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Economic Factors Holding Down Food Price Increases

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Many consumers remember the wild food-price fluctuations in 1973 and 1974, when prices climbed almost 15 percent each year. Several factors led to the sharp increases—high energy prices, a high general inflation rate, and reduced supplies of domestically produced corn and wheat. When tight grain supplies and record-high wheat prices occurred in 1996, some analysts automatically forecasted significantly larger increases in overall food prices.

But today's food price situation is very different from 1973-74, so a spike in food prices due to tight supplies did not occur in 1996. Overall food prices rose a modest 3.3 percent in 1996, continuing the fairly stable trend of 3-percent annual increases since 1992 (fig. 1).

U.S. consumers are probably more alert to changes in food prices than to changes in most other prices, because food prices for some items vary seasonally and we buy food more frequently than most other items. We commit to monthly payments for rent or a house mortgage, a car, or household appliances and view these infrequently purchased items as fixed costs. On the other hand, we purchase food often and generally pay cash, so the changes in food prices are more noticeable.

Along with energy prices, food prices are the most volatile con-

sumer good the Government tracks. Retail food price changes are underpinned by general economic factors that influence food prices and the relationship between farm and marketing costs. In recent years, food price increases have been small due to the low general inflation rate, the larger share of the food dollar going to purchases of food away from home, the continued decline in the farm value share of the retail price for most food items, and increasing economies of size in the farm sector.

Index Reflects Changes in Prices and Shopping Habits

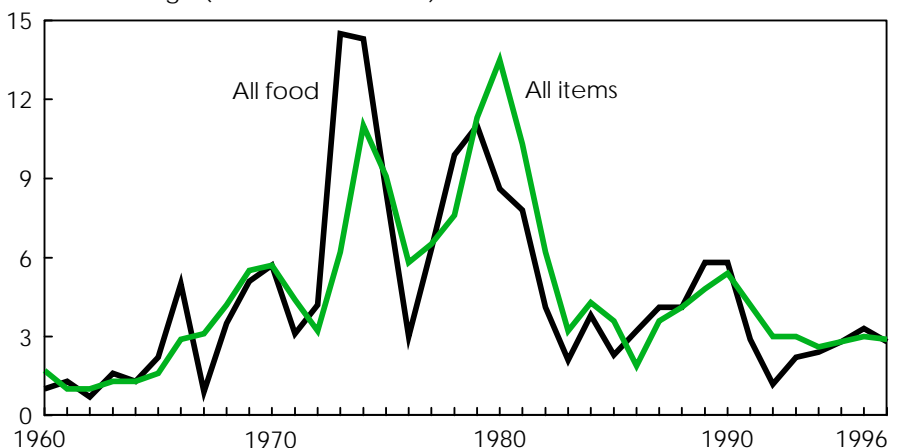
The general inflation rate is measured by the Consumer Price Index (CPI), a measure of the average

change over time in prices paid by consumers for a fixed market basket of goods and services. The CPI for Food is the Nation's principal indicator of changes in retail food prices. The CPI for Food is calculated by the Bureau of Labor Statistics (BLS) and is constructed in two stages. A monthly CPI is built up from 44 geographic categories (such as the Atlanta metropolitan area) and 207 product categories (such as apples or white bread), which are combined to form 9,108 price indexes, one for each "strata" of an item and geographic category.

In order to aggregate these strata indexes into the overall food CPI and its components (such as Food at Home), BLS uses information on household shopping patterns from the Consumer Expenditure Survey

Figure 1
Consumer Price Index for Food Usually Less Than for All Items

Percent change (index: 1982-84=100)



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to develop weights applied to the strata indexes and components. The weights allow prices for an item purchased frequently or by many consumers, such as milk, to have more importance than an item purchased less often, such as star fruit. The current weights were introduced to the food CPI in 1987 and are based on expenditures during 1982-84. New weights from the 1993-95 surveys will be introduced in 1998.

Separate strata indexes are calculated for each product category in each geographic category using item prices and representative samples of outlets for food and beverages. Outlets are selected using a Point of Purchase Survey, in which households are asked where they purchased goods and services. Data collectors then go to the selected outlets and price selected specific items (such as Red Delicious apples, or a 5-pound bag of Gold Medal All-Purpose flour). Specific items are selected randomly, with the probability of selection driven by the item's share of a product category's sales in an outlet. Since this procedure means that different items (Red Delicious versus Rome apples) are priced in different outlets, the index provides relative price changes for a product category (such as apples).

Less Disposable Income Goes for Food

Food price changes are a key variable determining what proportion of income consumers spend for food and what is left for purchases of other goods and services. In 1995, 11.0 percent of household disposable personal income went to pay for food (6.7 percent for food at home, 4.3 percent for food away from home), down from 12-13 percent in the 1980's and 13-14 percent in the 1970's. As income increases, the proportion of income spent on food declines. In 1995, Americans spent about 26 percent of their disposable personal income on housing (includ-

ing supplies, fuel, and furniture), 16 percent on medical care and drugs, 10 percent on transportation (including cars and gasoline), and 4.5 percent on savings.

Supply, Demand, and Prices

When the demand for a food goes up and supplies are low, retail prices increase. For example, retail pork prices rose 10 percent in 1996, the first significant increase since 1990. The increase was most significant for bacon, with prices up 20 percent or more throughout 1996. A reduction in pork output (down 4 percent), along with a strong export market (up 280 percent in 1996) and high domestic demand by the fast-food industry for bacon on burgers, meant less pork on supermarket shelves, boosting retail prices.

The moderate gains in overall food prices since 1992 can be attributed to several factors dampening increases in domestic food prices, including: a continued decline in the farm value share of retail prices for most food items, low general inflation rate, larger share of the food dollar going to consumption of food away from home, and increasing economies of size in the farm sector slowing rises in production costs.

Lower Share of Food Expenditures Going to Farm Sector

The farm value share of the amount spent on food has continued to shrink, falling from an average of 36 cents for every food dollar in 1974 to only 22 cents in 1995. The decline has been most pronounced for manufactured and highly processed foods, especially cereals and bakery products. The farm value share for most products in this category was less than 10 percent in 1995. In contrast, the farm value share for relatively unprocessed eggs was about 59 percent. The farm

value share of the retail price of bread was only 7 percent. When U.S. farm prices for wheat, the principal ingredient in bread, climbed to record levels of over \$4.50 per bushel in 1996—an average 25-percent increase over 1995—and Kansas City wholesale wheat flour prices reached highs of \$17.80 per hundredweight in May 1996, many bakers passed on to consumers the increased costs in the form of higher bread prices. Average retail bread prices for January-August 1996 were 8.9 percent higher than the same period a year earlier.

However, for some processed foods, competition for market share causes lower prices despite higher ingredient costs. During the same 8-month period when bread prices rose 8.9 percent in 1996, breakfast cereal prices actually fell. Competition for market share among the three leading breakfast cereal manufacturers led to retail price cuts in April and June 1996, with the CPI for cereals falling 4.3 percent during the same period that bread prices rose 8.9 percent.

The farm value share is also smaller today for less processed foods, such as meats, fresh fruits, and fresh vegetables. For meat products, the farm value share dropped from 60 percent in 1973 to 35 percent in 1995; for poultry, from 59 to 42 percent; for fresh fruits, from 33 to 19 percent; and for fresh vegetables, from 35 to 23 percent. Other factors that influence the farm value share include transportation costs, storage, handling, and retailing costs. Higher levels of these costs have contributed to the lower farm value shares.

Low Inflation Moderates Marketing Costs

For products with relatively low farm value shares, retail food prices are determined less by farm commodity prices and more by general market conditions—such as costs for labor, packaging, marketing, and

advertising—as well as competition and general changes in inflation. Costs for labor, packaging, transportation, advertising, and other miscellaneous costs accounted for 37 cents, 8 cents, 4.5 cents, 4 cents, and 4.5 cents of every food dollar in 1995. Labor, packaging, and marketing costs tend to be dampened when the general inflation rate is low or moderate.

The overall CPI has been relatively low since 1992, averaging gains of 3 percent or less annually. The overall CPI increased 2.8 percent in 1995 and 3.0 percent in 1996. In contrast, the overall CPI increase was 11.0 percent in 1974, largely due to energy price increases of 50 to 60 percent. Energy costs, including fuels and other utilities and motor fuel, account for about 9 percent of the overall CPI. The moderate increase in general inflation during the last few years has dampened overall food price increases.

More of the Food Dollar Spent Away From Home

Also holding down retail food price increases is the continued growth in the portion of the food dollar spent on food away from home, as the at-home market competes for the food dollar. Food eaten away from home accounted for over 47 percent of total food dollars in 1995, up from 34 percent in 1970 and 44 percent in 1990. A growing number of two-income households have raised household incomes while reducing the amount of time available to prepare food at home, resulting in purchases of food away from home rising faster than purchases of food at home.

Expanding away-from-home sales tend to lessen the impact of rising farm prices on the overall food price index. Changes in prices for food away from home are more affected by the general inflation rate and competition among restaurants and fast-food establishments than by

farm prices. The quantities and types of foods purchased in the at-home market—primarily from grocery stores and supermarkets—fluctuate more because of commodity price changes, while away-from-home purchases—primarily from restaurants and fast-food establishments—depend more on the general economy.

According to U.S. Retail Trade Census data, food sales by restaurants and fast-food establishments increased 32 percent from 1987 to 1992 (the most recent census year), although the number of these eating establishments increased only 14 percent. With only about a third of the food-away-from-home dollar going toward the actual cost of the food, and another third going toward salaries and benefits, food cost increases are slow to be translated into menu price changes. Since 1990, the yearly change in the away-from-home food CPI has remained below the general inflation rate, as menu prices were lowered and “value meals” were introduced at fast-food restaurants to compete for the consumer’s food dollar.

In 1997, a higher Federal minimum wage could show up as a rise in the away-from-home food CPI. (The effect on the at-home food CPI, however, is expected to be small, since there are very few minimum wage workers in food manufacturing, processing, grocery stores, or supermarkets.) According to Bureau of the Census data for 1992, payroll expenses accounted for nearly 30 percent of sales in the restaurant and fast-food industry. However, Census data also suggest that less than half of entry-level workers in the restaurant and fast-food industry earn below the new minimum wage. So a rise in the wages of these workers would not have a large increase in the away-from-home CPI.

Larger Farms, Lower Production Costs

Continued economies of size in the farm sector have kept per unit production cost increases relatively low. For example, the number of farms (any establishment from which \$1,000 or more agricultural products were sold or would normally be sold during the year) fell from 2.8 million in 1974 to 2.1 million in 1996, while the average farm size increased from 384 to 469 acres. Farms also have become more specialized as the average farm size increased.

Hog farms and dairy operations are examples of how per unit costs decline as the size of the operation increases. According to the 1992 Farm Costs and Returns Survey conducted by USDA, per unit production costs for producing hogs from farrow to finish were higher for smaller operations. The cost per hundredweight (cwt) gained was \$69.02 for a hog operation producing fewer than 500 head, while the cost for an operation of 3,000 head or more was \$46.43. A 1993 survey on milk production indicates that the cost of producing milk on smaller operations was also higher: \$18.96 per cwt of milk sold for dairy operations with fewer than 60 milk cows, and \$12.56 per cwt for operations with 300 or more milk cows.

The factors that have kept overall food prices at a fairly stable trend of 3-percent annual increases since 1992 are expected to continue in the next few years. Low inflation, more eating away from home, farm value share staying small, and economies in farm production should maintain increases in overall food prices of 3 to 4 percent in 1997 and the following few years. Food price increases may be larger if production of feed grains, meats, and fresh fruits and vegetables was to be lower than anticipated. Similarly, large supplies could result in smaller food price increases. ■