## The 1997 Economy: An Overview

The 1997 economy featured the unusual combination of low inflation and strong growth in gross domestic product, employment, and personal income. The economic expansion that began in 1991 was still evident during 1997. Real gross domestic product rose 3.9 percent, a half percentage point higher than the 1996 increase of 3.4 percent. Aggregate employment grew 2.3 percent in 1997, while unemployment stood at the lowest level since 1989. Higher wages and salaries produced a 1.9 -percent increase in real per capita income, a gain that was 0.6 percent higher than in 1996, and continued the pattern of sustained growth observed during the 1990's. Meanwhile, the Consumer Price Index (CPI) for all items grew only 2.3 percent, the smallest increase since a 1.9-percent rise in 1986. However, as in 1996, the relatively strong economy failed to translate into stronger consumer food expenditures. Sales of food purchased in grocery stores and restaurants were nearly constant in 1997 when adjusted for inflation.

Retail food prices in 1997, as measured by the CPI, averaged 2.6 percent above those in 1996 (table 1). This increase was slower than 1996's rise of 3.3 percent. Food price inflation in 1997 was higher than the overall increase in the CPI ( 2.3 percent), for the third consecutive year. The general rate of inflation was higher than food price inflation from 1991 to 1994. These opposing trends made it difficult to raise prices and thus produced nearly constant sales at both grocery stores and restaurants in 1997.

Food prices in 1997 rose slightly more at restaurants than at supermarkets and other grocery stores. Food prices in grocery stores rose 2.5 percent, while prices for restaurant meals advanced at the slightly faster pace of 2.8 percent. Grocery store prices of foods increased less in 1997 than in 1996. The food groups whose retail prices increased the most in 1997 were pork, nonalcoholic beverages, and other prepared foods (table 2). Prices for cereal and cereal products, fresh fruits, and fats and oils increased less than 1 percent (table 2), while egg prices declined (table 3).

Modest price increases were recorded for most other food groups. The food-at-home index was held in check by low grain prices, large supplies of competing meats (especially poultry and pork), and large supplies of fresh produce. Higher marketing costs were a major factor that raised food prices, as is the case in most years. Prices of restaurant meals increased slightly more in 1997 than they had the year before, but were still consistent with the pattern of relatively small restaurant price increases during the 1990 's. These small price hikes were largely due to increased competition among restaurants, which held down menu price increases. However, the 1997 increase was the largest since 1991's 3.4-percent hike, reflecting a tight labor market that featured low unemployment rates due to the strong economy. A federally mandated minimum wage increase further augmented 1997 restaurant operating costs and, therefore, prices paid by consumers.

Food prices in 1997 rose more than prices for most other consumer products and services (fig. 1). Among major items in the CPI, housing prices, the largest component, went up 2.6 percent, while transportation and apparel and upkeep both rose 0.9 percent. The largest increase was again in medical costs, which climbed 2.8 percent-the smallest increase since 1965.

The marketing spread, the difference between the farm value and retail price of food, consistently contributes more to food price increases than do volatile farm prices. Higher costs for labor, packaging, and other marketing inputs push the spread wider nearly every year. The 1997 rise in the farm-to-retail price spread was 5 percent, larger than in 1996 and larger than the annual average increase of the last 5 years (table 4). During this period, the cost of marketing farm products has tended to rise at a faster pace than aggregate prices of farm commodities.

## Market Basket Prices

USDA uses its market basket concept to analyze changes in grocery store food prices by separating the two major components of food prices-prices received by farmers for food commodities and charges for marketing services (see box, p. 15). The market basket contains the average quantities of food that originate mainly on U.S. farms and are purchased for consumption at home in a base period, and excludes seafood and nonalcoholic beverages. Changes in retail prices of the market basket are components of the CPI for food consumed at home.

USDA divides the retail cost for a market basket of food into the farm value and the farm-to-retail price spread (table 4). The farm value represents prices farmers receive for raw commodities equivalent to foods in the market basket. The farm-to-retail price spread represents the difference between the retail price and the farm value. The price spread includes the charges for assembling foods from farms, and for processing, distributing, and retailing foods. The 1997 farm value decreased for the first time since 1994. However, marketing costs account for a much larger portion of retail food prices, 77 percent, than does the farm value. Therefore, higher marketing

Figure 1
Consumer price indexes
The nonfood price increase was smaller than the food price increase in 1997 for the third consecutive year.

Annual percentage change

costs had a larger effect on 1997 retail prices than the farm value decline.

## Farm Value

Farm value is a measure of the return, or payment, farmers received for the farm-product equivalent of retail food sold to consumers. The market basket farm value is an index of prices farmers receive for products later used for food. Farm values for individual food items are expressed in dollar amounts for comparison with the item's retail price. Farm value is calculated by multiplying farm price by the quantity of farm-product equivalent of food sold at retail. An allowance is made in farm values if byproducts are obtained in processing. The farm value usually represents a larger quantity than the retail unit, because the foodstuffs that farmers produce lose weight through storage, processing, and distribution. For example, nearly 2.4 pounds of live animal yield 1 pound of Choice beef on the meat counter. The payment the cattle farmer receives for that larger quantity of live animal is the gross farm value in the price of 1 pound of retail beef.

The average farm value (what farmers receive) of USDA's market basket of foods declined 4.4 percent in 1997, the first decrease since 1994 (table 6) and the largest drop since a 6.2 -percent decline recorded in 1991. The 1997 farm value of foods was about 12 percent higher than the value a decade earlier. Since that time, the farm value has either declined or increased only slightly, except for 1989, 1990, and 1996 (fig. 2).

Red meat accounts for about 36 percent of the farm value of USDA's market basket. Farm value of red meat rose 0.8 percent in 1997 (table 6), mainly reflecting smaller supplies due to reduced cow slaughter, which is indicative of the herd-building phase of the cattle cycle. However, large supplies of competing meats prevented beef prices from posting large increases. For 1 pound of Choice grade beef selling for an average retail price of $\$ 2.80$, cattle producers received $\$ 1.37$ for the equivalent quantity of

Figure 2

## Food price components

Farm value of food products declined in 1997, following three consecutive annual increases. The farm value is 9 percent higher than a decade earlier.


Retail price based on the Consumer Price Index for food eaten at home. Farm value based on prices received by farmers. Price spread represents processing and distributing charges.
live animal ( 2.4 pounds) in 1997, up slightly from 1996. This increase was partially offset by lower pork prices. The decline in the farm value of pork reflected several factors-higher production reflecting an expansionary phase of the hog cycle, a weak export market, lower feed costs, and lower prices for competing chicken. For 1 pound of pork selling at retail for $\$ 2.32$ in 1997, hog producers received 81.1 cents for the equivalent quantity of live animal (1.7 pounds), about 3.5 cents less than in 1996.

Poultry producers increased broiler and turkey output in 1997 by 3.0 percent, a slower growth rate than in 1996. These higher supplies caused the farm value of poultry to drop 4.4 percent, after surging 11 percent in 1996. Another year of record broiler production in 1997 dropped the farm value in the face of lower export demand and lower feed costs than in 1996. Strong aggregate domestic demand continued to provide producer incentives to increase broiler output. Broiler chicken producers received 53 cents of the average retail price of $\$ 1.00$ per pound of whole frying chicken in 1997, a lower percentage than in 1996.

The farm value of eggs plummeted 13 percent in 1997, reflecting a 1.4 -percent production increase in response to lower feed costs and higher 1996 whole-
sale egg prices. The 1997 farm value averaged 60 cents for a dozen eggs, with an average price of $\$ 1.06$ at grocery stores.

A drop in producer prices for milk decreased the farm value of dairy products by an average of 8.6 percent. Milk production rose in 1997 following a decline in 1996. This expansion was stimulated by record 1996 farm milk prices, which induced higher milk production. A half-gallon of fluid milk retailing for $\$ 1.59$ returned the producer about 59 cents in 1997, 8 cents more than in 1996. (Half a gallon of fresh milk has a net weight of approximately 4.3 pounds. An allowance of 2 percent is made for milk lost in assembling, processing, and packaging. Thus, the farm-product equivalent is 4.39 pounds.)

The farm value of cereals and baked goods dropped 14 percent in 1997, mainly reflecting lower wheat prices stemming from higher domestic and foreign production. Farmers received 4.7 cents in 1997 for the wheat in a 1 -pound loaf of white bread selling for 87 cents in supermarkets, 0.4 cent less than in 1996. The 1997 farm value of other bread ingredients, mainly shortening and sweeteners, was 0.7 cent, slightly lower than in 1996.

The farm value of fruit averaged 10 percent lower in 1997, due mainly to abundant supplies of both citrus and noncitrus fruits. In particular, Washington State produced its second-largest apple crop. Moreover, large harvests were recorded for a variety of fresh fruits, including peaches, plums, apricots, and cherries. The farm value of fresh vegetables averaged 4.8 percent higher in 1997, primarily due to adverse weather conditions at the end of the year in Florida and the desert Southwest, which curtailed supplies and raised farm prices of a number of major fresh vegetables, particularly lettuce and tomatoes. In addition, potato growers produced a smaller crop by lowering planted acreage in response to low farm prices that reflected a record 1996 crop.

## Farm Value Share of Food Dollar

The farm value share is the proportion farmers get from the amount consumers spend on the market basket of food purchased in retail grocery stores. The
farm value share averaged 23 percent of the retail price of all foods in the market basket in 1997, a drop of 2 percentage points from 1996 (table 4). The farm value share reflects relative changes in farm and retail food prices. The 1997 farm value share decreased because there was a small rise in retail prices and a moderate decrease in farm prices. This decrease conforms with the longrun trend, in which rising farm productivity has created abundant food supplies. These supplies have depressed farm prices while rising food processing and distributing charges boosted retail prices. These opposing forces lowered the farm value share from 37 percent in 1980 to 30 percent in 1987. The farm value share remained stable until a sharp decline in 1991, reflecting a large decline in farm prices. The share has gradually declined since 1991, except for a small uptick in 1996.

Farm value share varies greatly among foods (table 5). In 1997, farm value share for a sample group of 40 foods varied from 57 percent for eggs to 5 percent for corn flakes. Generally, the farm value share decreases as the degree of processing increases. For instance, wheat is the principal ingredient of both flour and bread, but the additional manufacturing processes required for bread result in a lower farm value share of its retail price. Foods derived from animal products tend to have a higher farm value share than do those derived from crops, because farm inputs are greater for animal products than for crops. For example, the 1997 farm value share was 49 percent for Choice beef and 53 percent for chicken, but only 6 percent for bread. Other factors influencing the farm value share among foods include costs of transporting from farm to consumer, product perishability, and charges for retailing. These factors partly explain why the farm value share for fresh fruits and vegetables is relatively low.

The farm value of most foods that come from grains and oilseeds represents a small share of the retail price. In 1997, farmers received about 7 percent of retail bakery and cereal prices and 19 percent of retail prices of processed fruits and vegetables (table 7). Because the farm value of these foods is small, the rise in retail prices in 1997, as in most other years, resulted mostly in a widening of the farm-to-
retail price spread. For example, the farm value of cereal and bakery products decreased 14.3 percent in 1997. But this decline did not cause the retail price to drop, because there was a 2.1 -percent increase in the farm-to-retail spread.

Marketing charges are largely independent of farm prices, as reflected in instances when retail prices have held firm or risen in the face of a decline in farm prices. Over the years, there has been a persistent tendency for such charges to rise, regardless of whether farm prices were rising or falling. Thus, increases in marketing charges can, and often do, exceed the effect of a change in farm prices on retail prices.

## Farm-to-Retail Price Spread

The farm-to-retail price spread is the difference between the farm value and the retail price. It represents payments for all assembling, processing, transporting, and retailing charges added to the value of farm products after they leave the farm. Price spreads are sometimes confused with marketing margins. Margins represent the difference between the sales of a given firm and the cost of goods sold. There is often a time lag between receipt and final sale of merchandise involved in the calculation of this figure. Spreads, on the other hand, represent the difference between retail and farm prices of a specific product at a given point in time.

The farm-to-retail price spread is a much larger proportion of food prices than the farm value of commodities and has grown at a greater annual rate than the farm value nearly every year of the past decade. The spread, therefore, has consistently contributed much more to rising food prices than has farm value. Higher costs of labor, packaging, and other marketing inputs push the spread wider nearly every year, reflecting more intense use of these inputs over time. The farm-to-retail spread for the market basket of foods averaged 4.7 percent higher in 1997, the largest rise in the spread since a 6.7 -percent increase in 1991. This continued rise in the spread reflected a lower farm value, coupled with a modest rise in retail food prices.

The market basket farm-to-retail price spread attempts to measure charges for performing services connected with a fixed quantity of foods of a constant type and quality. However, the types of services incorporated into food sold in grocery stores have changed over time, a result of new product introductions and greater food preparation, such as boneless meat and poultry products, and fruits and vegetables sold at salad bars. Prices for these new and usually higher value foods are incorporated into the market basket retail price calculations over time, thus changing the type and quality of foods in the market basket. These changes in foods marketed with added services may increase price spreads.

Price spreads increased for every market basket food group in 1997. The largest increases were for eggs, dairy products, and poultry, while the spreads for most other food groups posted more moderate gains. The farm-to-retail price spread for red meats rose 4.3 percent, larger than both the 1996 increase and the 3.7 -percent annual average rise of the last 5 years. Tight beef supplies were responsible for raising the farm value for meat products in 1997, while large pork supplies mitigated the extent of the increase. Strong demand for pork products, particularly bacon in restaurants, was responsible for higher retail pork prices. Retail prices were higher for both beef and pork. Retail meat prices rose at a faster pace than farm prices, thereby resulting in a wider spread for red meats. The higher meat spread was mitigated by the Choice beef spread, which averaged 2.1 percent lower, due to a 1.7-percent rise in cattle prices and a 0.2 -percent decline in retail prices whose combined effects squeezed the price spread. The farm-to-retail price spread for pork rose at the faster rate of 10.3 percent, following a 6.4 -percent rise in 1996. Retail pork prices rose 4.8 percent, despite a 4.1 -percent fall in the farm value.

Cereals and bakery products accounted for 21 percent of the farm-to-retail spread of the market basket. The spread for this food category rose 3.7 percent in 1997, while the farm value of ingredients dropped 14.3 percent (table 6). Revised figures from USDA's Food Consumption, Prices, and Expenditures, 197095 (SB-939, August 1997) indicate that cereal consumption increased an average of 2.5 percent per
year during the last decade in response to positive nutritional perceptions, after posting increases of only 0.9 percent per year from 1976 to 1986.

The price spread for poultry rose 8.5 percent in 1997, a considerably faster rate than for 1996. This sharp rise was due to lower farm value and a modest retail price rise that combined to widen the spread. The price spread for eggs jumped 11.3 percent in 1997, slightly more than the fast-paced rise recorded in 1996. Retail egg prices dropped slightly in 1997, and at a much smaller rate than the farm value for eggs.

The average farm-to-retail price spread for dairy products jumped 8.6 percent in 1997, a much greater increase than in 1996. The price spread for dairy products rose the most of any food group in 1997, in contrast with the general trend of the past decade. This increase reflected an 8.6 -percent farm value drop, combined with a modest rise in retail dairy prices. The farm-to-retail price spread for a half-gallon of whole milk retailing for $\$ 1.59$ was $\$ 1.00$ in 1997, up 11 cents from 1996.

The farm-to-retail price spread rose 3.4 percent for fresh fruit in 1997, and 2.3 percent for fresh vegetables. Retail fresh produce prices were primarily affected by changes in farm value during 1997. Retail fresh fruit prices rose 0.9 percent, and were restrained by a 9.7 -percent farm value decrease, while retail fresh vegetable prices rose 2.9 percent, reflecting a 4.8 -percent farm value increase. However, a 5-year average of price changes reveals that increases in farm-to-retail price spreads had the most significant effect on retail prices. For example, the spread for fresh fruit rose an average of 6.0 percent, but the farm value posted a 2.9 -percent increase during 1991-97. Similarly, the spread for fresh vegetables rose an average of 5.7 percent, while the farm value increased an average 0.1 percent per year.

## Prices of Marketing Inputs

Increases in farm-to-retail price spreads mainly reflect rising costs that food industry firms face, including wages and salaries of workers and supplies and services that marketing firms buy from other parts of the economy. ERS maintains a food market-
ing cost index (FMCI) for monitoring and analyzing changes in variable operating costs incurred in processing, wholesaling, and retailing foods. The FMCI consists of hourly earnings of workers and price indexes of various marketing inputs, weighted by the share of each input in total operating costs. The FMCI is not a substitute for measures of marketing costs such as farm-to-retail price spreads and the marketing bill (see box, p. 15, for an explanation of these concepts). Farm-to-retail price spreads include nonfarm inputs that are not components of current operating costs, such as profits, depreciation, and long-term interest costs that are not included in the FMCI. The marketing bill allows for changes in product price, mix, quantity, and the quantity of marketing services. With the exception of product price, these factors are fixed in both the FMCI and the farm-to-retail price spread. However, the behavior of the index at least partially indicates changes in operating costs of the food marketing sector.

The largest component of the index ( 45 percent) is labor costs. Food containers and packaging materials ( 15 percent), transportation rates ( 11 percent), and energy costs ( 8 percent) complete the list of leading cost components of the index. Other cost components include advertising, maintenance and repair services,
insurance, short-term interest, rent, and miscellaneous supplies and services.

In 1997, the FMCI rose 1.7 percent, somewhat more than the 0.6 -percent increase of 1996 . Labor prices increased 3.2 percent in 1997, but were restrained by declines in the prices of other major marketing inputs. Packaging prices declined 2.3 percent, reflecting lower prices for paper, metal cans, and glass. Energy prices also dropped slightly, reflecting lower prices of electricity and oil, which were offset by a sizeable increase in natural gas prices (table 8).

Because businesses attempt to recover increases in variable costs, the rise in the FMCI partially explains the observed increase in the farm-to-retail price spread and food prices at retail. The smaller rise in the FMCI than the farm-to-retail price spread indicates that other factors are affecting marketing charges. These factors could include lower productivity; rising fixed costs, such as asset depreciation and interest on long-term debt; and higher profits. Weak retail sales growth and consumer price sensitivity have sparked food industry efforts to improve efficiency and minimize costs. Efforts have been made to improve labor use, conserve energy, and increase the use of technology for inventory management and other tasks.

