow the importation of meat from abroad to the extent that it would cause a significant reduction in domestic prices. At the same time, it is expected that they will try to keep domestic meat prices from reaching levels higher than those compatible with national and Community-wide conter-inflationary programs. Furthermore, the EEC proposes to unify meat and milk prices in the near future and it is not considered likely that the general level of EEC meat prices received by the farmer will be reduced, since the political pressures against this are considered too great. Accordingly, meat prices were assumed to be at the high 1964 level; they are more likely to rise than to fall. Considered with respect to their respective trends, beef and milk prices have not fallen since 1961 and 1962 to the extent that they did after 1954. Also they have rebounded more promptly to trend and above-trend levels.

In December 1964, the EEC decided to unify grain prices, effective as of July 1, 1967, and the target prices governing the unification were published. Using weights derived from the quantities of the various grains fed during 1959-61 a rise of 5 percent in feed-grain prices is estimated to have taken effect between the base period (1959-61) and 1964. Grain prices in the coming years are expected to reflect the approaching 1967 unification structure.

Beef and Veal

The persistent upsweep of production, prices, and incomes in postwar Europe has obscured the wave-like advance in output of some farm products. The probable presence of a cycle in beef production is not generally recognized. This is partly because the period of the cycle appears to extend from 7 to 8 years. The cycle has been most apparent for France, the leading beef producer in the EEC. Italy's beef output has a high degree of periodic change, and W. Germany's, less. An important feature, however, is that the fluctuations generally have been in phase across the Community (fig. 2).

The severity of the winter of 1962-63 is generally recognized as a critical factor in considering the meat situation since then. In 1963, supplies were reduced, and close culling and early selling of livestock was encouraged; the price situation also favored large sales. Thus, the bad weather caused the timing of farmers' decisions throughout Europe to coincide. Previous to this cyclical downturn, only one, from 1955-58, occurred in the post-Marshall Plan years (fig. 3).

The period of time studied, covers one complete cyclical sequence together with the end of an earlier one and the beginning of a new one. A variety of factors, including prices, interact to set up such cycles and may have special significance in different phases of their development.

A possible cycle in beef production becomes evident when observations are expressed as departures from trend values or as changes from one year to the next. The upward trend in the output of beef (including veal) shows an average annual increase of 130,000 metric tons--or 3.7 percent at a simple rate based on the mean--during 1961-64, the period to which the straightline trend was fitted. Prior to 1963, output rose in every year but one. Only 1956 shows an absolute decline in output as compared with the level of the preceding year. However, examination of the deviations from the trend reveals that production rose steadily from below trend values in 1951 to a peak above trend in 1954, then dipped continuously below the trend until 1958. Thereafter, output again resumed a high rate of growth which carried it to a peak more than 8 percent above the trend by 1962. The data for 1963 onward indicate the downward phase of another possible beef cycle. By 1964, beef output had sunk to some 4 percent below the trend.

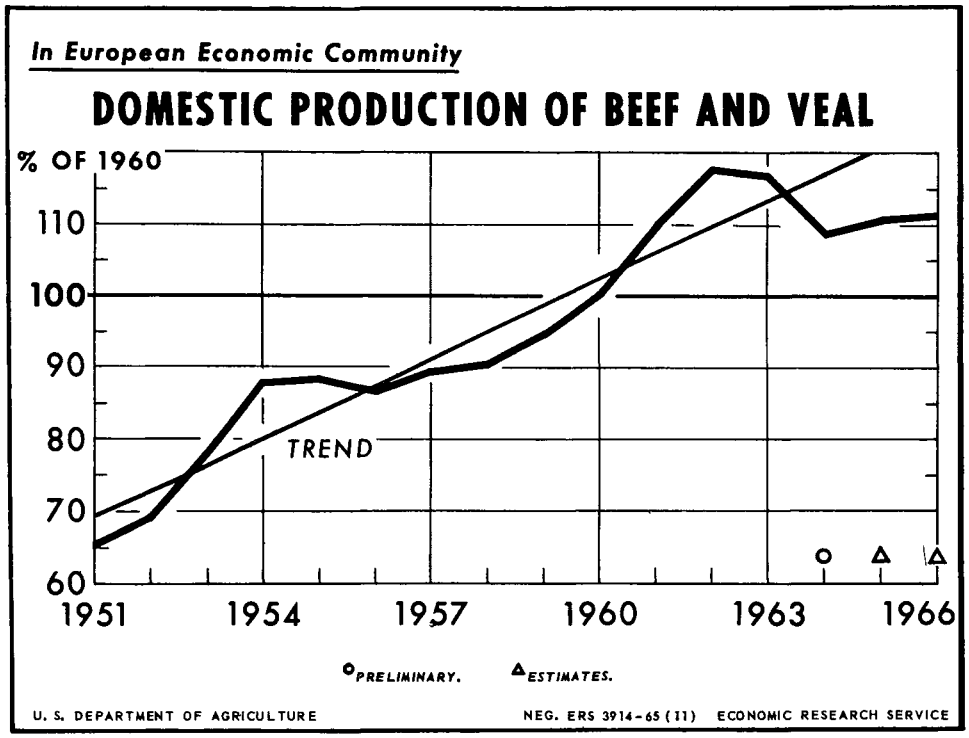


Figure 2

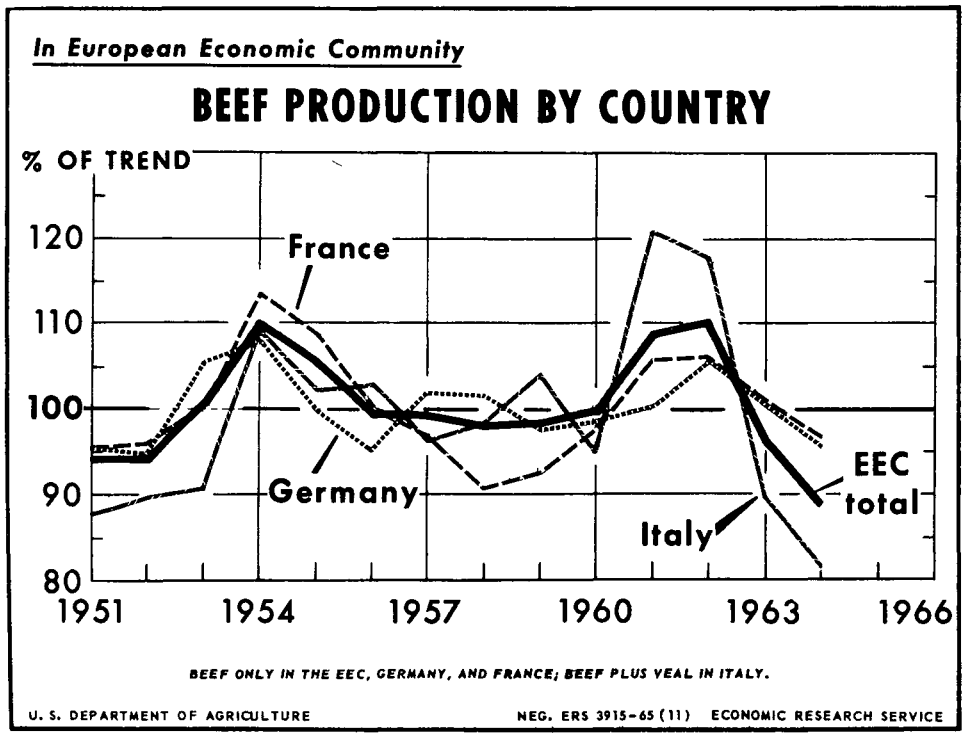


Figure 3

A long-term factor that is also affecting the present cyclical downturn in beef production is the closing of dairy operations because of rising labor costs. Relatively high wages and improved working conditions in the European cities are tempting people away from the farms in large numbers, leaving family-type farms undermanned and unable to afford nonfamily labor. This factor is altering long-standing agricultural practices and has led to a disruption of small farms and the discontinuation of some or all of their activities, including beef and milk production.

In Europe, beef is typically produced in conjunction with dairying on a multiple-product farm, using dual-purpose cattle. Such farming operations suggest that the price of milk may be as important in the farmers' decisions as the price of beef. Since the early 1950's, there appears to have been a particularly strong relationship between the beef and dairy sectors. Milk and beef prices have moved in a roughly parallel sequence which seems out of phase with beef production. Output appears to follow changes in milk and beef prices with a lag of approximately 2 to 3 years. The lagged relationships suggest that above-trend milk and beef prices tend to draw out above-trend beef production, while below-trend milk and beef prices seem to depress beef output (figs. 4 and 5).

From changes in EEC beef production, a standard beef cycle for the Community was constructed with a period of 8 years. This period conforms closely to observed deviations from trend values and to biological expectation. On the basis of this construction, the projection for beef and veal output in the EEC countries shows a slight increase in absolute terms during 1965-66 compared with 1964. The cycle, however, may deepen in 1965 with respect to projected trend values, whereas in 1966 the rate of increase of output is likely to quicken. But the projection indicates that the production of beef and veal will remain below trend for several years (fig. 6).

By 1966, beef and veal output is expected to be approaching the 1963 level, 4.1 million metric tons, and increasing by about 3 percent annually. However, it is possible the output may reach 4.2 million metric tons. But the present output level (3.9 million metric tons) might still hold in 1966 if the cycle should be slow in bottoming out. However, indications that there will be a rise in beef production are: The high milk and beef prices expected to prevail through 1966, the EEC policy of keeping prices more favorable to beef than to veal, and indications of herd buildup (noticeably in France).

Pork

A straight line fits closely the EEC pork production data for 1951-64. This trend rises at 120,000 metric tons a year--an increase of 3.5 percent annually at a simple rate. Only 2 years, 1954 and 1963, show an absolute decline in output from the preceding year; and during the latter half of the period, readings slightly above and below the trend have alternated annually until 1963, which was followed by another low year (fig. 7).

From 1954-57, output increased faster than the trend rate and was followed by years of approximately on-trend production. Since 1961, oscillations are more pronounced.

The pork cycle is quite clear in France and Italy and, to some extent, in W. Germany, and its relationship to overall EEC production is evident though partly obscured by counter-cyclical tendencies in other EEC countries (fig. 8).

The relationship of the deviations from trend of pork production and the prices of pork and of feed grains shows sharp oscillations and apparent shifts. No well-defined relationship is evident over the entire period. The broader movements in the price of beef with respect to trend, however, parallel the deviations from trend of pork production. Since beef and pork are closely competitive in demand, a shortage of one would tend to result in a high price for it and for its close competitors as well. For example, if beef were in short supply, the prices of beef, pork, and other meats would be higher (than would otherwise be the case) with consequent stimulus on output of all types of meat. However, the output response of beef is slower than pork, so that when beef prices are relatively high, pork production might rise more sharply than beef. Thus, the availability of beef appears to be an important determinant of pork production (fig. 9).

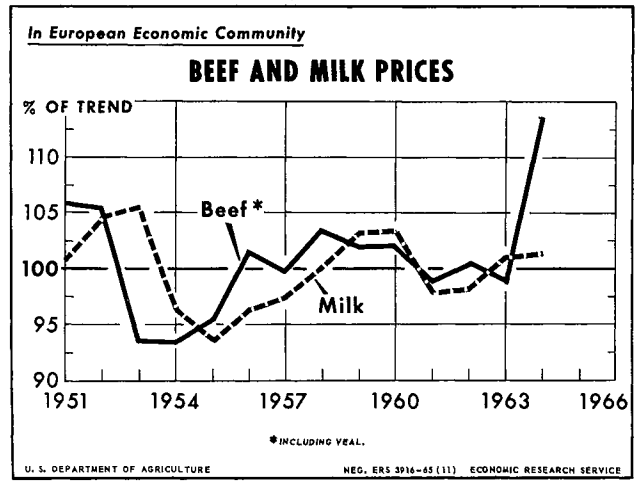
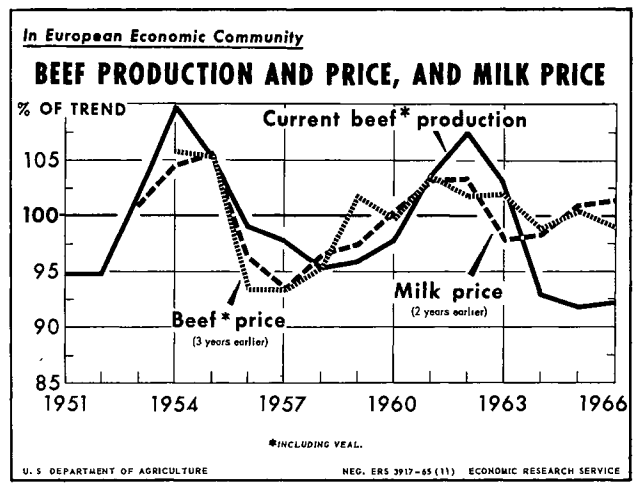


Figure 4



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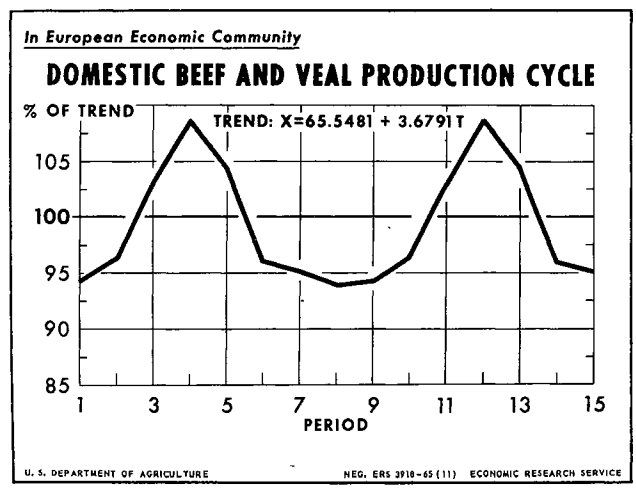

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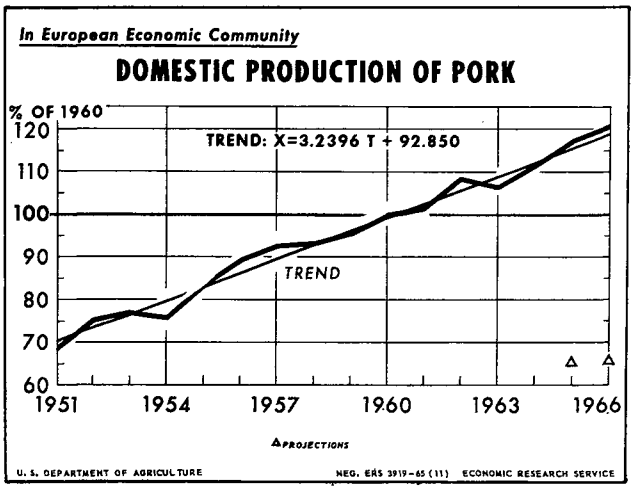

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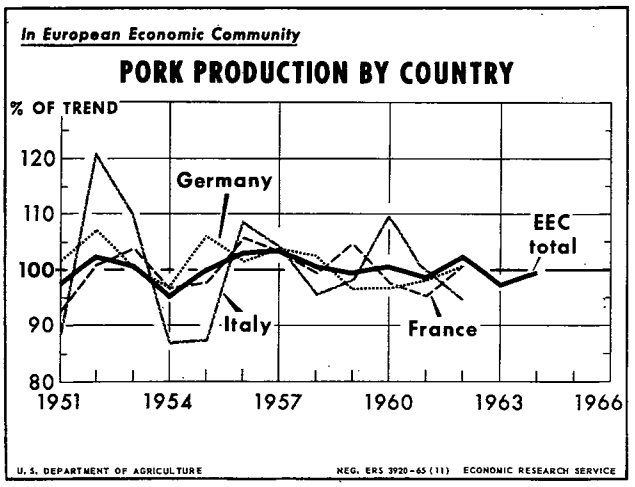

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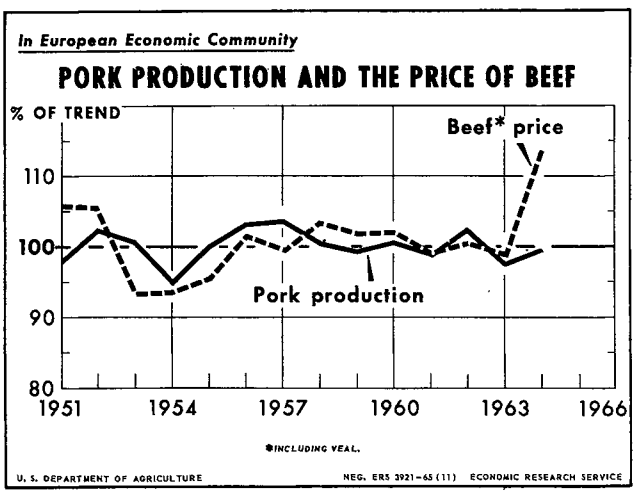

Figure 9

Pork output in both 1963 and 1964 was below trend values for the first time since the early 1950's. Partly for this reason it seems reasonable to expect the 1965 pork production to be well above trend. This expectation is further justified by concern in Europe over the high pork prices prevailing since 1963 and the possible extent of the upswing in production in 1965. Thus far, pork prices have not turned down to the extent expected or usually experienced at the present timing of the production cycle. Since this price disincentive has not appeared, prices may very well not reach their usual (in terms of trend) low. In view of the fact that beef production is down and prices high, the unsatisfied consumer demand for beef is likely to be transferred to other meats such as pork and sustain their prices.

Two alternative courses were projected for pork production. The first is based on above-trend output in 1965, followed by a return to trend in 1966; the second, based on a less marked rise, persists into 1966 with production well above trend. A rough average of these alternative sequences, lying moderately above the trend of pork production for 1966, was selected as the basic projection, with the spread constituting a plausible range.

Thus, pork production in 1965 is expected to be about 7 percent over 1964, a value moderately above trend. The prospects are good that pork production will stay above trend during the following year, increasing by about another 3 percent. Here again, the range of possible outcome for 1966 pork production would be a high of 4.45 or a low of 4.3 million metric tons.

Poultry Meat

The growth of poultry meat production in the EEC countries has been so rapid since the early 1950's that the trend obscures the effect of the individual factors. Two exponential trends were fitted to the index of production, covering the entire period as a whole and the individual years from 1955 onward. Both curves conform well to the data, but the shorter trend fits more closely. Growth has averaged 9 percent annually at a compound rate over the entire period, and in 1955, reached a compound rate of 10 percent per annum and has held it since (fig. 10).

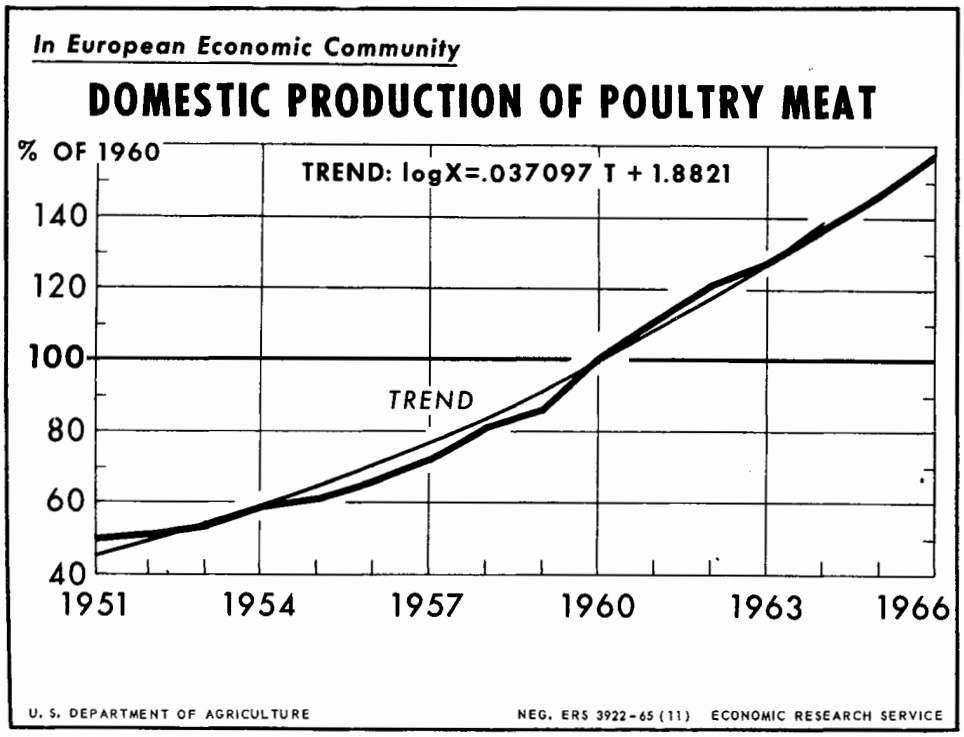

Figure 10

The upsurge in poultry output, which has continued uninterrupted, and the high level of prices which prevail in Europe tend to obscure the underlying significance of prices.

Output was projected on the basis of a continuing growth rate of 10 percent per annum. However, in recognition of the potential negative effect of the decline in prices for poultry since 1963, the output for 1966 was projected on the hypothesis that growth might become more limited and amount in effect only to the average increase from an arithmetic trend fitted to the entire period of observation. A middle course between the two trends provides the basic projection which shows estimated increases of approximately 85,000 metric tons each year and a 1966 production of 1.3 million metric tons.

Other Meats

Mutton and lamb constitute a minor part of total meat production (about 2 percent) in the EEC countries, and their relative importance is diminishing. In spite of steeply rising prices, output response has been less than 1 percent per annum at a simple rate since 1950, and price fluctuations seem to have had little influence on production.

The production of horsemeat rose to a maximum in 1954 and since then has been on an unsteady downward trend. The high production of the early 1950's and its subsequent decline are apparently associated with farm mechanization and the declining need for draft animals. A parabolic trend rises to a maximum in 1954 and drops off thereafter in fairly close conformity with the observed statistics, reaching a negative rate of 6.5 percent recently.

Since 1960, the category "wild meats and game" has accounted for more output than either mutton and lamb or horsemeat. The available statistics show a steady decline in output of this classification until 1956 and from then on, an uninterrupted increase. A parabolic trend fits the data reasonably well, reaching its minimum value, however, in 1955, a year before the minimum in the observed data. Thereafter, the trend has been strongly upward, reaching almost 9 percent per annum in the most recent years for which we have data.

In view of the small volume of output of the minor meats (mutton and lamb, horsemeat, and game), the low-rising trend of mutton and the mutually cancelling, contrary trends of horsemeat and game, a linear trend has been fitted to the entire group, called "other meat." The trend rises gently, averaging less than .3 percent annually over the period, and the growth in the production of game has carried the recent figures somewhat above the trend (fig. 11).

The basic projection of the "other meat" category consists of the extension from the 1962 figures of the trend increment obtained from the linear trend. Within this category, mutton and lamb production was projected as rising slightly. The horsemeat and game categories were projected on the basis of two hypotheses regarding each of their widely divergent, contrary trends. A high production alternative was obtained from the hypothesis that the upward trend of game production would continue, while horsemeat kept its present level of output. A low variation emerged from the hypothesis that the downward trend of horsemeat production would continue, while game output maintained its present level. The effect of these alternatives on total meat output was found to be of small importance, but their effect is retained in the final projections.

Total Meat Production in 1966

In 1964, total domestic meat production of the EEC was still at the 1963 level of 9.7 million metric tons. Based on the specific projections discussed above, total EEC meat production will increase each year by 3 percent, to 10.4 million metric tons by 1966. The range of outcome established for 1966 is 10.1 to 10.7 million metric tons. The range of projection is obtained by summing separately the low and the high projections for each type of meat. Specific estimates are shown in table 1.

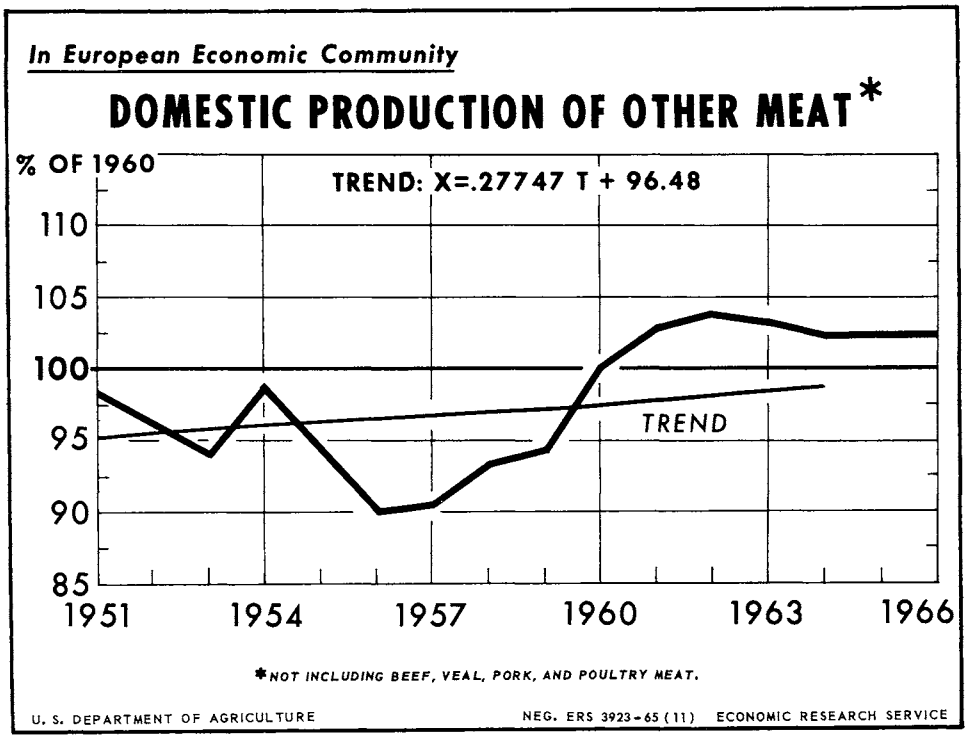

Figure 11

Table 1.--EEC: Domestic meat production 1963 and 1964, estimates 1965 and 1966

Type of Meat	1963	1964	1965	1966
	------- 1,000 metric tons --------			
Beef and Veal				
High			4,000	4,150
Likely	4,150	3,869	3,940	4,075
Low			3,870	4,000
Pork				
High			4,330	4,450
Likely	3,861	4,057	4,265	4,385
Low			4,200	4,320
Poultry Meat				
High			1,210	1,330
Likely	1,016	1,100	1,185	1,270
Low			1,160	1,200
Other Meat				
High			730	755
Likely	689	670	650	650
Low			610	590
Total Domestic Meat Production				
High			10,270	10,685
Likely	9,715	9,696	10,040	10,380
Low			9,840	10,110

MEAT CONSUMPTION IN THE EEC

Recent Changes in Meat Consumption

For the EEC as a whole, total meat consumption increased by almost 60 percent over the 10-year span from 1951-53 to 1961-63, rising from an annual average of 6.25 to 9.95 million metric tons. This substantial increase reflects increases in per capita meat consumption, as well as population increases. Of the increase (3.7 million metric tons), 3.1 million were associated with increased per capita consumption. This represents an increase of 84 percent in per capita consumption, while the increase due to population growth was only 16 percent.

Table 2.--EEC: Meat consumption, 1951-53 to 1961-63

	Total	Per capita	Population
	Million metric tons	Kilograms	Millions
Average, 1951-53	6.25	39	160
Average, 1961-63	9.95	57	175
Increase	3.70 (59%)	18 (46%)	15 (9%)

Per capita consumption is expected to continue to increase in the EEC, with the 1965 total reaching 11.3 million metric tons and the 1966 total, 11.7 million metric tons.

Analytical Approach and Factors Affecting Consumption

In order to estimate consumption of meat for future years, a separate regression analysis of per capita meat consumption on per capita real consumption expenditure and real price of meat received by farmer was run for each country for the period 1951-63. It would have been desirable to compute additional regressions to obtain the per capita consumption of each type of meat as a function of the price of the separate types of meat and of real per capita consumption expenditure. However, trade data are not available in sufficient commodity detail prior to 1956 to permit computing the derived consumption by individual types of meat, and the few annual observations subsequent to that date were not considered sufficient to permit reliable measurement of the numerous coefficients involved. Consumption expenditure instead of disposable income was used as an explanatory variable primarily because it is readily available for each of the EEC countries, whereas disposable income is not. Consumption expenditure is generally comparable to disposable income, but smaller. The principal difference is in the treatment of saving. Coefficients of "income elasticity" obtained in this study may, therefore, be expected to be slightly larger than if they had been related to disposable income.

The regression equations, utilized in conjunction with certain data and assumptions as to basic economic conditions in each of the EEC countries, gave estimates of meat consumption in each country. When summed, they provided estimates of the whole Community. In the following discussion and in tables 3 and 4, gross national product and private consumption expenditure are referred to in real terms.

The W. German economy is considered likely to continue the steady growth of recent years. An upward trend in gross national product of 5 percent underlies the rise in private consumption expenditure. Recognition is given, however, to an increasing difficulty in stemming the tendency for prices to rise. Consumer prices continue upward, but meat prices are projected to remain at the high level attained in 1964.

In France, recent measures taken to overcome inflation caused the growth in physical output to slow toward the end of 1964, but the economy seems poised for a renewal

Table 3.--EEC: Conditions and assumptions

Country	1963	1964	1965	1966
France				
Real Consumer Expenditure[1]	227.8	238.1	246.4	255.0
Population[2]	47.9	48.4	49.0	49.6
Real Per Capita Consumer Expenditure[3]	4,756.0	4,919.0	5,029.0	5,134.0
Meat Prices[4]	113.6	120.5	120.5	120.5
Consumer Prices[5]	113.6	118.1	120.8	124.5
W. Germany				
Real consumer Expenditure[1]	197.4	207.9	218.3	229.0
Population[2]	57.6	58.3	59.0	59.7
Real Per Capita Consumer Expenditure[3]	3,427.0	3,566.0	3,700.0	3,838.0
Meat Price[4]	98.4	108.8	108.8	108.8
Consumer Prices[5]	108.8	111.8	113.5	115.8
Italy				
Real Consumer Expenditure[1]	15,526.0	15,893.0	16,211.0	16,535.0
Population[2]	50.5	50.7	51.0	51.2
Real Per Capita Consumer Expenditure[3]	307.4	313.5	317.9	322.4
Meat Price[4]	116.6	119.4	119.4	119.4
Consumer Prices[5]	114.7	121.6	126.0	130.0
Netherlands				
Real Consumer Expenditure[1]	28.7	30.4	32.0	33.6
Population[2]	12.0	12.1	12.3	12.4
Real Per Capita Consumer Expenditure[3]	2,393.0	2,515.0	2,598.0	2,677.0
Meat Price[4]	103.6	120.1	120.1	120.1
Consumer Prices[5]	106.8	112.6	115.0	117.0
Bel-Lux				
Real Consumer Expenditure[1]	455.2	478.1	497.3	517.0
Population[2]	9.6	9.7	9.7	9.8
Real Per Capita Consumer Expenditure[3]	47.3	49.5	51.2	52.9
Meat Price[4]	108.7	116.0	116.0	116.0
Consumer Prices[5]	103.9	108.8	111.6	113.0

[1] Billions of 1960 national currency. Source: OECD, Main Economic Indicators, various issues, for data through 1962, extended through 1965 on the basis of year to year changes published and projected by the EEC Commission in Economic Situation in the Community, various issues, especially March 1965.

[2] Millions.

[3] 1960 national currency, except that Italy and Belgium are in thousands of national currency.

[4] Average 1959-61 = 100, farm level.

[5] 1960 = 100. Source: International Monetary Fund, International Financial Statistics, various issues, and OECD, Main Economic Indicators, various issues.

of accelerated growth. The EEC Commission forecast a growth in GNP of 2.5 percent in 1965, as compared with 5 percent in 1964. The decline in the rate of increase in private consumption expenditure during the same period, from 4.5 to 3.5 percent, seems reasonable, and the lower rate is expected to continue into 1966. Consumer prices seem likely to continue to rise in line with recent trends, and the high 1964 meat prices are expected to hold at least through 1966.

Italy, too, is wrestling with inflation, and efforts to bring it under control have diminished the growth of the economy. From 4.8 percent in 1963, the rise in GNP declined to 2.7 in 1964, and the outlook is for 2 percent in 1965. Private consumption expenditure, in turn, fell from a rate of 9.7 percent in 1963 to 2.4 in 1964, and the EEC

Table 4.--EEC historic economic series

Country	Per capita meat consumption		
	Average 1951-53	Average 1961-63	Change
	---- Kilograms ----		Percent
France	58.1	78.0	34
W. Germany	43.3	63.4	46
Italy	17.8	31.6	77
Netherlands	32.9	46.0	40
Belgium-Luxembourg	44.0	57.8	31
	Per capita consumer expenditures in U.S. dollars, at 1960 prices and exchange rates		
	Average 1951-53	Average 1961-63	Change
	------ Dollars ------		Percent
France	619	916	48
W. Germany	476	840	76
Italy	305	450	48
Netherlands	724	927	28
Belgium-Luxembourg	457	628	37
	Real meat price at farm level Index, 1960 = 100		
	Average 1951-53	Average 1961-63	Change
	--- Index numbers ---		Percent
France	101.7	98.3	-3
W. Germany	101.6	94.8	-7
Italy	116.3	99.3	-15
Netherlands	128.4	101.3	-21
Belgium-Luxembourg	118.2	105.9	-10

Commission estimate of 2 percent for 1965 is accepted for both 1965 and 1966. Consumer prices are likely to rise on trend, and the high meat prices, to remain.

The Netherlands enjoys a strong productive position. The 1964 rise in GNP of 7.5 percent is being scaled back to 4 percent for 1965, and reflects an aspect of the effort to restrain price increases. Private consumption expenditure is considered likely to grow at 5 percent per annum through 1966. Consumer prices are expected to continue to rise approximately on recent trend, and meat prices, to remain high.

The Belgian economy, basically sound, is under tight rein. A 3.5-percent growth outlook for GNP for 1965 is expected to hold into 1966 and to be translated into a 4-percent annual rise in private consumption expenditure. Here, too, the upward creep in consumer prices is likely to continue and the high meat prices to remain.

On a Community-wide basis, the trend in private consumption expenditure has gradually slowed from 5.5 percent in 1963, to 4.5 percent in 1964, to an estimated 4 percent in 1965, and considered likely to hold for 1966. Consumer prices have risen 16 percent since 1960 on a continuous trend, which does not appear to have been broken. Real

per capita consumption expenditure for the Community is calculated to have been equivalent to $672 in 1960 and to $772 in 1963. It is expected to reach $850 by 1966, higher by more than 26 percent than in 1960.

All the countries of the EEC increased markedly the per capita consumption of meat. Substantial increases in real income and reductions in the real price of meat received by farmers, ranging from 3.3 to 21.1 percent, took place in each country and were important factors contributing to these changes.

West Germany had the largest increase in real consumption expenditure in the EEC and Bel-Lux the least. This more than offset the effect of a somewhat larger fall in the real price of meat in Bel-Lux and accounts for W. Germany's displacing Bel-Lux in the rankings of per capita meat consumption. France had the second largest gain in real consumption expenditure, and this probably accounts for its showing a greater increase in consumption than Bel-Lux, in spite of its considerably higher initial consumption level and lower decrease in meat prices. The Netherlands remained in fourth place both in per capita meat consumption and in increase in real consumption expenditure. Nevertheless, the Netherlands showed a somewhat greater increase in per capita consumption than France, due to a lower initial level of consumption and by far the largest drop in the real price of meat.

As indicated in the first part of this section the increase in per capita meat consumption on an EEC-wide basis has been 45 percent in 10 years. There have been substantial differences, however, between the individual countries. For example, Italy, the country with the lowest per capita consumption, increased its per capita consumption by over 75 percent. In contrast the per capita consumption in Bel-Lux increased by slightly over 30 percent.

The national governments of the EEC countries and the EEC Commission regard the volume of meat imports as one of the instruments of internal price policy. When they want to hold down domestic prices, they increase import quotas and lower customs duties to induce imports. When they want prices to rise, they reduce import quotas and increase tariffs to restrict imports. Because of the inflationary impact of rising meat prices and the disruptive effect this could have on programs of price and exchange stabilization, it is assumed that the EEC governments will seek to prevent meat prices from rising further during the next few years. It is also assumed that meat supplies will be available in sufficient quantity to satisfy the import requirements of the EEC at prices equal to or lower than those prevailing within the EEC, when adjusted by the cost of transportation to Europe.

Estimating Equations

The five regression equations, one for each country, used to explain total meat consumption over the period 1951-62 are presented in table 5.

Both independent variables (index of per capita consumption expenditures in real 1960 currency units and index of real price of meat received by the farmer in 1960 U.S. dollars) were adjusted from nominal to real terms by dividing the current value for the variable by the respective consumer price index numbers for that year. Since the above regressions were actually run in terms of index numbers, where for each variable 1960 = 100, the coefficients are "price" and "income" elasticities for per capita meat consumption for the base year. Specifically, for France, it was estimated that a .7-percent increase in the per capita consumption of meat was associated with a 1-percent increase in per capita consumption expenditure from the 1960 level, with the real price of meat at the farm level held constant.

The expenditure coefficients do not reflect the net effect of a change in consumption expenditure on the consumption of meat. During the period studied, consumption expenditures in each of the countries followed a strong rising trend. It is not statistically

Table 5.--EEC: Meat demand regression equations. Per capita meat consumption related to real per capita consumer expenditure and the real farm level meat price. For all variables, index 1960 = 100.

Country	Regression coefficients [1]			R^2	S^2
	Meat price	Expenditure	Constant		
W. Germany	.049 (.081)	.722 (.018)	23.780	.996	.760
France	-.238 (.108)	.696 (.049)	53.678	.958	5.233
Italy	-.078 (.234)	1,332 (.124)	-30.342	.971	13.815
Netherlands	-.414 (.152)	.633 (.156)	81.243	.963	6.144
Bel-Lux.	-.258 (.143)	.896 (.113)	34.032	.936	7.289

[1] Standard errors of the regression coefficients are shown in parentheses.

possible with the available information to separate the effect of changes in consumer expenditures on consumption from the effect of other influences that may also have changed persistently over the same period. Thus, for example, the effect of gradual changes in tastes and preferences and in standards of consumption cannot be distinguished from the effect of consumer expenditures on consumption.

Similarly, again for France, it was estimated that a rise of .2 percent in per capita consumption of meat was associated with each 1-percent decrease in the real price of meat received by farmers.[2] The magnitudes of the different coefficients tend to bear out that the equations reflect rather than reproduce what economic theory tells us the real situation to be. This is seen in the positive price coefficient for West Germany. Its standard error is, however, almost twice the coefficient's size which is small itself.

Total Meat Consumption in 1966

The regression equations along with the anticipated income, price, and population conditions indicated in table 3 yielded the estimates of per capita meat consumption and total meat consumption which are shown in table 6.

The Community's total meat consumption in 1966 is estimated to be 30 percent higher than in 1960 and 12 percent higher than in 1963. From 10.5 million metric tons in 1963, it is estimated to rise to 11.3 million metric tons in 1965 and to 11.7 million metric tons in 1966.

[2] These "point" elasticities would be exact only if the estimated value for 1960 of C were 100; i.e., the estimated value equaled the actual value. The actual differences are too small to affect the results significantly.

Table 6.--EEC: Meat consumption, 1963, estimates 1964, 1965, and 1966

Country	Per capita meat consumption			
	1963	1964	1965	1966
	Kilograms			
W. Germany	64.11	66.17	68.05	69.88
France	80.82	82.44	84.21	86.05
Italy	35.99	37.00	37.76	38.58
Netherlands	47.68	47.56	48.99	50.59
Bel-Lux.	58.67	60.90	63.30	65.47
EEC average	59.22	60.79	62.38	64.18
	Total meat consumption			
	1963	1964	1965	1966
	1,000 metric tons			
W. Germany	2,690	3,857	4,013	4,170
France	3,867	3,992	4,130	4,308
Italy	1,815	1,876	1,925	1,977
Netherlands	621	628	655	685
Bel-Lux.	517	540	564	586
EEC total	10,510	10,893	11,287	11,726

FOREIGN TRADE IN MEAT OF THE EEC

Prospects for 1966

The difference between projections of EEC meat consumption and domestic production offers a basis for estimating the Community's consumption gap. By definition, this difference constitutes an estimate of the net imports of the Community. As indicated in the earlier sections, Community meat consumption is rising on a smooth curve with minor deflections. In contrast, meat production of the Community broke stride after 1962, and after 2 years of relative stability is expected to recover some of its lost impetus, with 1965 production expected to be 10.0 million metric tons and another increase expected in 1966, bringing production to a level of 10.3 million metric tons. In consequence of the expected production and consumption levels, net imports in 1965 and 1966 are expected to be 1.3 million metric tons each year (fig. 12).

During these years of flagging domestic production, gross meat exports to outside the Community are considered unlikely to exceed significantly the level in 1963. Accordingly, an annual 200,000 metric tons of meat exports to outside the Community is expected through 1966.

Thus, the net trade estimates together with the expected exports outside the Community imply that the EEC meat imports from non-EEC countries are likely to have reached 1.4 million metric tons in 1964, and that they may attain 1.5 million metric tons in 1965 and 1966.

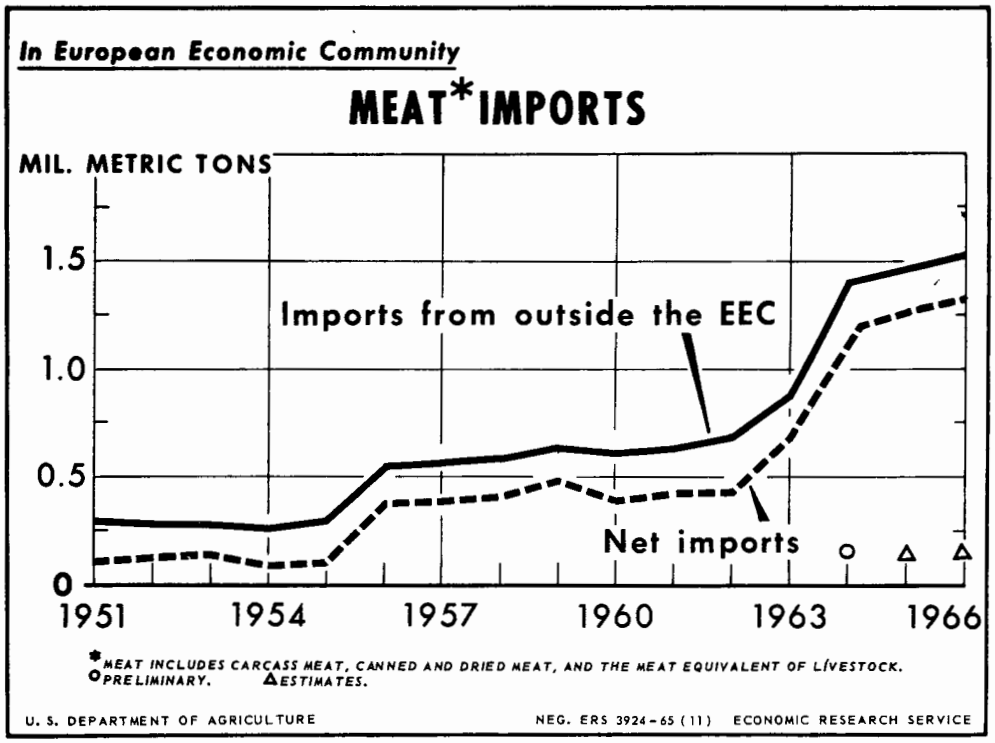

Figure 12

Historic Tendencies in EEC Meat Imports

Historically, the net meat imports of the EEC rise when domestic meat production loses its pace. Recovery in production and its pressure to narrow the consumption gap and reduce meat imports contribute to the conditions which cause beef production to slow down. Between 1951 and 1955, net imports were below 150,000 metric tons. In the following 2 years they expanded to the order of 400,000 metric tons, drifting gradually upward to 480,000 metric tons by 1962. In 1963, EEC net imports of meat rose to over 700,000 metric tons, and in 1964, estimates indicate that they exceeded a million metric tons.

Beef and veal, either in carcass form or on the hoof make up by far the most important segment of the EEC meat trade. Since 1955, this segment has averaged over two-thirds of annual EEC net imports of meat. However, the trend has been downward from 95 percent in 1955 to a low of 46 and 43 percent, respectively, in 1961 and 1962. In 1963, the trade in beef and cattle rose sharply to account for 59 percent of the high net imports of that year, and seems likely to have increased its share in 1964, according to incomplete trade data. EEC net imports of beef and cattle reached 417,000 metric tons of carcass meat equivalent in 1963, and incomplete figures for 1964 suggest that the comparable figure may be in excess of 620,000 metric tons.

A possible domestic cycle in EEC beef production is evident in these net trade figures for beef and cattle imports. The proportion of beef in net imports increases during years of pronounced rises in EEC meat imports. This occurs when domestic beef production is low. As the production cycle works through its rising phase, the proportionate share, and even the absolute amount, of beef imports declines.

Pork and hogs, in carcass weight equivalent, have comprised 14 percent of the net meat imports of the EEC since 1955. This meat category has also shown the effect of possible cyclical developments in domestic EEC meat production. In years of cyclically low beef production, pork imports have tended to rise, both absolutely and proportionately, in competition with more expensive beef.

In 1955-58, net imports of poultry meat averaged somewhat more than net imports of pork, but averaged only 25,000 metric tons per year. Subsequently, the increases were substantial and a peak of over 130,000 metric tons net imports was reached. Since then they have declined sharply, but not to the pre-1958 levels.

Historically, U.S. exports of meat to the Community have been concentrated in poultry meat and offals. The United States has, however, been a prominent supplier of each of these products. For example, in 1961-63, poultry exported by the United States to the EEC accounted for 55 percent of their net poultry imports; offals accounted for 58 percent.

Beyond 1966

In the years after 1966, meat consumption is likely to continue to rise on the present trends--possibly more rapidly as the EEC countries improve the balance in their economies and move again to higher growth rates. In contrast, beef production is likely to remain below trend for some time as production recovers from the recent decline. Consequently, for several years EEC meat production will probably not be able to narrow appreciably the consumption gap--and meat imports will remain high.

APPENDIX

Table 7.--EEC: Meat production, foreign trade and consumption

Year	Meat production[1]	Foreign Trade								Consumption[3]
		Imports			Exports			Net trade		
		Total	Non-EEC	Intra-EEC[2]	Total	Non-EEC	Intra-EEC[2]	Total	Non-EEC	
	1,000 Metric tons									
1951	5,695	383	310	73	270	197	73	113	113	5,808
1952	6,113	336	282	54	204	150	54	132	132	6,245
1953	6,545	354	281	73	206	133	73	148	148	6,693
1954	6,917	376	253	123	285	162	123	91	91	7,008
1955	7,247	480	298	182	375	193	182	105	105	7,352
1956	7,364	680	542	138	302	164	138	378	378	7,742
1957	7,623	693	551	142	309	167	142	384	384	8,007
1958	7,778	738	583	155	322	167	155	416	416	8,194
1959	8,115	890	649	241	410	169	241	480	480	8,595
1960	8,642	987	619	368	594	226	368	393	393	9,035
1961	9,100	939	641	298	514	216	298	425	425	9,525
1962	9,701	1,019	688	331	585	254	331	434	434	10,135
1963	9,715	1,327	871	456	657	201	456	670	670	10,385
1964	[4]9,700	--	1,400	--	--	200	--	1,200	1,200	[5]10,900
1965[6]	10,040	--	1,460	--	--	200	--	1,260	1,260	11,300
1966[6]	10,380	--	1,520	--	--	200	--	1,260	1,260	11,700

[1] See tables 8 and 9 for sources.
[2] In this tabulation intra-Community exports were taken for both intra-imports and intra-exports. See table 11.
[3] Derived consumption, equal to production plus net trade.
[4] Preliminary.
[5] Calculated from regression equations.
[6] Estimated.

Table 8.--EEC: Domestic meat production

Year	Beef	Veal	Pork	Poultry	Livestock exported[1]	Other	Total
	1,000 metric tons						
1950	1,747	555	2,240	393	--	527	--
1951	1,824	506	2,408	391	35	528	5,695
1952	1,923	530	2,734	402	8	516	6,113
1953	2,116	607	2,790	435	13	506	6,545
1954	2,474	653	2,755	472	33	530	6,917
1955	2,486	659	3,026	490	78	508	7,247
1956	2,439	642	3,238	530	31	484	7,364
1957	2,540	629	3,367	576	25	486	7,623
1958	2,608	605	3,386	649	29	501	7,778
1959	2,723	638	3,474	711	55	514	8,115
1960	2,870	682	3,635	803	115	537	8,642
1961	3,227	677	3,681	886	77	552	9,100
1962	3,432	748	3,934	954	75	558	9,701
1963	3,423	727	3,861	1,016	134	554	9,715
1964[2]	3,869		4,057	1,100	120	550	9,696
1965[3]	3,940		4,265	1,185	100	550	10,040
1966[3]	4,075		4,385	1,270	100	550	10,380

[1] Meat equivalent.
[2] Preliminary
[3] Estimated

Source: Data for 1950-63: EEC, Agrarstatistik No. 4, 1963 and No. 5, 1964; and U.N. Commodity Trade Statistics. Data for 1964: Based on FAS estimates adjusted to align with EEC series and ERS estimates.

Table 9.--EEC: Meat imports including the meat equivalent of livestock (including intra-Community trade)

Year	Fresh, frozen, or chilled	Canned	Dried	Livestock meat equivalent[1]	Total
	1,000 metric tons				
1951.....	168	30	25	160	383
1952.....	163	30	8	135	336
1953.....	163	41	9	141	354
1954.....	191	32	11	142	376
1955.....	250	32	11	187	480
1956.....	371	38	14	257	680
1957.....	401	52	17	223	693
1958.....	421	62	12	243	738
1959.....	496	63	18	313	890
1960.....	586	48	9	344	987
1961.....	567	38	7	327	939
1962.....	665	42	17	295	1,019
1963.....	890	56	11	[2]370	1,327

[1]Liveweight published in U.N. source converted to carcass equivalent.
[2]Estimated by adjusting U.N. data to fit EEC series.

Sources: United Nations Commodity Trade Statistics (SITC numbers 011, 012, and 013). Livestock Meat Equivalent, Agrarstatistik (SITC No. 001)

Table 10.--EEC: Meat exports including the meat equivalent of livestock. (including intra-Community trade)

Year	Fresh, frozen, or chilled	Canned	Dried	Livestock meat equivalent[1]	Total
	1,000 metric tons				
1951.....	55	130	49	36	270
1952.....	43	105	47	9	204
1953.....	60	88	44	14	206
1954.....	118	97	38	32	285
1955.....	155	98	44	78	375
1956.....	118	99	54	31	302
1957.....	126	112	46	25	309
1958.....	136	125	33	28	322
1959.....	206	125	24	55	410
1960.....	301	133	45	115	594
1961.....	302	113	24	75	514
1962.....	381	104	25	75	585
1963.....	400	106	17	134	657

[1] Liveweight published in U.N. source converted to carcass equivalent.

Source: U.N. Commodity Trade Statistics.

Table 11.--EEC intra-Community trade: Meat, livestock (meat equivalent), and canned meats

Year	Imports	Exports	Difference
	1,000 Metric tons		
1951.....	54	73	-19
1952.....	51	54	-3
1953.....	76	73	3
1954.....	111	123	-12
1955.....	165	182	-17
1956.....	132	138	-6
1957.....	139	142	-3
1958.....	157	155	2
1959.....	227	241	-14
1960.....	333	368	-35
1961.....	287	298	-11
1952.....	317	331	-14
1963.....	425	456	-31

Source: U.N. Commodity Trade Statistics.

Table 12.--Selected Prices
Index, average 1959-61 = 100 (Milk, 1960 = 100)

Year	Meat	Beef	Pork	Milk	Feed grain	Poultry	Mutton
1950.....	--	--	--	--	--	--	--
1951.....	89.2	76.3	99.4	74.9	94.3	93.9	81.6
1952.....	90.7	79.1	96.8	80.3	103.0	104.9	83.6
1953.....	84.2	73.0	88.8	83.7	101.7	102.0	81.1
1954.....	90.5	75.7	100.4	78.9	93.4	101.7	84.1
1955.....	88.8	80.2	92.7	78.9	98.2	100.7	92.8
1956.....	92.1	88.4	92.1	83.7	99.8	102.8	94.2
1957.....	94.9	89.9	96.9	87.0	95.8	101.5	105.9
1958.....	96.9	96.3	94.2	92.0	97.2	105.3	114.2
1959.....	98.6	98.0	99.0	97.2	100.1	100.2	89.5
1960.....	99.9	101.1	98.6	100.0	99.0	100.8	99.9
1961.....	101.5	101.0	102.4	97.2	100.9	99.0	110.6
1962.....	101.8	105.5	98.0	100.0	101.8	102.6	110.7
1963.....	107.3	107.0	109.8	105.4	108.6	98.8	114.6
1964[1]	115.6	126.1	111.7	107.9	104.7	98.0	118.9

[1] Preliminary.

Source: Data from 1951-61 is computed from data published by the Economic Research Service, The Grain-Livestock Economy of the European Economic Community: A Compendium of Basic Statistics. U.S. Dept. Agr., Statis. Bul. 351; data after 1961, computed from data published in Agrarstatistik; Preis, EEC Statis. Off., Brussels, various issues.

Table 13.--France: Prices of meats, feed grain, and milk

Index, average 1959-61 = 100 (Milk, 1960 = 100)

Year	Meat	Beef	Pork	Feed grain	Milk
1950.....	--	--	--	--	70.7
1951.....	78.9	71.1	82.8	78.4	73.8
1952.....	75.1	58.4	81.3	83.6	79.4
1953.....	71.7	57.2	75.2	83.8	78.8
1954.....	79.8	64.3	89.0	81.0	70.4
1955.....	79.3	68.3	81.3	85.3	71.2
1956.....	83.8	80.1	77.1	84.6	77.1
1957.....	88.5	80.1	91.2	83.2	77.4
1958.....	100.1	97.8	96.9	93.7	82.8
1959.....	95.1	97.1	90.4	97.9	95.6
1960.....	102.1	102.4	101.5	96.9	100.0
1961.....	102.8	100.6	108.0	105.2	98.6
1962.....	104.7	112.1	96.3	105.1	101.6
1963.....	113.6	114.9	121.0	116.3	109.0
1964[1].....	120.5	134.5	117.0	104.9	109.2

[1] Preliminary.

Source: Data for 1951-1961, computed from data published by the Economic Research Service, The Grain-Livestock Economy of the European Economic Community: A Compendium of Basic Statistics. U.S. Dept. Agr., Statis. Bul. 351; data after 1961, computed from data published in Agrarstatistik; Preis, EEC Statis. Off., Brussels, various issues.

Table 14.--West Germany: Prices of meats, feed grain, and Milk

Index, average 1959-61 = 100 (Milk, 1960 = 100)

Year	Meat	Beef	Pork	Feed grain	Milk[1]
1950.....	--	--	--	--	--
1951.....	90.5	70.5	101.0	83.3	75.2
1952.....	94.5	87.5	97.5	104.7	80.6
1953.....	84.7	78.5	91.7	101.9	83.4
1954.....	94.9	78.8	103.4	98.9	79.7
1955.....	90.5	85.9	92.3	99.7	84.5
1956.....	94.6	90.9	95.8	100.8	89.9
1957.....	96.4	92.3	97.8	98.1	97.5
1958.....	91.4	91.8	90.3	99.4	104.2
1959.....	100.7	99.4	101.3	100.9	99.6
1960.....	99.3	100.0	99.0	100.6	100.0
1961.....	100.1	100.6	99.8	98.5	97.5
1962.....	99.1	101.3	97.6	99.2	100.4
1963.....	98.4	97.0	98.8	105.1	106.2
1964[2].....	108.9	111.2	108.1	104.8	111.8

[1] Split year ending June 30 of indicated year.
[2] Preliminary.

Source: Data for 1951-1961, computed from data published by Economic Research Service, The Grain-Livestock Economy of the European Economic Community: A Compendium of Basic Statistics. U.S. Dept. Agr., Statis. Bul. 351; data after 1961, computed from data published in Agrarstatistik; Preis, EEC Statis. Off., Brussels, various issues.

Table 15.--Italy: Prices of meats, feed grain, and milk

Index, average 1959-61 = 100 (Milk, 1960 = 100)

Year	Meat	Beef	Pork	Feed grain	Milk [1]
1950.....	--	--	--	--	--
1951.....	98.8	88.0	119.8	131.9	80.2
1952.....	106.4	100.6	117.7	125.3	83.1
1953.....	93.5	88.9	90.2	137.6	99.7
1954.....	96.4	86.1	105.6	102.7	100.5
1955.....	102.4	91.4	122.7	113.8	87.0
1956.....	99.6	94.6	108.7	121.0	81.8
1957.....	103.5	104.1	106.8	114.0	85.0
1958.....	102.4	103.4	103.2	99.6	91.9
1959.....	98.9	95.8	105.3	100.2	95.9
1960.....	100.3	102.3	98.5	99.9	100.0
1961.....	100.8	101.9	96.2	99.9	91.6
1962.....	105.1	101.8	109.2	98.8	96.2
1963.....	116.6	109.9	127.8	106.3	99.7
1964.....	[2] 119.4	[2] 128.4	[2] 104.2	[2] 105.6	[3] 99.7

[1] Split year ending June 30 of indicated year.
[2] Preliminary.
[3] 1963 price.

Source: Data from 1951-61 is computed from data published by the Economic Research Service, The Grain-Livestock Economy of the European Economic Community: A Compendium of Basic Statistics. U.S. Dept. Agr., Statis. Bul. 351; data after 1961, computed from data published in Agrarstatistik; Preis, EEC Statis. Off., Brussels, various issues.

Table 16.--Netherlands: Prices of meats, feed grain, and milk

Index, average 1959-61 = 100 (Milk, 1960 = 100)

Year	Meat	Beef	Pork	Feed grain	Milk
1950.....	--	--	--	--	62.2
1951.....	98.4	85.7	106.2	108.0	60.5
1952.....	106.6	91.1	116.8	110.5	69.2
1953.....	97.4	86.1	103.8	97.5	74.3
1954.....	98.8	88.4	105.2	104.6	76.2
1955.....	94.9	86.1	98.8	104.4	79.6
1956.....	102.1	99.1	102.5	106.8	98.4
1957.....	99.6	97.4	98.8	101.0	100.0
1958.....	100.9	97.4	102.0	98.3	100.0
1959.....	102.7	101.8	103.4	101.6	100.0
1960.....	95.0	97.8	92.3	96.9	100.0
1961.....	102.3	100.5	104.3	101.5	98.6
1962.....	97.7	96.4	97.4	103.0	97.2
1963.....	103.6	100.0	112.8	105.3	93.5
1964[1].....	120.1	136.4	120.1	104.0	96.2

[1] Preliminary.

Source: Data from 1951-61 is computed from data published by the Economic Research Service, The Grain-Livestock Economy of the European Economic Community: A Compendium of Basic Statistics. U.S. Dept. Agr., Statis. Bul. 351; data after 1961, computed from data published in Agrarstatistik; Preis, EEC Statis. Off., Brussels, various issues.

Table 17.--Bel-Lux: Prices of meats, feed grain, and milk

Index, average 1959-61 = 100 (milk, 1960 = 100)

Year	Meat	Beef	Pork	Feed grain	Milk
1950.....	--	--	--	--	--
1951.....	107.3	100.2	121.5	108.8	91.3
1952.....	102.1	101.3	102.0	113.4	96.5
1953.....	97.9	92.5	102.6	95.7	95.9
1954.....	101.7	92.7	111.5	77.7	89.2
1955.....	94.6	93.6	93.0	98.3	88.7
1956.....	96.0	101.9	86.7	98.7	89.5
1957.....	97.4	97.3	96.1	85.1	96.8
1958.....	95.1	91.6	93.4	93.3	90.7
1959.....	100.2	97.5	102.6	102.7	98.3
1960.....	95.6	98.3	89.8	101.3	100.0
1961.....	104.2	104.2	107.6	96.1	98.8
1962.....	99.0	104.6	92.4	106.5	100.6
1963.....	108.7	107.9	128.1	102.8	106.1
1964[1].....	116.0	133.0	121.3	102.3	119.2

[1] Preliminary.

Source: Data from 1951-61 is computed from data published by the Economic Research Service, The Grain-Livestock Economy of the European Economic Community: A Compendium of Basic Statistics. U.S. Dept. Agr., Statis. Bul. 351; data after 1961, computed from data published in Agrarstatistik; Preis, EEC Statis. Off., Brussels, various issues.

Table 18.--ECC meat consumption

Year	West Germany	France	Italy	Bel-Lux	Nether-lands	Total
	1,000 metric tons					
1951.....	2,065	2,286	753	383	344	5,808
1952.....	2,198	2,454	879	397	318	6,246
1953.....	2,353	2,666	897	412	363	6,694
1954.....	2,450	2,831	909	427	391	7,008
1955.....	2,630	2,908	967	435	411	7,351
1956.....	2,780	3,019	1,076	444	422	7,741
1957.....	2,907	3,096	1,106	459	438	8,006
1958.....	3,001	3,069	1,201	483	438	8,192
1959.....	3,136	3,225	1,292	496	447	8,596
1960.....	3,263	3,363	1,399	528	484	9,034
1961.....	3,465	3,558	1,453	541	507	9,523
1962.....	3,704	3,670	1,530	557	568	10,029
1963[1].....	3,690	3,867	1,815	517	621	10,510
1964[1].....	3,857	3,992	1,876	540	628	10,893
1965[2].....	4,013	4,130	1,925	564	655	11,287
1966[2].....	4,170	4,308	1,977	586	685	11,726

[1] Calculated.
[2] Estimated.

Source: Derived consumption. Figures are obtained from adjusting meat production, defined as the carcass weight of locally slaughtered domestic animals, by net trade in meat including the meat equivalent of live animals. For sources of production and trade data, see notes to tables 7 through 11.

Table 19.--Per capital meat consumption

Year	W. Germany	France	Italy	Bel-Lux	Nether-lands
	Kilograms				
1951.....	40.84	54.23	16.02	42.67	33.52
1952.....	43.23	57.80	18.56	43.97	30.63
1953.....	45.79	62.36	18.84	45.38	34.59
1954.....	47.23	65.75	18.98	46.81	36.83
1955.....	50.23	66.96	20.06	47.42	38.28
1956.....	52.46	68.86	22.20	48.10	38.76
1957.....	54.19	69.84	22.69	49.37	39.72
1958.....	55.28	68.52	24.49	51.59	39.15
1959.....	57.14	71.29	26.18	52.68	39.39
1960.....	58.87	73.61	28.18	55.77	42.16
1961.....	61.63	77.07	29.12	56.94	43.57
1962.....	65.04	78.09	30.50	58.37	48.15
1963[1]	64.11	80.82	35.99	58.67	47.68
1964[1]	66.17	82.44	37.00	60.90	47.56
1965[2]	68.05	84.21	37.76	63.30	48.99
1966[2]	69.88	86.05	38.58	65.47	50.59

[1] Calculated from regression equations.
[2] Estimated.

Source: Data for 1951-62 calculated from meat consumption figures in table 18 using population figures shown in table 21.

Table 20.--EEC: Real per capita consumer expenditure, in U.S. dollars at 1960 prices and exchange rates[1]

Year	W. Germany	France	Italy	Bel-Lux	Netherlands
	Dollars				
1951.....	435	596	288	715	451
1952.....	472	614	303	717	451
1953.....	522	647	323	739	468
1954.....	547	676	327	756	491
1955.....	594	711	338	791	521
1956.....	636	769	347	798	554
1957.....	670	820	358	823	544
1958.....	694	801	362	804	537
1959.....	725	806	376	827	554
1960.....	767	839	395	864	581
1961.....	811	877	417	887	608
1962.....	851	915	449	921	625
1963.....	859	956	483	972	651
1964.....	890	945	498	1,009	684
1965[2]	965	1,009	498	1,020	688
1966[2]	1,009	1,040	511	1,051	708

[1]Current local currency units deflated by respective consumer price and corrected to U.S. dollars at the following exchange rates:
W. Germany--4 Deutsche Marks = $1.00
France--4.937 New Francs = $1.00
Italy--625 Lire = $1.00
Bel-Lux--50 Belgian Francs = $1.00
Netherlands--3.62 Guilders = $1.00
[2]Estimated.

Source: Derived from national accounts data as published in OECD, Main Economic Indicators (Paris), various issues, and OECD, General Statistics (Paris), various issues, using consumer price data from the same sources.

Table 21.--EEC: Population

Year	W. Germany	France	Italy	Bel-Lux	Nether-lands
	Thousands				
1951.....	50565	42156	47005	8976	10264
1952.....	50843	42460	47352	9029	10382
1953.....	51386	42752	47604	9079	10493
1954.....	51875	43057	47899	9122	10615
1955.....	52364	43428	48200	9173	10715
1956.....	52995	43840	48469	9231	10888
1957.....	53649	44331	48743	9297	11026
1958.....	54283	44789	49041	9363	11187
1959.....	54882	45240	49356	9416	11348
1960.....	55423	45684	49642	9467	11480
1961.....	56227	46163	49903	9501	11637
1962.....	56947	46998	50170	9543	11797
1963.....	57606	47853	50457	9615	11953
1964.....	58297	48427	50709	9663	12108
1965[1]	58997	49008	50963	9712	12265
1966[1]	59705	49596	51218	9761	12424

[1] Estimated.

Source: OECD, General Statistics (Paris), various issues, especially November 1964, p. 31. Population estimates for 1965 and 1966 are at the following rates:

W. Germany	1.2%	Netherlands	1.3%
France	1.2%	Belgium	.5%
Italy	.5%	Luxembourg	.7%

Table 22.--EEC: Net imports of fresh and frozen meats by type of meat [1]

Year	Poultry meat [2]	Beef and veal [2]	Sum of poultry, beef and veal	Pork [2]	Sum of poultry, beef, veal and pork	Other meats [3]	All, fresh, frozen, or chilled meats [4]
	1,000 metric tons						
1955.....	[5](18.0)	12.5	30.5	11.3	41.8	53.2	95.0
1956.....	23.9	171.0	194.9	5.7	200.6	52.4	253.0
1957.....	26.3	156.6	182.9	12.3	195.2	79.8	275.0
1958.....	34.1	131.6	165.7	32.1	197.8	86.2	284.0
1959.....	62.1	125.0	187.1	43.3	230.4	59.6	290.0
1960.....	81.1	127.3	208.4	18.0	226.4	58.6	285.0
1961.....	119.6	43.9	163.5	23.1	186.6	77.4	264.0
1962.....	131.5	42.3	173.8	11.1	184.9	99.1	284.0
1963.....	80.2	219.4	299.6	69.9	369.5	121.5	491.0
1964[6]	80.8	346.9	427.7	119.2	546.9	160.1	707.0

[1] Note that 2 separate sources were used in the construction of these data. Net imports were computed by subtracting the sum of the country exports from the sum of the country imports.

[2] Source: FAO, Trade Yearbooks for poultry, beef, and pork figures.

[3] Computed difference (a residual) after deducting poultry, beef, veal, and pork from all fresh, frozen, or chilled meats tabulated in the last column.

[4] Source: United Nations, Commodity Trade Statistics.

[5] Estimate.

[6] Preliminary.

Table 23.--EEC: Net imports of slaughter livestock in carcass equivalent, 1955-64[1]

Year	Carcass equivalent from--				
	Cattle, including calves[2]	Hogs[2]	Sum of cattle and hogs	Other live stocks[3]	All live-stock[4]
	1,000 metric tons				
1955	80.4	11.3	91.7	9.3	101.0
1956	153.8	31.5	185.3	47.7	233.0
1957	149.7	18.6	168.3	34.7	203.0
1958	148.3	35.8	184.1	27.9	212.0
1959	152.9	49.7	202.6	21.4	224.0
1960	170.6	42.3	212.9	52.1	265.0
1961	165.9	41.4	207.3	76.7	284.0
1962	159.9	24.8	184.7	68.3	253.0
1963[5]	197.9	17.2	215.1	56.9	272.0
1964[5]	272.8	27.6	300.4	67.6	368.0

[1]The FAO livestock trade numbers were converted to carcass equivalent by assuming that carcasses averaged only 55 percent of the liveweight. A further assumption was made that the average beef type animal traded weighed 275 kg. live and that live hogs weighed 125 kg. each.

[2]Source: FAO, Trade Yearbooks.

[3]Difference between all livestock and the sum of cattle and hogs.

[4]Source: United Nations, Commodity Trade Statistics. Note the FAO and the U.N. Statistics appeared to be very similar if not identical. Totals were not available in the FAO series so the U.N. series was used here to complete the series.

[5]Preliminary estimates: 1963 and 1964 were based on data published by the EEC Statis. Off. in the Analytical Tables of Trade Statistics, which summarize imports and exports of the Community.

Table 24.--EEC: Trade in dried and canned meats, 1951-1963

Year	Dried meats (SITC 012)		Canned meats (SITC 013)		Sum of dried and canned meats	
	Imports	Exports	Imports	Exports	Imports	Exports
	1,000 metric tons					
1951	25	48	30	130	55	178
1952	8	47	30	105	38	152
1953	9	44	41	88	50	132
1954	11	38	33	97	44	135
1955	11	43	32	98	43	141
1956	14	54	38	99	52	153
1957	16	46	52	112	68	158
1958	12	33	62	125	74	158
1959	18	23	63	125	81	148
1960	9	45	48	133	57	178
1961	7	24	38	113	45	137
1962	17	25	42	104	59	129
1963	11	17	56	106	67	123

Source: United Nations, Commodity Trade Statistics.

Table 25.--EEC: Net imports of fresh meats, slaughter livestock, and canned and dried meats, 1951-64[1]

Year	Fresh, frozen, and chilled meats (carcass weight[2]	Slaughter livestock (carcass equivalent)[3]	Sum of meats and slaughter livestock ([4])	Canned and dried meats (as reported) ([5])	Total net imports[6]
	1,000 metric tons				
(1)	(2)	(3)	(4)	(5)	(6)
1951	113	115	228	-123	105
1952	119	114	233	-114	119
1953	103	124	227	- 82	145
1954	73	105	178	- 91	87
1955	95	101	196	- 98	98
1956	253	233	486	-101	385
1957	275	203	478	- 90	388
1958	284	212	496	- 84	412
1959	290	224	514	- 67	447
1960	285	265	550	-121	429
1961	264	284	548	- 92	456
1962	284	253	537	- 70	467
1963	491	272	763	- 56	707
1964[7]	707	368	1,075	- 53	1,022

[1] Source: United Nations, Commodity Trade Statistics and EEC, Foreign Trade Analytical Tables, (import and export) for Germany and Belgium where U.N. statistics were incomplete after 1960. The 1963 and 1964 estimates were compiled from Monthly Statistics published in the latter reference.

[2] SITC 011.

[3] SITC 001 converted to carcass equivalent. Procedure: The tonnages of fresh, canned, and dried meats were not adjusted; they are included in the import and export statistics as reported. The total tonnages of livestock reported in the sources were converted to carcass basis as follows. The totaled liveweight tonnages of cattle, hogs, sheep, etc., imported or exported by each country were adjusted by the following percentages: W. Germany, 60; France, 66; Italy, 49; Netherlands, 58; and Bel-Lux, 77 percent.

These liveweight to carcass weight conversion percentages were developed for each country as follows: The carcass meat from imported live animals as reported in EEC, Agrarstatistik No. 4, 1963, for the years 1959, 1960, and 1961 was divided by the total liveweight of the live animals imported as reported in United Nations, Commodity Trade Statistics for the same 3 years. U.N. liveweight data for Germany were incomplete in 1960 and 1961 so the 1957-59 period was used for W. Germany instead.

[4] Sum of columns (1) and (2).

[5] Includes S.I.T.C. numbers 012 and 013. Negative or minus net imports indicate that the sum of the canned and dried meat exports of the EEC countries is larger than the sum of similar imports. To convert to carcass equivalent, the net exports need to be increased by at least 10 percent depending upon the composition of these meats.

[6] Sum of columns (2), (3), and (5). Net imports in this table vary slightly from those shown in other tables because of slight variations in EEC data as compared with U.N. data.

[7] Preliminary estimates.