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1981 AGRICULTURAL OUTLOOK

Papers Presented at the Agricultural Outlook
Conference Sponsored by the U.S. Department
of Agriculture—Held in Washington, D.C.,
November 17–20, 1980

PREPARED FOR THE
COMMITTEE ON AGRICULTURE, NUTRITION,
AND FORESTRY
UNITED STATES SENATE

JANUARY 1981



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Printed for the use of the
Committee on Agriculture, Nutrition, and Forestry

U.S. GOVERNMENT PRINTING OFFICE

69-563 O

WASHINGTON : 1981

Historic, Archive Document

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1981 FOOD PRICE OUTLOOK

(By Paul C. Westcott, Economics and Statistics Service,
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Inflation is an important economic problem facing the Nation. Food prices are one of the most visible aspects of inflation. Two reasons are often cited for this. First, food is a basic necessity making expenditures on food a required living cost. Second, because of its perishability, food is purchased frequently by consumers, usually more than once a week.

Until the middle of the year food prices in 1980 rose relatively slowly—about half as fast as prices in the rest of the economy. Farm level prices of foods rose only slightly in the first half of 1980, primarily reflecting declining livestock prices. In the second half of 1980 food prices have risen more rapidly as prices received by farmers recovered from relatively low levels.

In 1981 food prices are expected to rise substantially through mid-year. As in the last half of 1980, the farm value component of food prices will continue to be a major source of rising retail prices. Food marketing costs and raw sugar prices will also be important.

My remarks today will focus on the major cause of rising food prices, how these factors have affected food prices in 1980, and how they are expected to influence food costs in 1981. First, I will discuss the use of the Consumer Price Index as a measure of retail prices and the importance of food prices in determining that index. A discussion of the major components of retail food prices will follow. This will be followed by a review of food price developments in 1980 and the outlook for food prices in 1981.

RETAIL FOOD PRICES AND THE CONSUMER PRICE INDEX

The most commonly used and closely watched indicator of retail price movements in the economy is the Consumer Price Index for all urban consumers (CPI-U). Compiled monthly by the Bureau of Labor Statistics (BLS), retail prices are surveyed nationwide for a fixed basket of consumer goods and services. Indexes representing these prices are reported, and weighted aggregates are computed for major goods and services categories.

TABLE 1.—Relative importance of major consumer price index categories

CPI category :	December 1979
All items	100.0
Housing	45.0
Transportation	18.6
Food	17.7
Food at home	12.2
Food away from home	5.5
Apparel and upkeep	5.1
Medical care	4.8
Entertainment	3.7
Other goods and services	4.1

Source : Department of Labor, Bureau of Labor Statistics.

The CPI-U is a price index. However, because the survey covers a fixed market basket, the CPI-U is not a cost-of-living index. A 10-percent rise in the CPI-U for food does not necessarily mean that consumers spend 10 percent more for food. Consumers adjust their purchases in response to changing relative prices. This is especially important for foods where a great deal of substitution takes place. For example, when beef prices rose rapidly in 1978 and 1979, consumers purchased more pork and poultry, whose prices rose relatively less. The CPI-U does not take such consumption adjustments into account, and therefore tends to overstate changes in the cost of living.

In December 1979, the relative importance of food in the CPI-U was 17.7 percent (see table 1). This means that almost one-fifth of the retail basket of goods and services is represented by food prices. Food is the third most important category in the CPI-U behind housing (45 percent) and transportation (18.6 percent).

Prices for food at home account for 69 percent of the food CPI-U, with the remaining 31 percent being accounted for by prices for food away from home. In the food at home CPI-U (see table 2), meat is the most important category (26 percent), followed by fruits and vegetables (13.9 percent), dairy products (13.5 percent), and cereals and bakery products (12.4 percent).

TABLE 2.—*Relative importance of major grocery store food items*

CPI category:	Relative importance, December 1979
Food at home.....	100.0
Meats.....	26.0
Beef and veal.....	14.8
Pork.....	6.8
Other meats.....	4.4
Poultry.....	3.2
Fish and seafood.....	3.2
Eggs.....	1.9
Dairy products.....	13.5
Fats and oils.....	2.8
Fruits and vegetables.....	13.9
Sugar and sweets.....	3.4
Cereals and bakery products.....	12.4
Nonalcoholic beverages.....	11.3
Other prepared foods.....	8.3

Source: Department of Labor, Bureau of Labor Statistics.

MAJOR FOOD PRICE COMPONENTS

The retail food dollar can be viewed as being comprised of three major components. Following the U.S. Department of Agriculture's (USDA) market basket concepts, prices for domestically produced farm foods consist of (1) a farm value, measuring the return or payment received by farmers for agricultural commodities used in food, and (2) a farm retail price spread, measuring the impact of marketing costs on food prices. The third component of food prices covers the costs of foods not produced on domestic farms and includes fish and imported foods.

All food price changes can be traced to changes in these three components. For example, the annual average retail food price increase for 1980 will be near 9 percent, the smallest increase since 1977. The

farm value of foods will average about 6 percent above 1979 levels and account for about one-fifth of the food price rise. The farm to retail price spread will rise near 9 percent this year, accounting for about half of this increase. The remaining part of the food price increase can be attributed to prices for fish and imported foods which will average about 12 percent higher than last year.

FARM VALUE OF FOODS

Large production and adequate stocks of many farm food commodities kept agricultural commodity prices low in the first half of the year, leading to the relatively small 6 percent farm value increase for 1980. The farm value of foods played fundamentally different roles in food price inflation in the first and second halves of the year. In the first half of the year, large hog slaughter led to record supplies of meats and poultry. Mild winter weather led to a record citrus crop. At the same time, real consumer incomes were falling as the economy entered a recession, and demand for more expensive foods slackened. As a result, the farm value of foods rose very slowly in the first half of 1980 and was the major moderating factor in determining food prices.

In the second half of the year, the farm value contributed much more to food price rises than in the first half. A sharp rise in the farm value of foods from the low second quarter level caused most of the third quarter food price increase. Livestock prices rose substantially reflecting planned production cutbacks, seasonal marketing patterns, and adverse weather conditions. Prices for fresh fruits and vegetables rose seasonally. The farm value of fats and oils also rose sharply as reduced production of oilseeds this year led to rising commodity prices. In the fourth quarter, although the farm value of foods will continue to climb, it will likely increase less rapidly than in the third quarter as production of many agricultural products will increase seasonally.

FARM TO RETAIL PRICE SPREAD

The farm to retail price spread represents about two-thirds of the cost to consumers of domestically produced foods purchased for both at home and away from home use. Food marketing factors reflected in the spread include labor, packaging materials, transportation, energy, profits, taxes, rent, depreciation, advertising, and numerous other inputs used in the processing and distribution of food.

Labor is the largest component, accounting for about 46 percent of food marketing costs. Changing labor costs reflect wage increases, employee benefits, and changes in productivity. Wage increases tend to rise in line with the rate of inflation, with larger increases generally occurring in periods of sustained productivity gains, and smaller increases generally observed when productivity declines. Cost-of-living adjustments are included in many labor contracts to maintain the purchasing power of workers. Wages have increased about 9 percent this year.

Employee benefits such as paid vacations, pensions, and health programs have become a larger part of labor costs over the past decade. In 1972, they represented about 10.8 percent of labor costs while in 1979

they accounted for 12.6 percent. Because rising nominal incomes have pushed workers into higher tax brackets, benefits which are not taxable as income have become an attractive alternative to wage increases. The cost of benefits rose about 8 percent this year, adding about 1 percent to total labor costs.

Productivity declines in food manufacturing and food retailing added to unit labor costs in the late 1970's. The trend in consumer demand toward more highly processed foods and toward eating away from home added less productive service-oriented functions to the food production labor force. In 1980, however, preliminary data indicate that a slight gain in productivity in food manufacturing has occurred. This has held down labor costs and is a major reason that the 9-percent increase in the farm to retail price spread this year is lower than the general inflation rate.

Food packaging costs represent about 12 percent of food marketing costs. Prices for plastic containers, plastic wrapping materials, metal containers, paperboard, and glass containers are included. Transportation costs represent 8 percent of food marketing costs. These costs have been affected by higher petroleum prices in recent years. Direct-use energy represents about 6 percent of marketing costs. This includes energy used in processing factories and retail stores, but does not include indirect usage covered under transportation and packaging costs. Prices for these three inputs rose very rapidly in early 1980 and, with labor, were the primary cause of food price rises through midyear. Because energy prices have leveled off some in recent months, transportation and packaging costs have slowed as well, with prices for polyethylene resin and paperboard falling in the third quarter. Nonetheless, prices for transportation and packaging materials will each still average 14 percent higher than in 1979, and energy prices will average 30 percent higher.

Corporate profits represent about 6 percent of food industry marketing costs. Unit profits for food manufacturers and food retailers have averaged lower than in 1979 because consumer demand has not been strong enough to allow a complete passthrough to retail prices of higher farm values and marketing costs. This is another major factor moderating the farm to retail price spread this year, holding its increase below the inflation rate.

Besides the productivity gains in food manufacturing and the decline in unit profits, one additional factor has been important in holding down the farm to retail price spread this year. The large volume of food marketed has allowed fixed costs to be allocated to more production units, partly offsetting increases in other food marketing costs.

FISH AND IMPORTED FOODS

Coffee, sugar, bananas, and fish are the four major foods in the fish and imported foods category. Although they account for less than one-fifth of the retail food dollar, recent history shows that these products can be quite important in shaping the retail food price picture. For example, when coffee prices rose sharply in 1977 following a freeze in Brazil in the previous year, the resulting increases at retail accounted for about half of that year's food price rise. This year fish and imported food prices have added about 2 percentage points to the food

price rise. This primarily reflects higher sugar prices as production difficulties were encountered in some of the major producing countries.

1980 FOOD PRODUCT HIGHLIGHTS

Larger retail meat and poultry supplies have been one of the major causes of the smaller rise in retail food prices in 1980 than in 1979. In response to favorable hog to corn price ratios in early 1979, pork producers increased production 7 percent in 1980 with the largest supplies available in the first half of the year. Poultry producers also increased output, again with the largest production occurring in the first half of the year. Beef production has averaged slightly higher than in 1979, mainly due to drought-induced nonfed slaughter this summer and fall. This has resulted in an increase in per capita meat and poultry supplies of more than 1 percent over 1979 levels and has led to a retail price rise for these foods of about 4 percent, the smallest annual increase since 1977.

Egg production has declined slightly this year but will still be the second largest since 1972. Combined with the large supply of meat and poultry, the high level of egg production has caused retail egg prices to average below 1979 levels.

Prices for dairy products have been moderated by high levels of Government and commercial stocks. Milk production in 1980 will be about 3 percent higher than in 1979. Large meat and poultry supplies and declining real incomes have diminished demand for dairy products. However, rising processing and delivery costs and farm level price increases mandated by the price support program have pushed retail prices up about 10 percent.

Retail prices for fats and oils have averaged about 7 percent above 1979 levels. Record large oilseed production last year, led by soybean oil, along with only a small rise in oilseed usage led to an increase in stocks. Lard production also rose, primarily reflecting increased hog slaughter. These factors have kept downward pressure on retail fats and oils prices through most of 1980, partly offsetting higher marketing costs.

Prices for fruits and vegetables this year have averaged about 7 percent higher than in 1979, the smallest annual rise since 1976. Last year's apple and orange harvests both set records, providing large supplies for much of 1980. Production of many vegetables, especially potatoes, lettuce, carrots, and tomatoes, was also very high. Large stocks of processed fruits and vegetables, including frozen concentrate orange juice, tomatoes, and peas, and competition from fresh supplies kept downward pressure on prices for those foods. Additionally, many promotional discounts on processed fruits and vegetables were offered as high interest rates made inventory holding more costly.

Prices for sugar and sweets have averaged more than 20 percent higher than in 1979. World sugar production was about 6 million metric tons below consumption, the first deficit in 7 years. Reduced production in many producing countries including the U.S.S.R., Cuba, India, and Thailand, offset record production in the European Community.

Food marketing costs, especially for energy and packaging materials, have dominated price increases for cereals and bakery products

(up about 12 percent) and nonalcoholic beverages (up about 11 percent). Higher sugar prices have been an additional inflationary factor for these food groups.

Prices for food away from home this year will average about 10 percent higher than in 1979. Moderate increases in wholesale food prices and slackening demand have kept the rise in these prices below the inflation rate. Consumers purchased less food away from home as real incomes fell and travel was reduced to conserve fuel.

OUTLOOK FOR FOOD PRICES IN 1981

Weather uncertainties make it difficult to forecast food prices a year in advance. International conditions are also an important source of uncertainty. Poor crops abroad would result in increased demand for U.S. farm products and could add to food costs. A disruption in the availability of petroleum supplies from foreign sources would push all energy related costs up.

At this time, however, retail food prices in 1981 are expected to average 10 to 15 percent higher than this year (see table 3). With livestock production likely to fall next year, the farm value is expected to rise 12 to 20 percent, thus contributing significantly more to retail food price rises than it has this year.

The farm to retail price spread is expected to rise 9 to 11 percent in 1981, about the same as the general inflation rate. Labor costs are expected to rise 9 to 10 percent next year. Although a relatively low number of union contracts will be negotiated in the food industry next year, wage increases may be higher than in 1980 as cost-of-living adjustments are made to reflect inflation this year. Also the minimum wage will increase from \$3.10 to \$3.35 per hour on January 1. Employee benefit costs will rise at near the general inflation rate as the real value of existing benefits is preserved. Additionally, the January 1 social security tax increase will add to employers' labor costs.

Labor productivity represents an area of uncertainty in the outlook for total labor costs. At this time, however, a small productivity gain is expected. Many of the labor force adjustments to meet larger consumer demand for highly processed foods have been made. Furthermore, some food industry contracts have modified restrictions on the introduction of innovations. For example, in some metropolitan areas, recent contracts allow the introduction of price scanning equipment in retail stores where previously negotiations with unions were required. This will increase labor force efficiency.

TABLE 3.—COMPONENTS OF RETAIL FOOD PRICE FORECAST

[Percent change]

Food price component	1980	1981
Total food.....	8.7	10-15
Farm value.....	6	12-20
Fish and imported foods.....	12	10-17
Farm to retail spread.....	9	9-11
Labor.....	9	9-10
Packaging.....	14	9-11
Transportation.....	14	10-12
Energy.....	30	10-15
Unit profits.....	-2	2-5

Prices for energy, transportation, and packaging materials will likely increase less than in 1980 as growth in demand from sectors which compete with the food sector for these marketing inputs is expected to be slow. Transportation costs may also rise slower because of deregulation of railroads and trucks. As the economy recovers from the recession and real incomes improve, unit profits in the food industry next year are expected to average slightly higher than in 1980. With less food being marketed next year, the unit cost allocation of producers' fixed costs will be higher than in 1980.

Prices for fish and imported foods are expected to rise 10 to 17 percent next year. Sugar prices are likely to show another substantial rise because global production will be below consumption for the second consecutive year. The magnitude of this increase, however, will be extremely sensitive to the size of the production shortfall.

Conditions that would push the 1981 food price increase into the upper end of the forecast range include winter weather that damages the citrus crop and reduces livestock marketings, a poor grain harvest in the fall of 1981, another surge in the general inflation rate which would impact on food marketing costs, and an extremely poor global sugar crop. However, if weather conditions in 1981 are favorable, the general inflation rate slows significantly, and global sugar production nears consumption requirements, the food price increase in 1981 would be near the lower end of the forecast range.

1981 FOOD PRODUCT HIGHLIGHTS

Table 4 shows the retail food price forecast disaggregated by the major food products. Within the 10- to 15-percent range, the 12.2-percent point estimate represents the current assessment of the factors which affect food prices including production prospects, consumption requirements, marketing costs, and the macroeconomic outlook.

The major source of food price inflation in 1981 will come from rises in meat, poultry, and egg prices. Producer losses in the first half of 1980 resulting from rising corn prices and low hog prices will lead to declines in pork production in 1981—perhaps 8 to 10 percent. With only slight increases in beef and broiler production, 1981 per capita meat and poultry supplies will be 2 to 4 percent below this year's level, leading to a retail price rise for these foods of 15 to 20 percent, with the current assessment showing an 18-percent rise.

Increased demand for eggs, as consumers substitute eggs for meat and poultry, along with a slight decline in production will push retail egg prices up about 17 percent over this year's relatively low prices.

Prices for dairy products in 1981 are expected to rise slightly faster than this year with the price support program and rising marketing costs again being the major causes. Production in 1981 will be larger than utilization with both expected to increase marginally over 1980 levels. The resulting addition to stocks, however, will be less than in 1980.

Fruit and vegetable prices are one of the major areas of uncertainty in the forecast because of their sensitivity to weather developments. Citrus production is especially dependent on growing conditions in Florida and the Southwest. At this time, however, fruit prices in 1981

are expected to rise only moderately because of record production levels. The current apple crop and prospective orange crop are expected to exceed last year's. Supplies of most canned and frozen fruits are higher than a year ago. Frozen concentrate orange juice supplies are especially large and will grow further as the new citrus crop is harvested.

Vegetable prices are expected to rise faster in 1981 than in 1980. In response to the relatively low farm level prices in the last 2 years, potato acreage this fall was reduced to the lowest level in 15 years. The resulting decline in supplies will keep retail potato prices relatively high at least until next fall's harvest. Fresh market production this fall of 14 major vegetables was 4.5 percent lower than last year. This includes declines for lettuce (down 4 percent), tomatoes (down 3.5 percent), and carrots and cabbage (each down more than 10 percent). Contracted vegetable acreage for processing was reduced because large supplies last year and earlier this year led to very low grower and processor prices. This will cause sharply lower production of processed lima beans, beets, corn, and tomatoes.

TABLE 4.—RETAIL FOOD PRICE CHANGES, 1978 TO 1981

[Percent change]

Food category	1978	1979	1980 ¹	1981 ¹
All food.....	10.0	10.9	8.7	12.2
Food away from home.....	9.0	11.2	10.0	10.4
Food at home.....	10.5	10.8	8.1	13.0
Meats.....	18.7	17.0	3.5	17.9
Beef and veal.....	22.9	27.3	6.4	13.5
Pork.....	12.9	1.5	-2.6	27.6
Other meats.....	17.8	14.7	4.1	17.5
Poultry.....	10.3	5.0	4.1	18.0
Fish and seafood.....	9.5	9.8	9.2	9.6
Eggs.....	-5.5	9.5	-3.1	16.9
Dairy products.....	6.7	11.6	10.2	10.7
Fats and oils.....	9.5	8.0	6.7	11.0
Fruits and vegetables.....	11.1	8.0	7.0	8.0
Sugar and sweets.....	12.2	7.8	22.4	21.5
Cereals and bakery products.....	8.9	10.1	11.9	10.9
Nonalcoholic beverages.....	5.7	5.0	10.8	12.0
Other prepared foods.....	8.0	10.1	10.9	10.3

¹ Forecast.

Based on the Consumer Price Indices, All Urban Consumers. Source of historical data: Bureau of Labor Statistics. Forecast data estimated by U.S. Department of Agriculture.

Following this year's relatively small increases, retail prices for fats and oils are expected to rise more in 1981. Although carryover stocks from the 1979 crop rose, reduced acreage and yields this year have led to lower production of the major oilseeds (soybeans, peanuts, cottonseed, flaxseed, and sunflowers). Additionally, lard production will likely fall in 1981 because of reduced hog production.

Prices for sugar and sweets are likely to show another substantial rise next year with the size of the increase depending upon 1980/81 global sugar production. A great deal of uncertainty exists because of the limited information available about the crops in the U.S.S.R. and Cuba, and because of uncertainties about the extent of potential Brazilian use of sugarcane in ethanol production. Nonetheless, world sugar production is expected to be below consumption for the second consecutive year. Cuban sugarcane was damaged by rust disease last

year and some production decline is likely. Weather difficulties will limit sugar beet production in the U.S.S.R. and Europe, and sugarcane production in Thailand and South Africa.

Prices for cereals and bakery products and nonalcoholic beverages may rise more than the general inflation rate next year. These prices will be affected to a large degree by food marketing costs. However, the soft drink component of nonalcoholic beverages and prices for some bakery products will be affected by the higher sugar prices. Higher grain prices will also be passed through the retail cereal and bakery product prices.

SUMMARY

In conclusion, retail food prices in 1980 will average about 9 percent higher than in 1979 and thus will have a moderating effect on general inflation. Food prices have been rising more rapidly in the second half of 1980 as the farm value of foods, especially for meats, has risen from the low levels of the second quarter.

In 1981 food prices will likely rise 10 to 15 percent. The farm value of foods will contribute significantly more to retail food prices than in 1980. The farm to retail price spread is expected to increase 9 to 11 percent with a 10- to 17-percent rise expected in prices for fish and imported foods.