UNITED STATES DEPARTMENT OF AGRICULTURE
Economic Research Service

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OUTLOOK FOR FATS, OILS, AND OILSEEDS IN 1967-68

Talk by George W. Kromer
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at the Annual Agricultural Outlook Conference
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Trend: U.S. supplies of edible fats, oils, and oilseeds rose from 12.2 billion pounds (oil equivalent of oilseeds) in 1955 to 17.5 billion pounds in 1966, an increase of 43 percent. The gain is attributed mainly to increased soybean production which more than offset reduced supplies of lard, cottonseed oil, and butter. Soybeans now comprise two-thirds of total supply compared with one-third in 1955.

Outlook: The U.S. food fat supply during the 1967/68 marketing year (started October 1) will be around 19.0 billion pounds, 8 to 9 percent above 1966/67. The increase is due mainly to record supplies of soybeans. With abundant supplies of most oilseeds, farm prices in 1967/68 will likely average near support levels and below a year ago. Availabilities of food fats in 1967/68 are well in excess of domestic requirements and some buildup in soybean stocks probably will take place, despite anticipated heavy export movement of food fats and oils and soybeans.

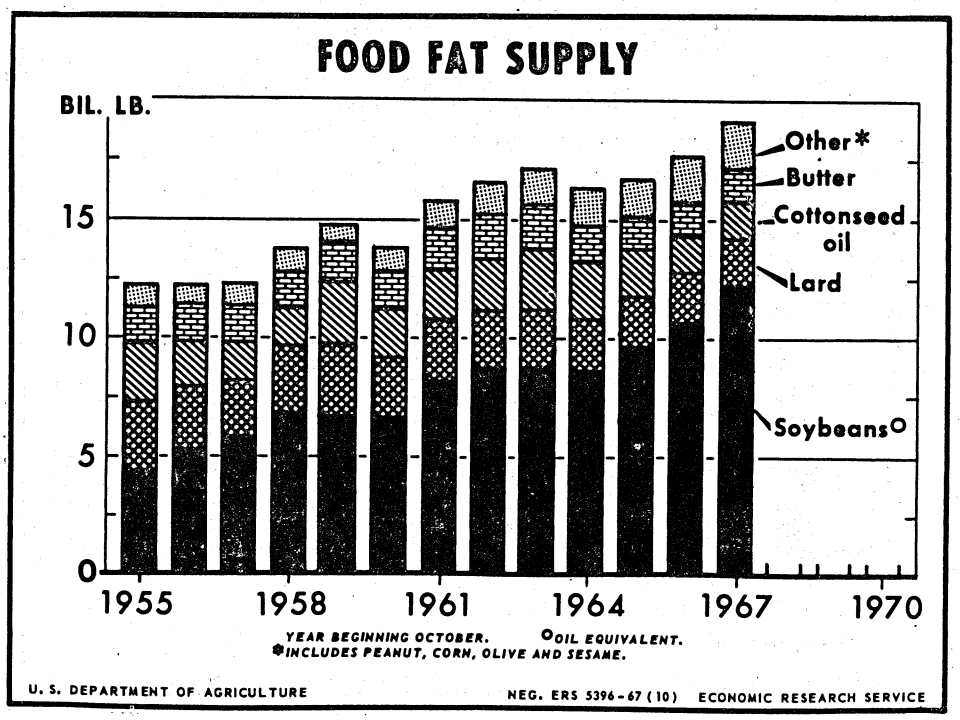

Figure 1

Trend: Domestic disappearance of the 4 major food fats increased from the 1949-53 average of 7.0 billion pounds to about 8.8 billion in 1966. During this period, soybean oil gained steadily, from 30 percent of the fats shown to 54 percent in 1966. Increases in soybean oil more than offset declines in butter, lard and cottonseed oil. The steady growth pattern for soybean oil reflects in part the consumer shift from animal fats to vegetable oils and liquid-type oil products. It also reflects the expanding use of vegetable oils in the production of margarine, shortening, mayonnaise, salad dressings, potato chips, frozen french fries, mellorine, bakery products (cookies, crackers, etc.), and other prepared foods.

Outlook: Further increases in population and consumer incomes along with large military procurement likely will boost domestic use of food fats and oils to record levels. Domestic disappearance of the 4 major food fats during 1967/68 is estimated at around 9.2 billion pounds, up some 3 to 4 percent from a year ago. Soybean oil probably will reach new highs--both in total usage and relative proportion--accounting for around 56 percent of the major fats utilized. Cottonseed oil use likely will decline again because of reduced supply and relatively high price. Total lard usage during 1967/68 probably will continue at year earlier levels. Domestic disappearance of butter is expected to increase slightly during 1967/68, as CCC donations for domestic programs rise. The total food fat per capita rate in 1967/68 probably will be more than the 48 pounds calculated for 1966/67.

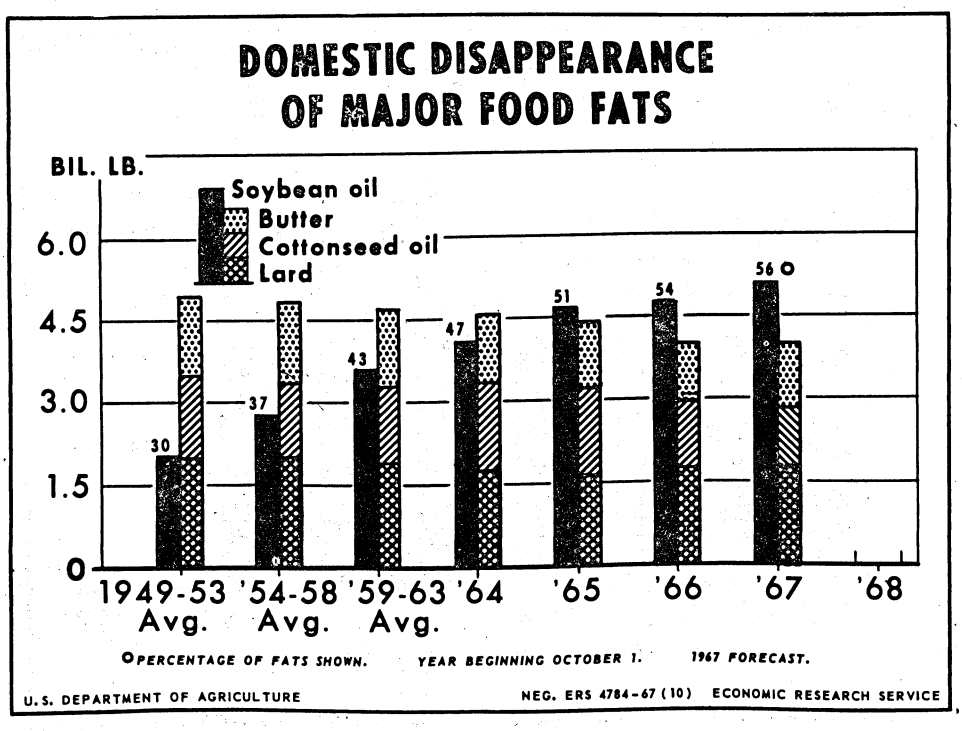

Figure 2

Trend: U.S. exports of food fats and oils (including the oil equivalent of soybeans) increased from 3.0 billion pounds in 1955 to a record 5.1 billion pounds in 1963 and 1964. In spite of record soybean shipments in 1965 and 1966, total exports were lower because of sharp reductions in edible vegetable oils, lard and butter. In 1955, total exports accounted for about a fourth of the U.S. output of these commodities but by 1966 the proportion increased to a third. The increase in U.S. exports is attributed to soybeans (including soybean oil) which now represents over four-fifths of the total food fat exports.

Outlook: The quantities of edible fats and oils available for export in the 1967/68 marketing year that started October 1 are estimated at around 5.0 billion pounds, compared with 4.6 billion exported last year and the record 5.1 billion pounds in 1964/65. The increase is in soybeans (including soybean oil). Such a total export volume would account for about one-third of the 1967/68 U.S. output of these commodities.

Competition in world markets will continue strong although the final outcome of major foreign crops is still not known. But lower average U.S. prices might improve our competitive position in export markets.

The United States accounts for about one-fourth of the world's production of all oilseeds, oils, and fats, and approximately one-third of the world's exports.

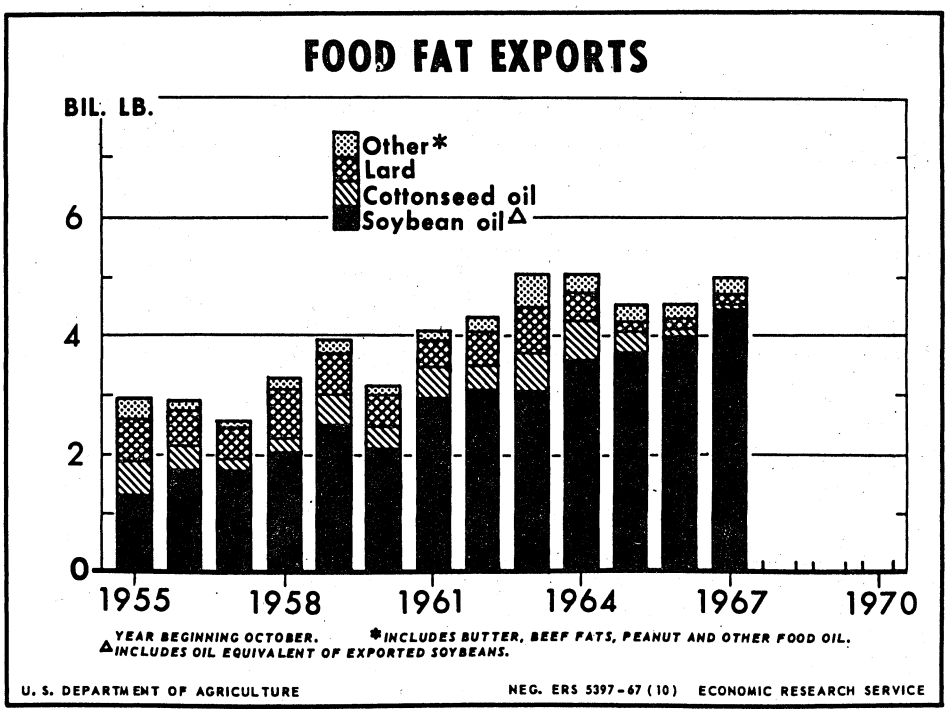

Figure 3

Trend: U.S. soybean production in 1967 is 3 1/3 times that of 1950, primarily because of a similar increase in harvested acreage. The average yield per acre has shown little trend during this period. Since 1956, the U.S. soybean yield has remained on a plateau, varying between 21.8 bushels per acre that year and the 1966 peak of 25.4 bushels. The relatively stationary yields partly reflect the rapid expansion of soybeans into new acres for which available varieties were not so well suited, and the planting of soybeans by many farmers lacking experience with the crop. Soybean yields per acre need to be raised for soybeans to compete more effectively with feed grains and other cash crops in the Corn and Cotton Belts. Higher yields will also help farmers combat the continuing rise in production costs.

Outlook: The 1967 soybean crop, as of November 1, is estimated at 985 million bushels--6 percent above the 931 million bushels in 1966. Acreage being harvested for beans is 40.1 million, up about 10 percent from the 36.6 million in 1966. Increases occurred in all producing regions and rapid expansion continued in southern areas. Estimated U.S. average yield (November 1) is 24.6 bushels per acre, 0.8 bushels below the 1966 record of 25.4 bushels. Favorable market prices received during 1966/67 were an important factor encouraging farmers to expand their 1967 soybean acreage.

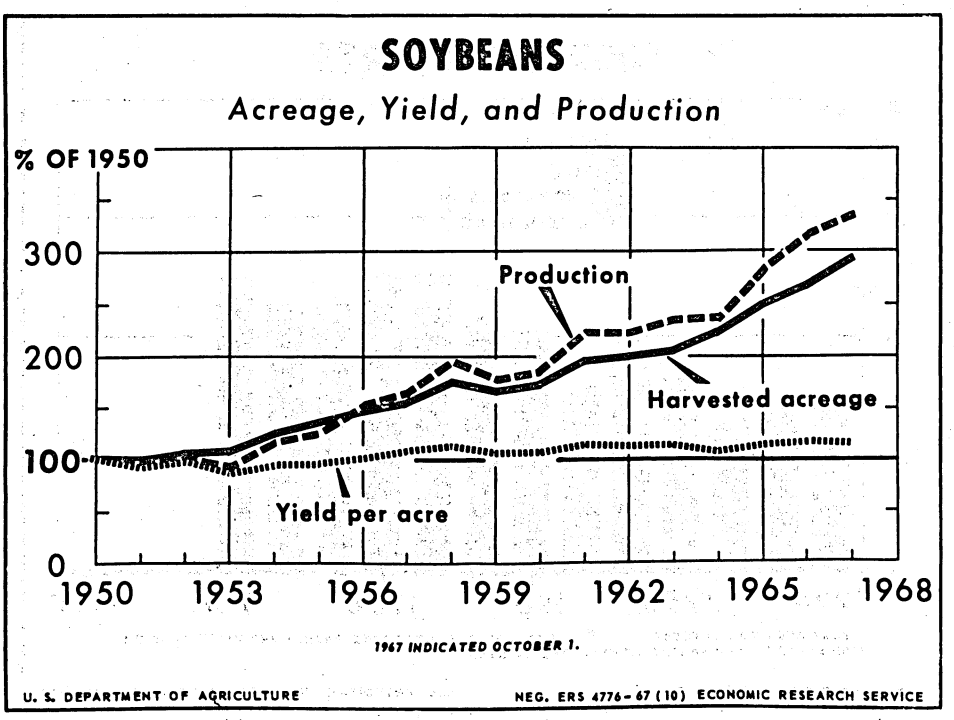

Figure 4

Trend: In most years since 1953, the U.S. season average price received by farmers for soybeans has been somewhat above the government support rate. Farm prices have trended upward nearly $1 per bushel during 1959-66. The support price for 1967-crop soybeans is $2.50 per bushel, the same as in 1966 but 25 cents over the rate in effect during 1962-65. Soybean prices at Chicago usually average around 20 cents a bushel over U.S. farm prices. While in some years significant quantities of soybeans were placed under the CCC price support program, these beans were subsequently needed and carryovers remained relatively small. Annual increases in soybean production will rarely coincide exactly with annual increases in requirements.

Outlook: The 1967/68 U.S. season average price received by farmers for soybeans is expected to be around $2.50 per bushel--approximating the support price. This would compare with $2.77 per bushel (weighted by monthly sales) received in 1966/67. Prices to farmers for soybeans during October 1967, a heavy marketing month, averaged $2.44 per bushel, about 34 cents below October 1966. Farm prices during most of the 1967 harvesting season are expected to average close to the loan rate. Later in the season market prices are expected to strengthen but may continue around the support level. Storage facilities are limited in some southern areas where soybean acreage increased sharply this year and many farmers are selling their beans at combining this fall.

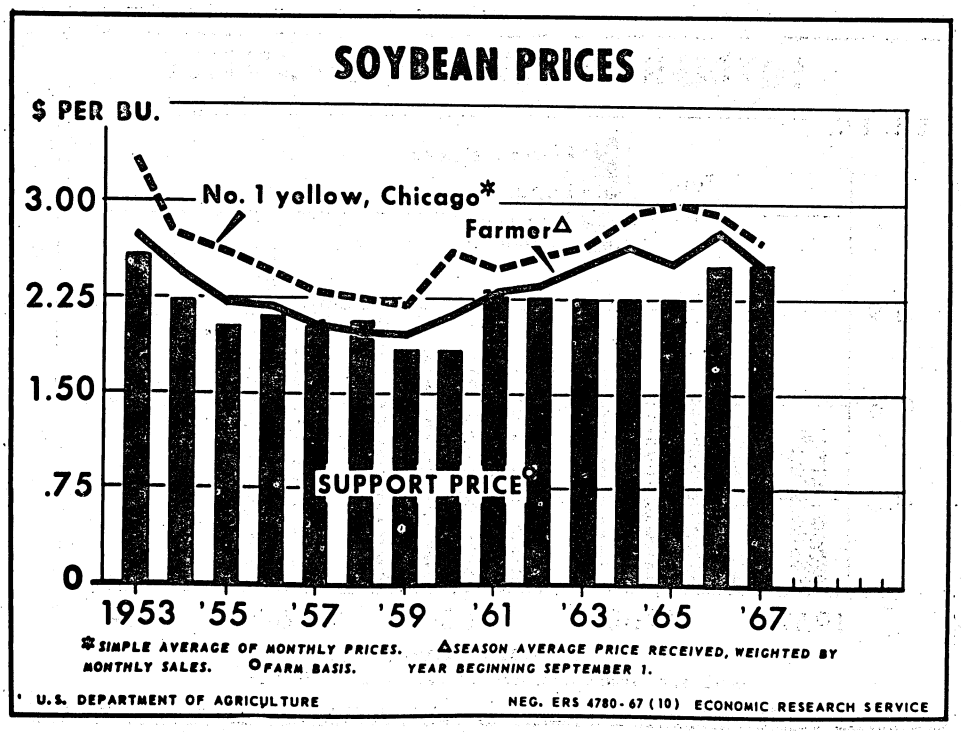

Figure 5

Trend: U.S. supplies of soybeans have trended upward from 515 million bushels in 1957 to 967 million 1966. Domestic use (mainly crushings for oil and meal) increased sharply during the period but the biggest percentage gain was in exports. Total growth in soybean utilization (crushings, exports, seed, and feed) during 1953-65 has averaged 46 million bushels annually. This is an annual rate of increase approximating 10 percent. This rate fell to 4 percent during the 1966/67 marketing year. Only in 1960/61 and 1963/64 was annual growth in utilization less than in 1966/67; in 1960/61 utilization was restricted by lack of supply. Growth in soybean utilization was limited in 1966/67 by higher soybean prices and increased world competition from other oilseeds, fats, and oils--particularly USSR sunflower seed and oil.

Outlook: Soybean supplies for the marketing year that started September 1, 1967, are placed at a record 1.1 billion bushels--12 percent more than last year. This consists of a carryover of 91 million bushels and the 1967 crop of 985 million bushels. Soybean usage during 1967/68 is expected to increase at a faster rate than last year and more in line with the recent average of about 10 percent. Domestic crushings may reach as high as 600 million bushels compared with 551 million in 1966/67. The final level of crush will depend upon such factors as soybean and soybean meal prices, our ability to export soybean oil, and competition from foreign oil-bearing crops. Soybean exports may rise to around 280-300 million bushels compared with 257 million during 1966/67. Prospective increases in exports and the domestic crush probably will not match this year's record soybean crop. As a result some further stock buildup is likely and present indications point to stocks next September perhaps $1\frac{1}{2}$ times the 91 million bushels this year.

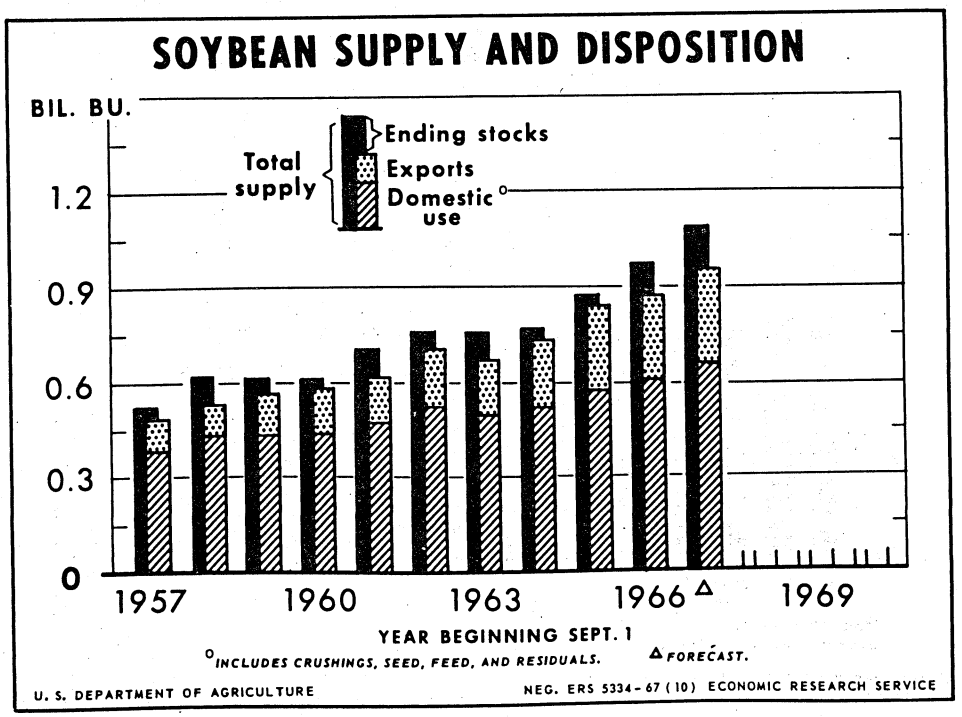

Figure 6

Trend: The U.S. soybean processing industry has continued to anticipate increases in soybean production and their growing markets for soybean oil and meal. Soybean processing capacity more doubled since 1951/52, rising from 310 million bushels that year to 650 million in 1966/67. The efficiency and capacity per plant increased markedly during this period as the number of processing mills declined from 193 in 1951/52 to an estimated 135 in 1967/68. During this period, the average annual processing capacity per mill rose from 1.6 million bushels to 5.6 million. Processing capacity has substantially exceeded the volume crushed (by about 20 percent) despite the sharp uptrend in soybean production and reduction in number of mills.

Outlook: Trade sources estimate the U.S. soybean processing capacity during the 1967/68 season at around 750 million bushels, about 15 percent more than the 650 million last year. On a monthly basis, this would be around 62½ million bushels compared with about 55 million in 1965/66. A 1967/68 soybean crush of 600 million bushels would mean an operating rate for the industry around 80 percent of capacity, which is about equal the long run utilization rate. During the past year, there were some processing plants constructed and others expanded existing facilities. However, some of the new plant capacity probably will not be available until later in the marketing year. Also, more cottonseed crushers may process soybeans this year because of the smaller cottonseed crop. Cottonseed oil mills not having solvent extraction equipment are not as efficient in processing soybeans as most soybean mills in the Corn Belt.

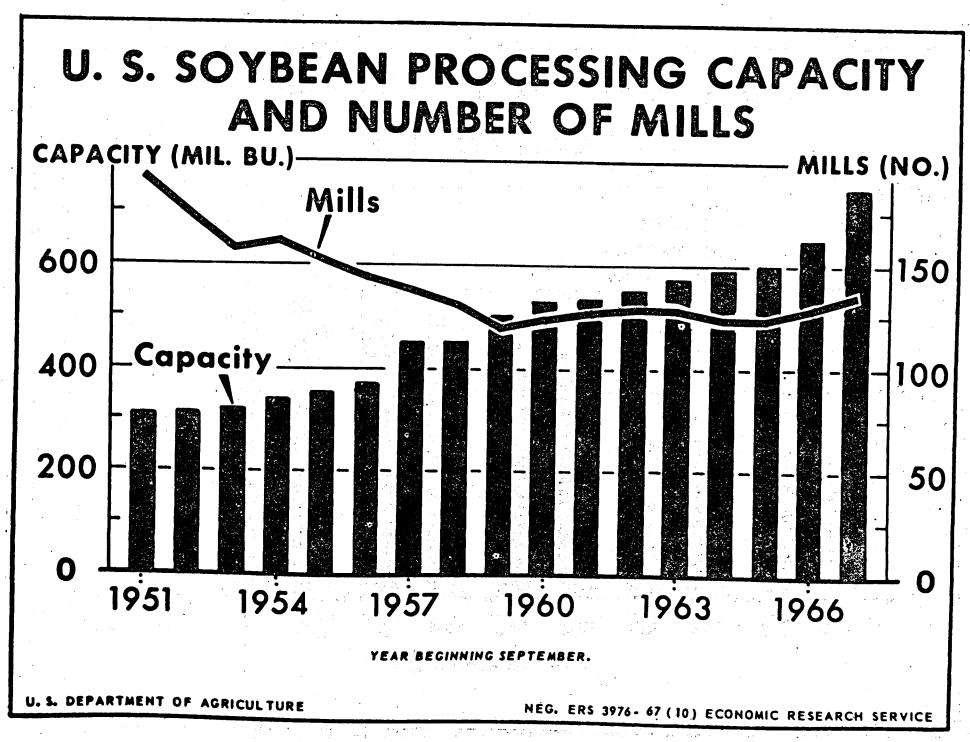

Figure 7

Trend: U.S. soybean exports have increased from 105 million bushels in 1958 to 257 million in 1966. The average annual rate of increase was around 13 percent. Western European countries, Japan, Canada, Israel, and Taiwan are the major foreign markets for U.S. soybeans, accounting for about 98 percent of our soybean exports in 1966/67. These economically advanced dollar markets use U.S. soybeans as a source of animal feeds and as an edible oil in food products. Japan buys large quantities for use as edible protein. Spain has become a significant outlet for U.S. soybeans, taking 27 million bushels in 1966/67, compared with 18 million in 1965/66. The United States accounts for about 75 percent of the world production of soybeans and Mainland China about 20 percent. However, the United States accounts for over 90 percent of world exports of soybeans and products. Soybean production in Brazil has been trending upward and is estimated this year at a record 25 million bushels.

Outlook: Soybean exports in 1967/68 may rise to around 280 to 300 million bushels, compared with 257 million last season. The increase over last year is expected to go primarily to Europe and Japan. Lower U.S. prices strengthen export prospects for U.S. soybeans. Under the Kennedy Round negotiations, Japan agreed to reduce its 13 percent duty on soybeans to about 6 percent ad valorem at current prices. This reduction--which will take place in 4 stages, July 1, 1968 to January 1, 1972--should lower internal prices in Japan and thereby encourage demand for U.S. soybeans and meal for the expanding Japanese livestock industry. Soybean exports from Mainland China in 1967 are not expected to vary greatly from last year's estimated 20 million bushels.

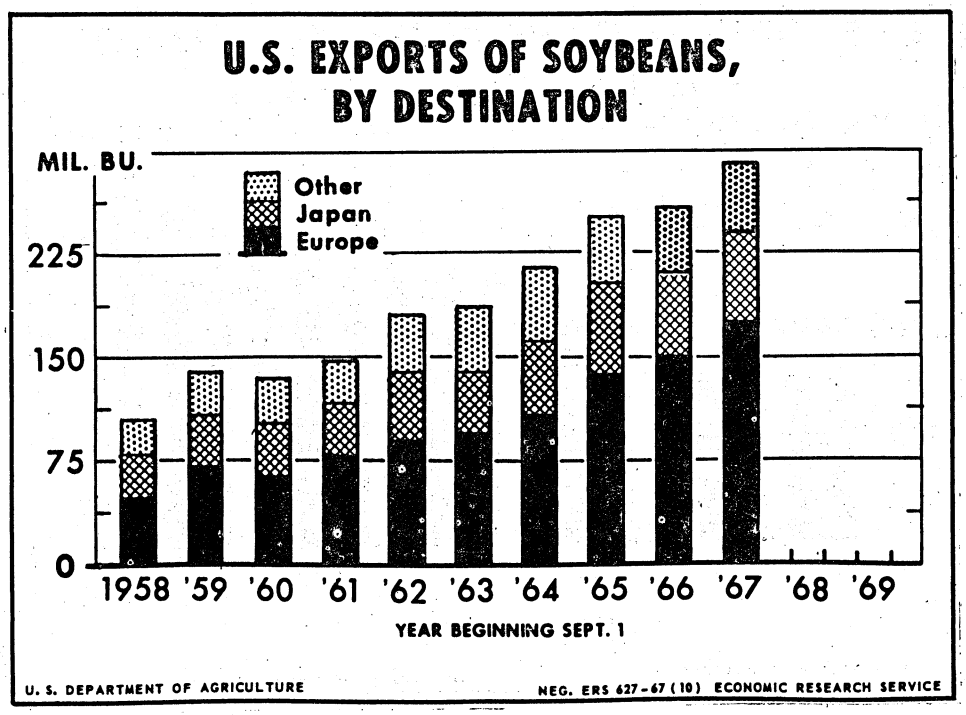

Figure 8

Trend: U.S. soybean oil exports trended upward from the 1950-54 average of 0.2 billion pounds to a record 1.3 billion in 1964/65. Most of the gain was attributed to increased shipments under government-export programs (P.L.480). Exports to Europe, formerly the most important market for U.S. soybean oil, have dropped sharply in recent years, and Asia and Oceania have emerged as our largest market.

Outlook: Prospective U.S. supply and domestic use for 1967/68 suggest that approximately 1.3 billion pounds of soybean oil will be available for export, assuming no change in the carryover next October 1. The quantity actually shipped will depend on the level of activity under government-export programs, and the level and trend in soybean and other soft oils prices here and abroad during the marketing year. Based largely on estimates of 1967 crops, world production of edible vegetable oil is expected to increase by nearly 5 percent in 1968. Much of the increased production will be in fat-deficit developing countries (i.e., India). Major factors in the world edible vegetable oils situation in 1968 are: (1) An all-time high in the U.S. exportable supplies of soybeans and products, with slight increase in Brazil and Mainland China; (2) a sharp increase in peanut production (chiefly in India and Senegal), supplemented by sizable stocks in Nigeria; (3) increased olive oil production in the major producing countries of the Mediterranean Basin except Spain (chiefly Italy, Greece, and Tunisia); (4) continued heavy availabilities of sunflowerseed and oil from the Soviet Union and Eastern Europe, despite some possible decline in production, and with production in Argentina up sharply; (5) the probability of record availabilities of rapeseed in the major exporting countries, including Canada and France.

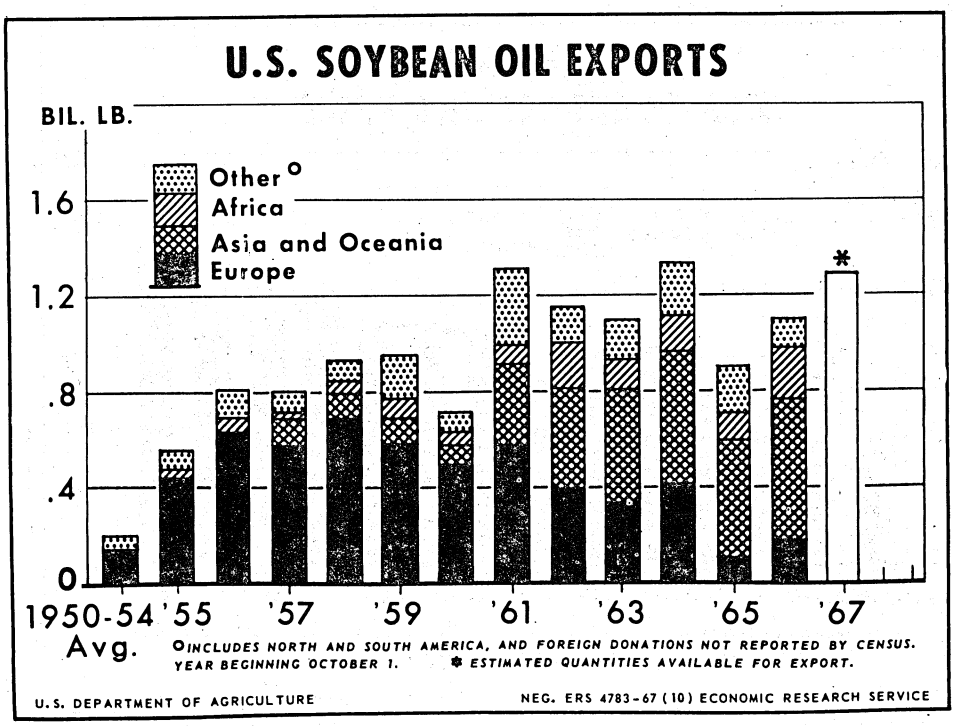

Figure 9

Trend: Total disappearance of soybean meal has increased from about 5.6 million tons during 1959-54 to 13.2 million in 1966/67. Domestic feed use during this period nearly doubled, from 5.5 million tons to 10.6 million. Soybean meal is utilized mainly in mixed feeds as high protein rations for poultry, hogs, and cattle. In recent years, soybean meal exports have become an increasingly important outlet for U.S. soybean meal. During the past decade, soybean meal prices have trended upward, from $47 per ton in 1956/57 to about $80 in 1965/66 and 1966/67.

Outlook: U.S. soybean meal supply for the 1967/68 marketing year that started October 1 is estimated at 14.3 million tons, compared with 13.4 million a year ago. With continued large domestic use of protein and reduced supplies of cottonseed meal, domestic use of soybean meal is expected to increase--probably in the area of 6 to 8 percent from the 10.6 million tons in 1966/67. The expected increase in domestic use of soybean meal during 1967/68 reflects: (1) reduced availabilities of cottonseed meal; (2) lower soybean meal prices, along with higher livestock prices; and (3) continuation of the expanding demand for livestock products. Competition from synthetic urea will continue strong. Competition from fish meal imports (mainly from Peru) is expected to be a little lower than in 1966/67. The number of high-protein consuming animal units is estimated for 1967/68 at around 159 million units, about the same as last year. Soybean meal prices during 1967/68 are expected to average lower than a year earlier, mainly reflecting lower prices for soybeans. Soybean meal prices (44% protein, bulk, Decatur, Ill.) in October, the first month of the current marketing year, averaged $72 per ton--about $10 less than October 1966.

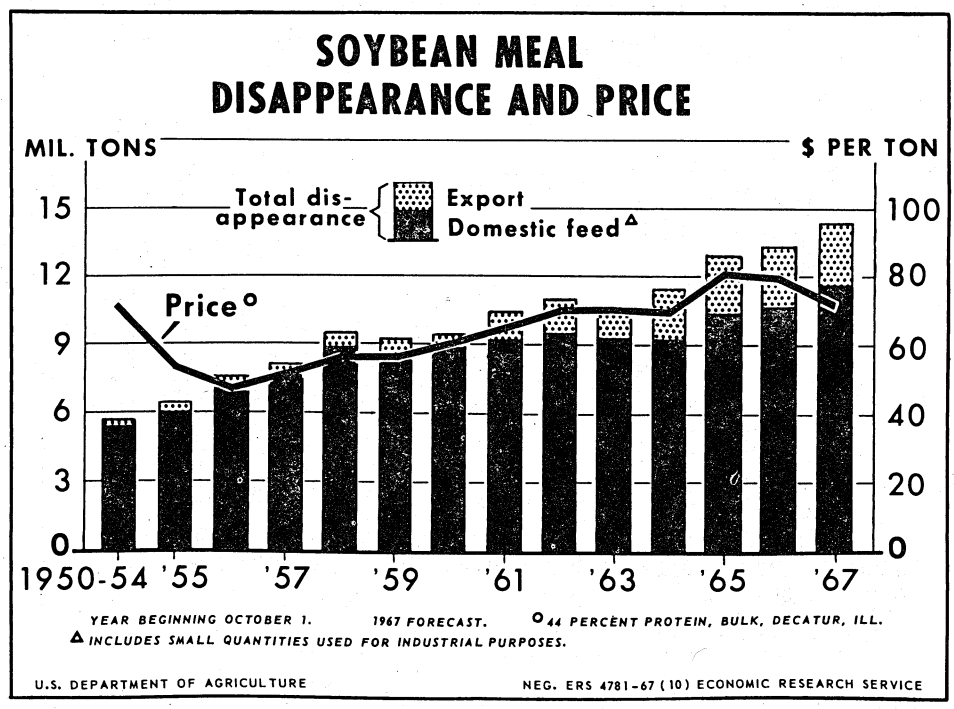

Figure 10

Trend: U.S. soybean meal exports have risen sharply from 0.6 million tons in 1960-61 to a record 2.7 million in 1966/67. About three-fourths of the total goes to Western Europe. Export demand for soybean meal is generated essentially by the same factors that create the demand for soybeans abroad. Demand is strong particularly in Western Europe, where U.S. meal has established a reputation for high quality. Important factors include increased knowledge of the feeding value of soybean meal, continued improvement in feeding practices, price ratios favorable for feeding, and rising livestock numbers. The sharp rise in European imports of other feed concentrates also reflects increasing demand for livestock products, rising incomes, and preference for meat.

Outlook: Soybean meal exports during 1967/68 probably will increase slightly from the year-earlier level of 2.7 million tons, as the record crush increases supplies. Prices are averaging somewhat lower than last year, mainly reflecting lower prices for soybeans. West European demand for U.S. soybean meal--as meal--will reflect additional vegetable-protein requirements not filled by the meal from imported U.S. soybeans. Prospective U.S. supply and domestic use for 1967/68 suggest that approximately 2.8 million tons of soybean meal would be available for export, assuming no change in the carryover next October 1. Most of the 1967/68 soybean meal exports will be to Europe as in the past. The greater part of the increase in foreign meal requirements during 1967/68 is expected to be satisfied by the importation of larger quantities of U.S. soybeans for crushing rather than importation of meal as such. New soybean crushing facilities abroad are expected to begin operation during 1967/68. As soybean meal supplies from domestic crush increase, import requirements may be reduced.

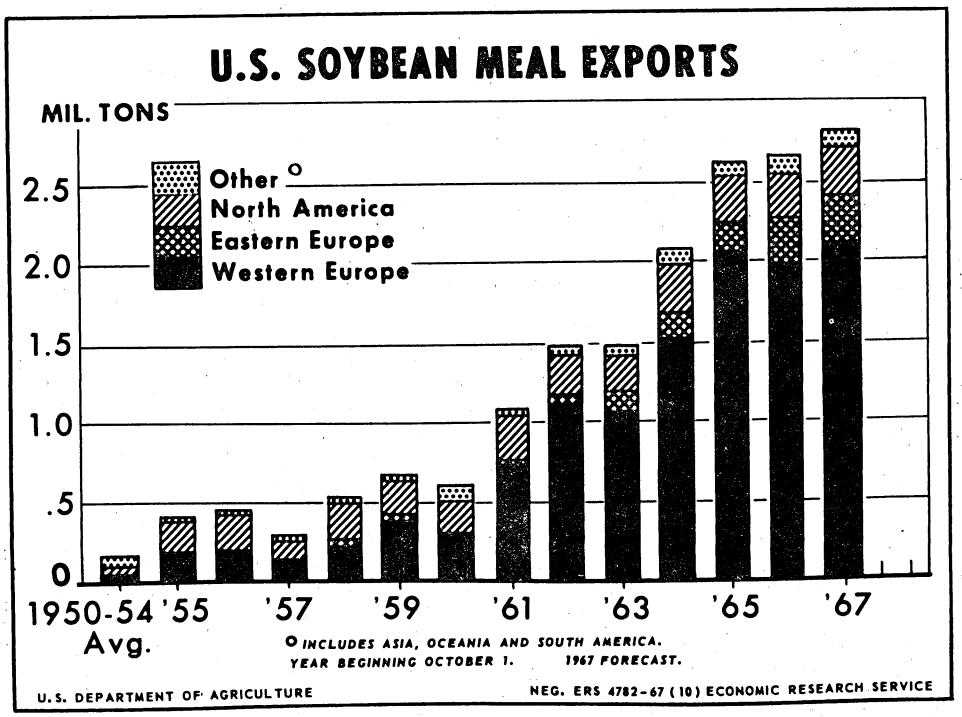

Figure 11

Trend: Soybean oil is the predominant edible vegetable oil produced and consumed in the United States. Its price level tends to set the basis for other competitive fats and oils. Wholesale prices of soybean oil and cottonseed oil have generally drifted lower during the 1950's and 1960's. The two competitive edible oils generally move together and tend to vary within a narrow range of one another. This reflects primarily their high degree of substitution and interchangeability in manufactured food products. When one gets out of line with the other in the general price structure, manufacturers who use that oil switch to lower priced substitutes as much as they can. The price premium of cottonseed oil over soybean oil during 1951-66 averaged about $1\frac{1}{2}$ cents per pound. It varied from zero in 1954 to $2\frac{1}{2}$ cents in 1966.

Outlook: Cottonseed oil and soybean oil prices during 1967/68 are expected to average lower than the year before. The sharp reduction in cottonseed oil supplies this year probably will result in the continuation of a relatively wide price premium over soybean oil--probably averaging around 2 cents per pound. In October 1967, cottonseed oil prices (crude, Valley) were about 11.0 cents per pound (2.5 cents below a year ago) and soybean oil prices (crude, Decatur) averaged 8.8 cents (2 cents below a year ago). Lower edible vegetable oil prices in the coming year will mainly reflect the reduction in oilseed prices this year, some buildup in vegetable oil inventories (especially in the first half of the year) and large supplies above increased domestic requirements. Next summer edible oil prices will be affected by the prospects for a greatly expanded 1968 cottonseed crop. In the long run, the price differential between cottonseed oil and soybean oil likely will narrow and may even disappear because of the nearly complete technical substitutability.

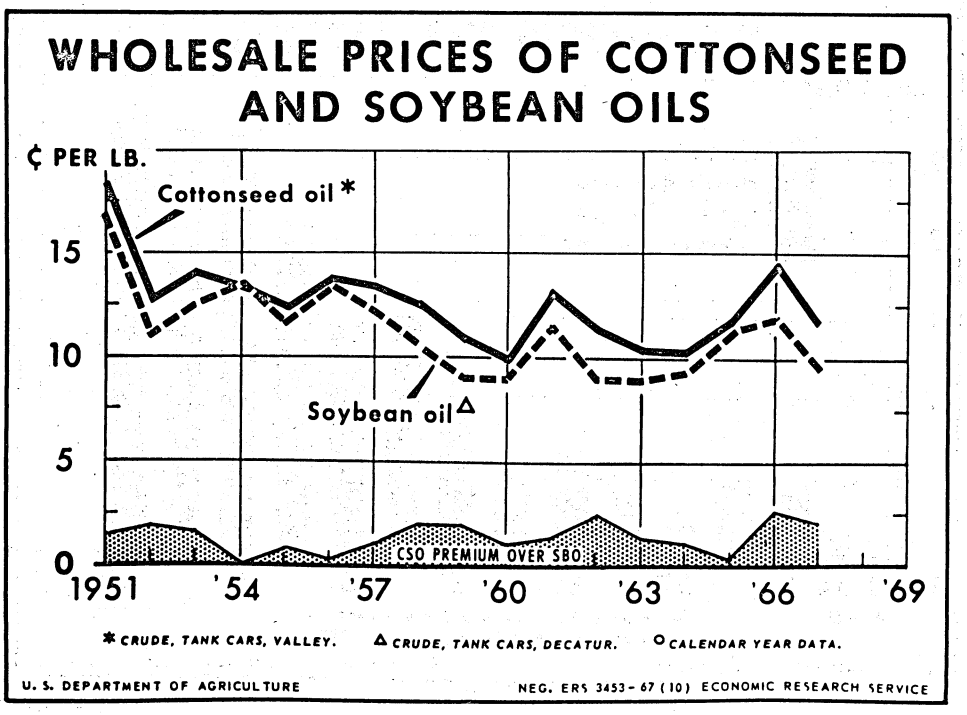

Figure 12

Trend: U.S. cotton acreage harvested has dropped 68 percent since 1951, from 26.9 million acres that year to 8.5 million in 1967. Cottonseed production was reduced only 48 percent during this period because of the strong uptrend in yield per acre, which rose from 467 pounds to about 767 pounds. Because cottonseed is a joint product in the production of lint cotton, its supply is determined primarily by the economic factors that affect cotton. Cottonseed output, therefore, does not adjust to changing demands and price levels for oilseeds, edible oils, and oilmeals.

Outlook: Based on the average bale weight and seed-lint ratios, the 1967 cottonseed crop was estimated, as of November 1, at 3.3 million tons. This is 17 percent less than 1966, and 45 percent below 1965. An unusually small outturn this season results mostly from (1) diversion of acreage under the Upland Cotton Program; (2) heavy abandonment of planted acreage; and (3) poor yield prospects due to poor weather, insect and disease damage. Crushings for the year are estimated at 3.1 million tons, compared with 3.8 million in 1966/67. A crush this size would produce around 1.0 billion pounds of crude cottonseed oil--about 17 percent less than the season before. Cake and meal output would be around 1.5 million tons, compared with 1.8 million in 1966/67. The estimated proportion of cottonseed crushed from the 1967 crop is lower (93 percent) than average (95 percent) because more seed will be required to plant an expanded 1968 cotton crop.

Prices received for cottonseed this fall are averaging $52 per ton--slightly above the CCC support price of $48 per ton, but well below the $65 received during August-October 1966. Cottonseed oil and meal prices are lower this year than last, and seed quality may be lower.

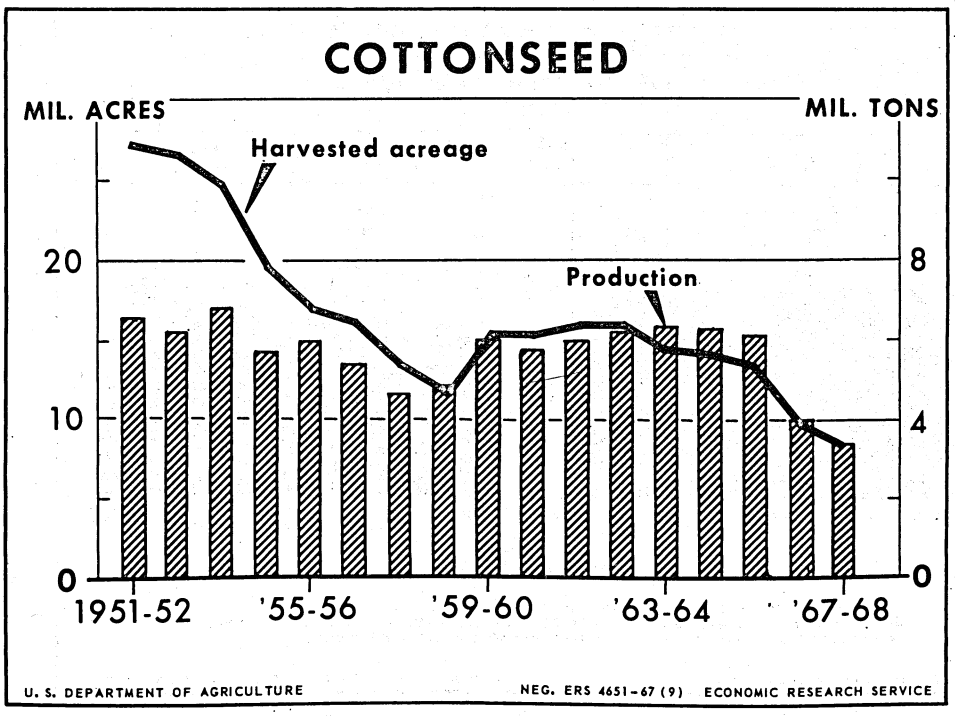

Figure 13

Trend: U.S. cottonseed oil supplies have fluctuated widely in the post-war years. From a peak of 3.0 billion pounds in 1953 they declined sharply to 1.6 billion in 1957, then increased again to 2.6 billion in 1964. Supplies currently are on the downtrend again. During the early 1950's CCC holdings were sizable and accounted for most of the exports. Cooking and salad oil are major outlets for cottonseed oil, accounting for about three-fifths of total domestic disappearance. Shortening comprises over a fifth; margarine and industrial products (mainly from foots) account for the remainder. Exports have declined sharply in recent years. Cottonseed oil imports during the August-July 1966/67 season totaled 17 million pounds (mainly from Russia and Nicaragua). These were the first recorded cottonseed oil imports since 1952.

Outlook: Total supply of cottonseed oil for the 1967/68 marketing year that started August 1 is estimated at 1.3 billion pounds, compared with 1.6 billion last year. The decline is due to reduced output. Domestic use is estimated around 1.0 billion pounds--roughly equal to the 1967/68 oil output. Exports probably will be even less than the 79 million pounds shipped abroad in 1966/67. Use of cottonseed oil in the manufacture of shortening and margarine probably will be lower than in 1966/67, because the price premium over soybean oil is expected to continue. Manufacturers of cooking and salad oils have been turning to blended vegetable oils or switching to lower-priced soybean oil in order to remain competitive. Next summer, oil prices will be affected by prospects for a greatly expanded 1968 cottonseed crop.

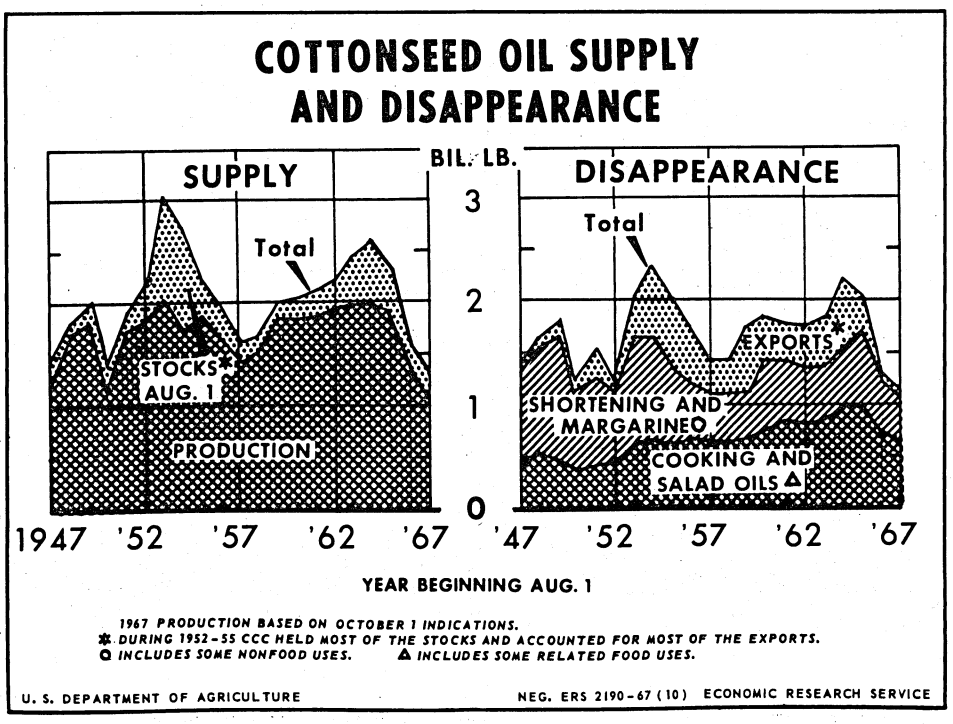

Figure 14

Trend: Annual changes in lard production are mainly associated with changes in the total number of hogs slaughtered, the average live weight of the animals killed, and lard yield per hog. Hog slaughter has varied widely in the postwar era and in recent years has tended to follow a 2-year cycle. Lard yields per hog have declined each year since 1958, and are down 9 pounds since 1951/52, when they totaled 34 pounds per hog. The lower yields result primarily from production of meat-type hogs, although when pork prices are high, processors tend to leave more fat on the meat cuts. Average live weight of hogs has trended upward from 233 pounds in 1956 to 242 pounds in 1965.

Outlook: For the 1967/68 marketing year which began October 1, the lard supply (including farm) is forecast at about 2.1 billion pounds--about the same as the year before. Commercial hog slaughter may be close to the 1966/67 total of 81 million head, but lard yield per hog probably will be down again.

Domestic use of lard is estimated at 1.8 billion pounds and exports and shipments at 0.2 billion pounds. Lard used in shortening and margarine manufacture will continue heavy in 1967/68 because lard is selling at a lower price than competitive edible vegetable oils. Direct use of lard during 1966/67 at 1.1 billion pounds was down 3 percent--thus continuing its long run downtrend in the United States. Lard prices (tanks, loose, Chicago) averaged 8.7 cents during 1966/67, 3 cents per pound below the year before. Lower prices reflect increased lard production and the general price decline in food fats and oils. Lard prices in October 1967, at 7.0 cents per pound, were nearly 4 cents under October 1966.

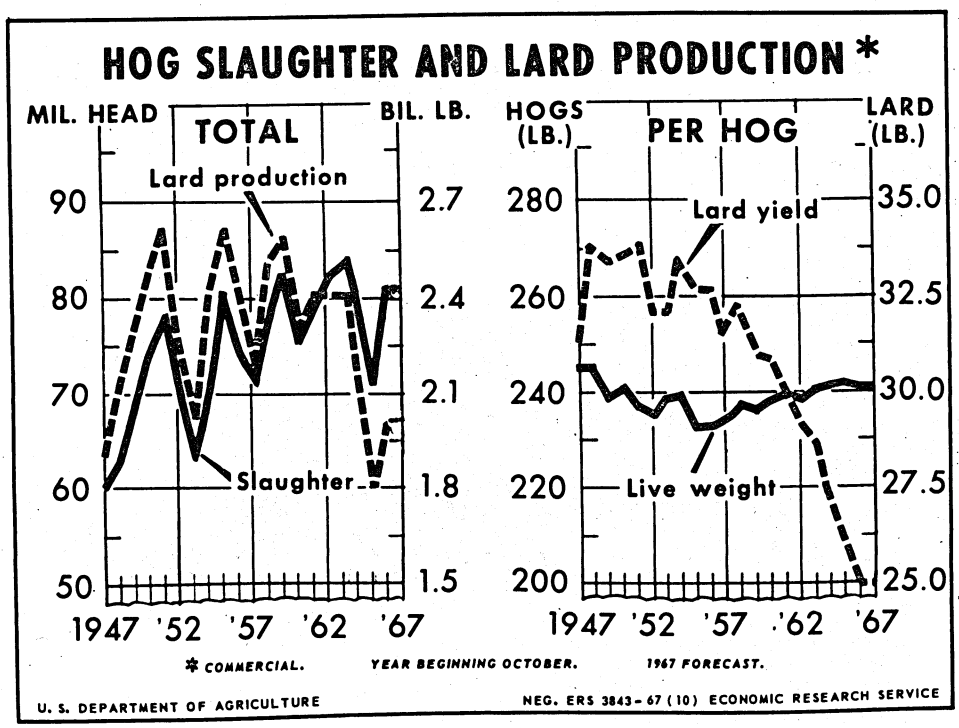

Figure 15

Trend: Lard exports (excluding shipments to U.S. territories) have fluctuated widely, averaging 0.5 billion pounds during 1950/63, or about one-fifth of U.S. commercial lard production. Exports since have dropped sharply and in 1966 were about 0.2 billion pounds, approximately a tenth of total output. Smaller domestic supplies and increased competition abroad were factors reducing lard exports in recent years. The loss of the Cuban market, starting in 1961, was also a factor. Our important foreign market outlets for lard have narrowed down to the United Kingdom which alone has accounted for about three-fourths total U.S. exports during the past 5 years.

Outlook: The volume of lard available for export (including shipments to Puerto Rico) during the 1967/68 marketing year is estimated around 0.2 billion pounds, roughly the same as that shipped during 1966/67. U.S. lard exports will face increased competition during 1967/68 due partly to increased lard production abroad and the current EEC lard export subsidy of $60 per metric ton (2.7 cents per pound). These could result in smaller U.S. exports of lard to the United Kingdom, thus forcing more lard back in the domestic market. Spain is planning to build a lard processing plant to produce an edible lard oil by a new process. The plant will have a capacity to make 25,000 tons of oil per year from pork lard, of which there is a large surplus in Spain. European lard prices are also influenced by the prices of competiting fats and oils, chiefly palm oil, fish oil, and edible tallow.

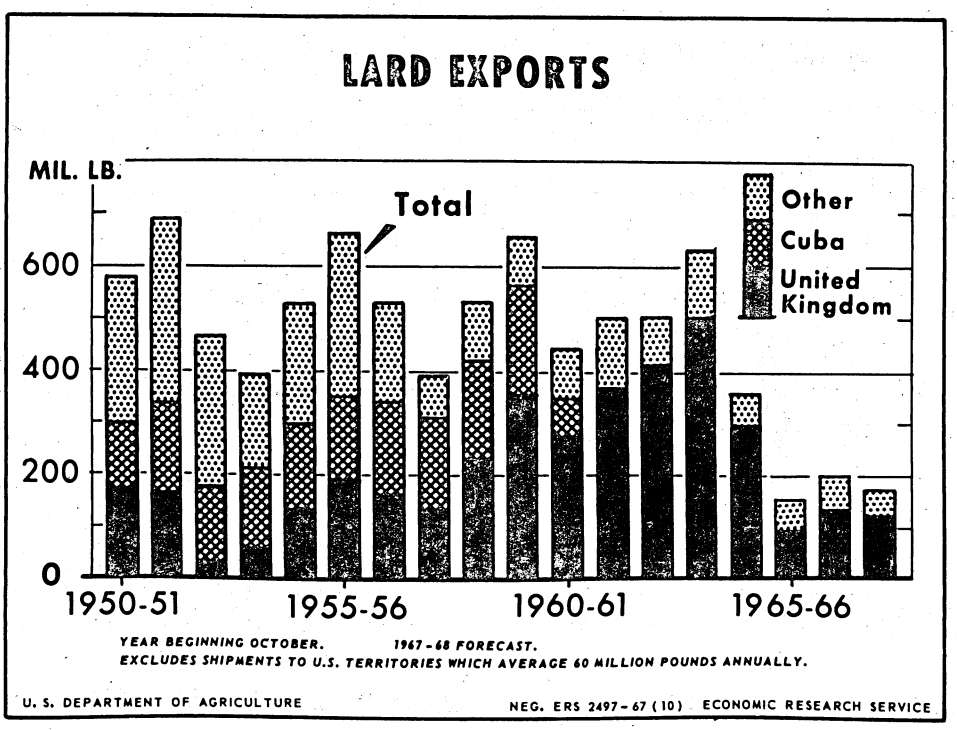

Figure 16