

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

### A Look Ahead at Food Prices

Ralph L. Parlett and Kathryn L. Lipton (202) 786-1870 (202) 786-1880

In the 1970's, food prices led the overall Consumer Price Index (CPI) and were a major contributor to inflation. Today, the opposite is true. Food prices are rising less than the overall CPI and help keep inflation under control (table 1). Furthermore, the rest of the decade may bring more of the same.

Between 1982 and 1985, consumers saw increases in grocery store prices of about 3 percent annually. The cost of meals sold in restaurants and fast food establishments rose an average of 4.5 percent (table 2). Depressed farm prices, more moderate increases in food marketing costs, and slow growth in demand have been behind the tempering of food price inflation. These trends are likely to continue over the next 10 years, holding retail food price increases to about 3 percent annually.

#### **Understanding Food Price Changes**

To track changes in food prices, USDA analysts use a fixed set of domestically produced foods representing consumer purchases. This market basket accounts for about 82 percent of food at home, with prices for fish, nonalcoholic beverages, and imported products making up the remainder.

The cost of the market basket is divided into two components—the farm value and the farm-to-retail spread, with the latter accounting for all charges for processing and distributing foods to consumers.

The farm value of food, a measure of the return or payment received by farmers for the farm-products equivalent to retail foods, slightly more than doubled between 1970 and 1980. However, large crop harvests and expanded meat supplies, combined with weak domestic and foreign demand for agricultural commodities during the 1980's, held down farm prices. As a result, the farm value of food was stable or declining during the first half of the 1980's. This slowed the rise in retail food prices to 25.5 percent from 1980 to 1986, much less than the 33.1-percent increase for all items in the CPI.

Table 1. Food Prices Led Inflation of 1970's, Lag It in the 1980's

	Food at home	Food away from home	All food	All items				
	1967 = 100							
1970 1971 1972 1973 1974	113.7 116.4 121.6 141.4 162.4	119.9 126.1 131.1 141.4 159.4	114.9 118.4 123.5 141.4 161.7	116.3 121.3 125.3 133.1 147.7				
1975 1976 1977 1978 1979	175.8 179.5 190.2 210.2 232.9	174.3 186.1 200.3 218.4 242.9	175.4 180.8 192.2 211.4 234.5	161.2 170.5 181.5 195.4 217.4				
1980 1981 1982 1983 1984 1985	251.5 269.9 279.2 282.2 292.6 296.8 305.2	267.0 291.0 306.5 319.9 333.4 346.6	254.6 274.6 285.7 291.7 302.9 309.8 319.6	246.8 272.4 289.1 298.4 311.1 322.2				

For most foods, farm value makes up a relatively small part of the food dollar. It averaged 34 cents for all foods in the market basket in the first half of the 1980's, compared with 50 cents in the 1940's. The decline partly reflects the trend toward more processed foods, in which marketing costs comprise a larger share of the retail price.

The farm value as a share of retail price varies depending on the inputs used and the complexities of the marketing process. In general, animal products have the highest ratios of farm value to retail prices, and the more highly processed crop products have the lowest. In 1986, for example, the farm value share of the retail price for major foods ranged from 7.5 percent for bakery products to about 61 percent for eggs.

The farm value's share of the food dollar also varies for food at home and away. The farm value share is smaller in the awayfrom-home market because the cost of the increased labor needed to prepare food for this sector diminishes the relative value of the farmer's contribution to the final product. In 1986, the farmer's share of the away-from-home dollar was 15 percent, versus 30 percent for food at home.

## Larger Share of Food Dollar Goes For Marketing

The farm-to-retail spread has risen steadily over the last several decades, accounting for most of the increase in retail food prices. A wider spread reflects higher costs faced by food industry firms, including wages of workers and prices of inputs bought from other parts of the economy.

The farm-to-retail spread for the market basket of foods rose each year since 1980. USDA's food marketing cost index, which measures prices of inputs, increased about 26 percent from 1980-86. The increase in marketing input prices, therefore, nearly matched the 30-percent rise in the farm-to-retail spread.

Labor is the largest component of food marketing costs, accounting for about half of all costs. Therefore, the nearly 25-percent rise in hourly labor compensation since 1980 contributed to the growth in the farm-to-retail spread. The rise in hourly earnings and benefits, however, is considerably less than the 56-percent increase between 1975 and 1980.

Several factors moderated labor costs, including the trend toward "multi-tiered" labor contracts that pay new workers significantly less than existing employees. More importantly, many of the union contract settlements in the last several years did not provide any wage increase during the first year of the contract, and only small gains were negotiated for the ensuing years. Moreover, there have been reductions in several areas, including overtime pay rates, cost-of-living adjustments, and holiday and sick day benefits. Some companies sold stores that were paying union wages. While many of these stores reopened under new ownership, worker pay scales were lower.

Energy represents about 9 percent of the cost of marketing food. Plentiful supplies and substantial declines in oil prices starting in 1983 nearly stabilized energy costs for food processing and transportation. After

Parlett is an agricultural economist with the Food Marketing and Consumption Economics Branch and Lipton is a staff economist in the Office of the Director of the National Economics Division.

Table 2. Estimates for Food Prices1

Item	1960-71	1972-81	1982-85	1986-90	1991-95		
Consumer Price Index	Average percent change						
Food	2.6	8.9	3.0	2.8	3.1		
Food away from home	3.9	8.7	4.5	3.5	3.3		
Food at home	2.3	8.8	2.4	2.5	3.0		
Meats	2.4	8.5	0.8	2.6	2.8		
Beef and veal	2.4	8.6	-0.3	2.1	2.4		
Pork	2.3	8.7	2.7	4.0	3.4		
Other meats	2.4	6.8	2.2	2.3	2.4		
Poultry	0.4	6.8	2.3	2.8	3.9		
Eggs	0.7	6.3	0.7	1.7	5.5		
Dairy products	2.4	7.9	1.4	1.1	2.0		
Fats and oils	NA	9.5	2.6	0	2.5		
Sugar and sweets	2.5	13.0	2.0	1.6	1.3		
Cereals and bakery products	2.4	9.4	3.9	3.2	3.3		
Macroeconomic assumptions							
Real per capita disposable personal income	2.7	2.0	2.4	2.4	2.3		
Inflation rate (GNP deflator)	3.0	7.4	4.1	4.0	4.3		

<sup>&</sup>lt;sup>1</sup>Based on May 1986 estimates. NA = Not available.

rising nearly 35 percent in 1980, fuel and electricity costs have held relatively steady since 1982. The rate of increase in transportation costs, which comprise nearly 11 percent of the total for food marketing, also slowed in the early 1980's.

Lower petroleum prices have also helped hold down the cost of packaging materials, the second largest component of food marketing costs at 15 percent. Costs have risen slightly in recent years due to greater use of paper and paperboard products, reflecting larger quantities of food in the marketing system and more competition for packaging materials from the nonfood sector.

#### Food Prices by 1995

Looking ahead, farm value is projected to change little during the late 1980's. Sharp reductions in commodity price supports provided for in the Food Security Act of 1985 will also hold down the farm value of food over the next few years.

By 1990, the farm value of food should begin to trend upward. Farmers are likely to make adjustments that will reduce the surpluses that have depressed commodity prices during the 1980's. However, commodity price increases will probably not be sufficient to raise the farm value's share of the retail food dollar.

Marketing costs will increase at a faster rate than the farm value because of several trends. Fast-paced, two-income lifestyles have reduced the amount of time available for preparing food in the home. Therefore, consumers will continue to purchase a growing percentage of their meals from public eating places. The resulting increase in demand for restaurant personnel will mean greater marketing costs for meals away from home.

Changing lifestyles and rising per capita income will also increase the likelihood that the food consumed at home will be in the form of convenience items, such as frozen dinners and entrees. Marketing services, such as deboning, portioning, cooking, seasoning, and storing, are already being added to farm foods as the labor required for preparation is shifted from the consumer to the marketing system. Furthermore, su-

permarkets are responding to foodservice competition by expanding their operating hours and adding specialty departments, such as salad bars, in-store bakeries, and delicatessens. Increased purchases of convenience products with built-in services will mean higher marketing costs and greater consumer food spending.

While greater demand for more prepared foods may raise consumer costs, increases in food prices are still likely to be moderate through the end of the 1980's. Continued low inflation of 3 to 4 percent will temper labor and other costs in food retailing and processing, and the moderate growth in the economy that has prevailed for several years is likely to continue.

A trend toward growing use of plastics and new types of packaging in the food industry, such as microwave-ready containers, could boost marketing costs somewhat in the next decade. Plastics currently account for approximately 15 percent of packaging costs and are used for a number of functions, including trays, bottles, and wrapping. Increasingly, however, plastic bottles are being substituted for metal cans and glass for a range of food products. This greater use of plastics means that the food industry will be subject to any unforeseeable fluctuations in petroleum prices to an even greater extent than in the past.

The trend toward more away-from-home eating will also have implications for energy costs. Over one-third of the fuel and electricity costs of food marketing are incurred by public eating places and other foodservice facilties. Energy expenses for this sector have risen more rapidly during the past decade than for the other food marketing functions. The increased expenses are partly due to more outlets and a greater volume of business. Growth in away-from-home spending rose from 36 percent of the food dollar in 1975 to 43 percent in 1985. Also, the foodservice industry has the highest energy costs per dollar of sales, averaging about 3.8 percent.

Overall, marketing costs will increase at a faster rate than the farm value. However, the decline in the farm value share of food expenditures is expected to be at a slower rate than during the last 5 years, when farm prices were depressed.  $\square$