

# Food Production and Prices – Perspective and Outlook

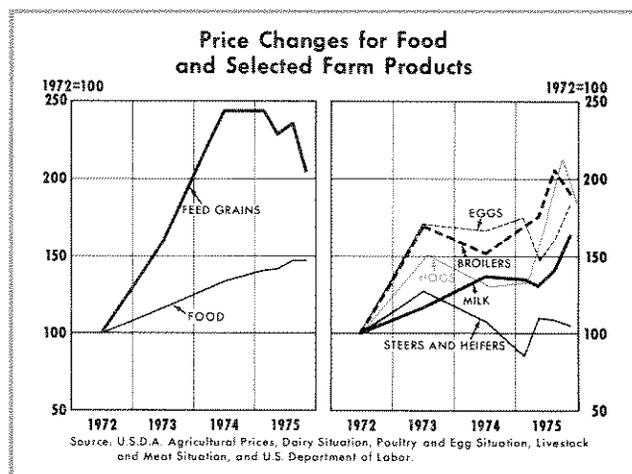
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THE United States Department of Agriculture (USDA) provides an annual appraisal of the outlook for food prices and consumption. The outlook for 1976 was presented at the National Agricultural Outlook Conference, Washington, D.C., November 17-20, 1975. This article discusses the outlook as presented by the USDA within the context of some recent food industry developments which had a major impact on food prices.

From the consumer viewpoint the outlook for food production and food prices this year is improving. Food prices turned sharply upward in 1972 and rose at an annual rate of 13 percent during the three years ending in July 1975. Since July, however, they have advanced at a 2 percent annual rate and are not expected to rise at more than a 4 to 5 percent annual rate during the first half of 1976.

In contrast to the generally declining per capita production and sharply rising prices experienced since 1972, food production this year is expected to increase and the rate of food price inflation is expected to decline. The larger quantity of crops harvested last fall, as compared to a year earlier, will provide greater amounts of fruits, vegetables, sugar crops, and livestock feed, and will likely contribute to an expected upturn in the production of most livestock products in the months ahead. The greater production of food will tend to have a dampening effect on price increases.

Much of the rise in food prices since 1972 was caused by a series of short-run supply constraints and unexpected surges in demand in the food industry. A number of short-run disturbances, such as those associated with the operation of the OPEC (Organization of Petroleum Exporting Countries) cartel, erratic domestic crop production, a number of health and environmental protection measures, and the imposition of wage-price controls, led to reduced short-run per capita supplies of farm products and food. The realignment of world currencies coupled with some crop failures abroad led to an unanticipated increase in



export demand for U.S. farm products. Also contributing was an increase in domestic demand for food resulting from the rapid increase in government food assistance programs such as food stamps and various child nutrition programs. The cost to the government of such programs totaled \$6.9 billion in 1975, about 45 percent more than in 1974 and five times that of 1969.

## *Livestock Feeding Costs Led Food Price Increases*

The accelerated rate of food price inflation since 1972 was led by a sharp increase in feed prices and livestock feeding costs. Production of feed grain (about 80 percent corn) declined somewhat in 1972 from the 208 million short tons of the previous year; however, demand for feed grain rose. As a result of unfavorable weather conditions abroad and, thus, unexpected grain purchases, export demand rose sharply. Exports increased from 27 million tons in the marketing year 1971-72 to 43 million tons in 1972-73. Domestic demand for grain was likewise rising. Domestic grain feeding rose from 149 million tons in 1971-72 to 156 million tons in 1972-73. Total feed grain usage rose to 216 million tons in 1972-73, well above 1972 production, and carryover stocks declined

Table 1

	FEED GRAINS					
	Acres (millions)	Production (million short tons)	Usage (million short tons)			End of Year Stocks (million short tons)
			Domestic	Exports	Total	
1972-73	115.1	199.9	173.2	43.1	216.3	32.4
1973-74	121.4	205.0	171.0	44.4	215.4	22.2
1974-75	122.6	165.1	132.8	39.2	172.0	15.8
1975-76*	122.9	204.1	147.0	50.0	197.0	24.0

\*Forecast.

Source: "Outlook for Feed" (a presentation) by James J. Naive at the National Agricultural Outlook Conference, November 19, 1975.

about one-third to 32 million tons. Consequently, feed grain prices spurted (see accompanying chart). For example, corn prices, which averaged \$1.08 per bushel in the marketing year 1971-72, rose to \$1.57 in 1972-73, and \$2.55 in 1973-74. Protein feed costs likewise rose sharply, more than doubling from late 1971 to 1972. The price of protein declined somewhat in 1973 and 1974, but remains about 50 percent above the late 1971 level.

#### *Higher Prices Serve as an Incentive for Increased Feed Production*

In response to higher prices in 1972, feed grain production rose somewhat in 1973 (Table I). Acreage planted to feed grains was increased about 5 percent, and production rose about 3 percent over the prior year. Both export and domestic demand for feed, however, continued upward; consequently, total usage in the marketing year 1973-74 again exceeded production, resulting in the second sizable decline in carry-over stocks.

Feed grain prices continued to rise sharply into 1974 and acreage planted to feed grains was again increased. Extremely poor weather conditions, however, resulted in a 20 percent decline in feed grain yields from the 1973 level. Corn prices, representative of all feed grains, continued up, rising from \$2.55 per bushel in the 1973-74 marketing year to \$2.95 per bushel in 1974-75.

#### *Incentive for Feeding Declined*

Prices of food and livestock products generally did not rise as fast as feed prices, however, and profit from feeding operations declined (see chart). For example, the average price of choice steers at Omaha rose 17 percent from 1972 to 1974, while feed grain prices jumped 77 percent. In the first three quarters of 1975, prices of choice steers averaged 22 percent above the 1972 level, while feed grain prices averaged

62 percent higher. Since feed is the major portion of the total cost of cattle feedlot operations, the result has been losses over the past two years. Hence, cattle feeding declined, dropping from 26.1 million head in 1972 to an estimated 22.4 million in 1975. The total number of cattle on farms, however, continued to increase throughout 1975.

The number of cattle on farms takes a relatively long time period to adjust to changes in supply and demand conditions for beef. The sharp buildup in cattle herds in the 1971-73 period reflected favorable feeder cattle prices. The number of cattle and calves on farms rose from 171 million head in early 1971, to 197 million in early 1975. With the reduced feeding and sharp decline in prices of feeder cattle in 1974, packers began to buy increasing numbers of cattle directly off pastures and the rate of increase in the number of cattle on farms declined. The number on farms is expected to level off this year, despite some improvement in the feed/beef price relationships.

Hog farmers were able to adjust production to the higher feeding costs more rapidly than cattle producers. Sow farrowings began to decline sharply in early 1971. The decline moderated in late 1972 and through 1973, but farrowings turned down sharply again in late 1973 and continued down through most of 1974. The number of hogs on farms rose slightly in early 1974 as a result of a larger feed grain crop in 1973, but declined about mid-year after it became apparent that the 1974 corn crop would be substantially below the average of recent years.

#### *Nonfed Cattle Slaughter Rose . . .*

Part of the negative impact on meat production resulting from the decline in livestock feeding was offset in 1974 and 1975 by the increased slaughter of lower quality nonfed cattle. Such animals declined in price until it became profitable to slaughter them directly off the farms and ranches. Consequently, total beef production in 1975 exceeded that of a year earlier.

#### *. . . But Per Capita Production of Livestock Products Declined*

Per capita production of all animal products declined about 4 percent from 1971 to 1975, with de-

clines occurring each year except 1974. The decline would have been much sharper had not cattle farmers and ranchers shifted from herd-building toward herd-reduction.

While per capita beef consumption rose 2 percent in 1975, total per capita meat production and consumption declined. The decline reflected a 17 percent drop in pork consumption. Meat consumption per person generally declined from 1971 through 1975, dropping 6 percent during the five-year period.

Dairy and poultry production have generally followed the pattern of beef cattle and hogs, with declining per capita production in most years since 1972. Such production of broilers and turkeys declined 5 percent and 10 percent, respectively, from 1972 to 1975. Per capita egg production declined 10 percent during the period and milk production declined a fraction of one percent.

The reduced output and sharp increase in prices of animal food products caused increased demand for other foods. Consumption of fresh and processed fruits per person rose 10 and 8 percent, respectively, from 1972 to 1975; that of processed vegetables rose 6 percent, and consumption of fresh vegetables remained unchanged. Nevertheless, total food consumption per person declined about 3 percent from 1972 to 1975.

### *Share of Income Spent on Food Rose*

With rising prices and relatively inelastic demand for food, the percent of disposable personal income spent on food increased even as the amount of food consumed declined (Table II). The percent of such income spent on food had generally trended downward for several decades. In 1972, however, it began to increase, with the share spent on food for home use rising from 12 percent to 13.4 percent during the three years ending in 1975. The proportion spent on all food rose from 15.4 to 17 percent during this period.

### *Declining Rate of Food Inflation This Year*

Large crops were harvested in 1975, and larger supplies of most foods are in prospect for 1976. Total crop production was about 10 percent above that of a year earlier. While the production of livestock products this year probably will not greatly exceed that of a year ago, a turnaround from the low rate of production in mid-1975 is in prospect. This rebound is expected to contribute to a slowdown in the rate of

Table II

#### PERCENT OF DISPOSABLE PERSONAL INCOME SPENT ON FOOD

	Food for Use at Home	Food at Home and Away from Home
1960	16.2%	20.0%
1965	14.6	18.1
1970	12.7	16.2
1972	12.0	15.4
1973	12.5	15.9
1974	13.3	16.8
1975*	13.4	17.0

\*Average for first three quarters of year only.

Source: USDA *National Food Situation* (November 1975), p. 11.

increase of food prices. With a lower rate of food price inflation in prospect, food expenditures as a proportion of total personal income will tend to level off and the downtrend could well be resumed.

The turnaround in food production and price prospects for 1976 largely reflects a return to longer-run supply and demand conditions following the short-run disturbances which occurred during the period from 1971 through 1974. Such disturbances in a market economy are self-correcting. Farmers will adjust their capital, labor, and other inputs to increase the production of those commodities for which expected prices and costs of production provide sufficient profit incentive. Farm production is more responsive to price changes in the long run than in the short run.

The higher prices for livestock feed provided the incentive for the large crops last year. With the increased incentive and the termination of government restrictions on planting, total production of grain and soybeans was sufficiently large to more than offset the rising demand for domestic use plus exports. Feed grain production was up about 23 percent from 1974. The larger quantity has resulted in lower feed prices and greater incentive for increased feeding. Feed prices in mid-December 1975 averaged 13 percent less than a year earlier, while the average price of all livestock products was 20 percent higher.

Farmers are responding to this improved potential for profit. Placements of cattle on feedlots began to pick up in late 1975 after a two-year decline. On December 1 the number of cattle on feed in seven major feeding states was up 25 percent from a year earlier. On September 1, hog producers indicated plans to increase farrowings (for the December-February pig crop) 6 percent from the previous year; if realized, this would be the first quarterly increase

Table III

## YEAR-TO-YEAR CHANGES IN WHOLESALE FOOD PRICES

	Fruits and Vegetables		Meats	Poultry	Eggs	Dairy Products	All Food
	Fresh and Dried	Processed					
1970-71	+ 7.6%	+ 3.5%	- 0.8%	- 0.8%	-20.5%	+ 3.8%	+ 1.8%
1971-72	+ 6.2	+ 4.7	+12.6	+ 3.0	+ 2.9	+ 2.8	+ 5.5
1972-73	+31.7	+ 8.3	+27.2	+53.0	+59.8	+10.5	+20.6
1973-74	+14.4	+19.3	- 2.3	-11.2	- 3.1	+11.7	+18.7
1974-75*	- 7.4	+13.9	+15.1	+17.3	- 1.5	+ 3.6	+ 9.3
1975-76**	up seasonally	up moderately	beef up moderately; pork down slightly	down slightly	down slightly	up moderately	up moderately

\*Average of first nine months of each year.

\*\*Expected change in retail prices from late 1975 to the first half of 1976.

Source: USDA *National Food Situation* (November 1975), pp. 7-10 and 35.

in farrowings since the December 1972-February 1973 quarter. Total red meat production in the first half of this year will likely be about the same as in the first half of 1975, but production in the second half should be greater than a year earlier. With the more favorable milk-feed price relationships, milk production in early 1976 is likely to exceed that of early 1975. With the decline in feed prices, egg production increased in late 1975 and is expected to continue upward in early 1976. Favorable feed/broiler price ratios point to an increase in broiler production in the first half of 1976, up to 10 percent above the level of a year earlier.

## SUMMARY

In contrast to the sharp increase in food prices experienced since 1972, only moderate increases are expected this year. Large crops of grain and soybeans were harvested last fall which resulted in lower prices for livestock feed. The lower feed prices and the relatively high prices for livestock products provided greater incentive for livestock production. Conse-

quently, livestock production is beginning to increase. Larger quantities of fed beef, pork, poultry, eggs, and milk are in prospect for the second half of the year.

The prospective slowing in the rate of increase in food prices this year reflects the adjustments of our market economy to longer-run conditions. This adjustment to more fundamental determinants follows a period from 1972 to 1974 when short-run, price-increasing disturbances dominated. As a result of poor weather conditions in both the United States and abroad, as well as the depletion of domestic grain stocks, the price of livestock feed more than doubled in the 1972-74 period. The prices of livestock products rose more slowly and the incentive for livestock production declined in this period. Last year, however, farmers responded to the higher priced feed with near record crops and the feed/livestock prices have returned to more normal relationships. Hence, a rising rate of output of livestock foods is in prospect, and the larger output will result in a slower rate of price increase for such products. In addition, the prices of fruits and vegetables may rise only moderately.

