

Price changes in 1980: double-digit inflation persists

Consumer prices jumped 12.4 percent and producer prices, 11.7 percent; costs for energy items rose, but mortgage interest rates fluctuated wildly and a severe drought raised food prices

CRAIG HOWELL, DAVE CALLAHAN, AND OTHERS

For the second consecutive year, the rate of inflation in both retail and primary markets registered double-digit increases. The Consumer Price Index for All Urban Consumers (CPI-U) moved up 12.4 percent, following a 13.3-percent advance during 1979. Prices for all major consumer expenditure categories, except apparel and entertainment, increased at least 10 percent over the year. Mortgage interest costs advanced 27.6 percent, compared with a 34.7-percent climb in the preceding year. Prices paid by consumers for energy items were up 18.1 percent. Although this was larger than the increases recorded for most other CPI components, it was half as large as the 1979 surge of 37.4 percent. Food prices rose about 10 percent for the second consecutive year. Excluding food, energy, and mortgage interest costs, however, the rate of increase in the CPI accelerated from 8.7 percent in 1979 to 9.9 percent in 1980. (See table 1.)

At the primary market level, Producer Price Indexes (PPI) for each of the three major stage-of-processing groupings—finished, intermediate, and crude goods—rose at double-digit rates from December 1979 to December 1980, although each rate was somewhat slower than the corresponding 1979 pace. The Finished Goods Price Index climbed 11.7 percent in 1980, following a

12.8-percent advance in 1979.¹ The slowdown in 1980 was partly due to the deceleration in the rate of increase for the finished energy goods index, which climbed 27.7 percent, after soaring 58.0 percent in 1979. Finished consumer food prices rose 7.3 percent in 1980, virtually the same as during the previous 12 months. Prices for finished goods other than food and energy rose more in 1980 (11.0 percent) than in 1979 (9.3 percent); on average these prices advanced rapidly in early 1980 and then moderated as the year progressed. At the earlier stages of processing, the price index for intermediate goods moved up 12.5 percent over the year, after increasing 16.1 percent from December 1978 to December 1979, and crude material prices climbed 11.9 percent, following a 16.4-percent jump during the 12 months ended in December 1979.

Energy cost increases moderate

Prices for most energy goods and services continued to rise rapidly in 1980, although the increases were generally less than in 1979. (See table 2.) The upward movement in energy prices reflected increased costs of imported crude petroleum as well as higher prices allowed for domestic crude petroleum and natural gas. The slowdown in the rate of increase was partly due to reduced consumer and industrial demand for energy.

In late 1979 and early 1980, world crude petroleum prices rose sharply as the security of Persian Gulf oil shipments was threatened by political turmoil in Iran

Craig Howell and Dave Callahan are economists in the Office of Prices and Living Conditions, Bureau of Labor Statistics. They were assisted by Andrew Clem, John Z. Wetmore, William Thomas, Eddie Lamb, Mary Burns, and Jesse Thomas, economists in the same office.

Table 1. Changes in selected components of the Consumer and the Producer Price Indexes, 1979-80

Grouping	Relative importance Dec. 1979	Percent change		Contribution ¹		Compound annual rates, seasonally adjusted except as noted, for 3 months ended—			
		Dec. 1978 to Dec. 1979	Dec. 1979 to Dec. 1980	Dec. 1978 to Dec. 1979	Dec. 1979 to Dec. 1980	1980			
						Mar.	June	Sept.	Dec.
Consumer Price Index for All Urban Consumers (CPI-U)²									
All items	100.0	13.3	12.4	100.0	100.0	17.3	11.4	7.8	13.2
Food and beverages	18.7	10.0	10.1	14.5	15.3	3.6	5.9	19.1	12.5
Food at home	12.2	9.5	10.6	9.1	10.4	.8	4.7	24.8	13.2
Food away from home	5.5	11.4	9.6	4.8	4.2	9.1	8.1	9.0	12.3
Alcoholic beverages	1.0	8.0	7.6	.6	.6	7.4	9.8	8.2	5.2
All Housing	45.0	15.2	13.7	50.5	49.7	18.5	19.7	1.7	15.8
Shelter	30.9	17.4	15.1	39.0	37.6	20.0	23.1	-1.4	20.2
Rent, residential ³	5.3	7.9	9.1	3.3	3.9	8.3	10.0	8.6	9.6
Homeownership	24.9	19.8	16.5	35.0	33.2	22.6	26.4	-3.5	23.1
Home purchase ³	10.4	15.8	11.4	12.1	9.5	7.0	14.9	14.9	9.0
Finances, taxes, insurance ³	10.9	27.5	23.3	20.0	20.5	41.5	43.9	-20.0	41.8
Maintenance and repairs	3.6	10.3	10.6	2.9	3.1	16.2	8.3	8.2	10.1
Fuel and other utilities	6.5	16.0	13.6	7.6	7.1	19.8	17.0	9.8	8.5
Household furnishings and repairs	7.6	6.4	8.1	3.9	5.0	10.8	8.4	7.8	5.1
Apparel and upkeep	5.1	5.5	6.8	2.3	2.8	13.2	1.1	8.9	4.3
Apparel commodities	4.4	4.5	6.0	1.6	2.1	13.2	-.7	8.8	3.3
Apparel services	.7	12.5	12.4	.6	.7	14.9	13.8	9.2	11.7
Transportation	18.6	18.2	14.7	24.3	22.0	33.2	2.6	11.3	13.9
Private transportation	17.5	18.2	14.0	23.0	19.8	34.1	1.8	8.9	13.8
Public transportation	1.1	17.9	25.6	1.4	2.2	17.3	18.6	56.7	14.1
Medical care	4.8	10.1	10.0	3.8	3.9	14.2	8.9	9.2	7.9
Medical care commodities	.8	7.6	10.0	.5	.6	10.2	10.7	10.2	8.9
Medical care services	4.0	10.6	10.0	3.3	3.3	15.3	8.4	8.9	7.7
Entertainment	3.7	6.9	9.6	2.0	2.9	14.3	9.1	10.5	5.0
Other goods and services	4.1	7.9	10.1	2.5	3.3	11.0	9.3	11.1	9.0
All items	100.0	13.3	12.4	100.0	100.0	17.3	11.4	7.8	13.2
Food	17.7	10.2	10.2	13.9	14.6	3.3	5.8	19.7	13.1
Commodities less food and energy	34.5	8.8	9.9	23.8	27.7	9.5	7.7	12.9	9.6
Energy ³	10.3	37.4	18.1	24.0	15.1	64.0	15.2	2.5	.3
Services less energy	37.5	13.6	14.1	38.3	42.6	20.2	20.0	-.4	17.9
All items	100.0	13.3	12.4	100.0	100.0	17.3	11.4	7.8	13.2
Services	40.9	13.7	14.2	42.1	47.0	20.1	20.5	.7	16.8
Commodities	59.1	13.0	10.3	57.9	53.0	15.3	5.4	13.2	11.0
All items less food, energy, and mortgage interest cost	62.0	8.7	9.9	43.2	51.0	10.7	8.6	11.0	9.3
Producer Price Index (PPI) by stage of processing²									
Finished goods	100.0	12.8	11.7	100.0	100.0	17.5	8.4	13.5	7.8
Finished energy goods	11.3	58.0	27.7	36.7	26.9	89.2	18.7	27.3	14.4
Consumer foods	25.9	7.4	7.3	15.7	16.1	-.9	-1.4	31.0	3.6
Finished goods less food	74.1	14.8	13.3	84.1	83.9	24.6	11.8	8.3	9.3
Finished goods less food and energy	62.8	9.4	10.6	47.5	57.0	15.0	10.4	9.3	8.3
Finished consumer goods less food	52.0	17.5	14.0	68.2	62.2	29.7	12.1	7.6	8.5
Finished consumer goods less food and energy	40.7	9.7	10.2	31.7	35.5	16.0	10.0	8.9	6.7
Capital equipment	22.0	8.8	11.4	15.7	21.5	13.6	10.9	9.9	11.4
Intermediate materials, supplies, and components	100.0	16.1	12.5	100.0	100.0	22.2	6.6	10.1	11.9
Intermediate energy goods	14.1	44.7	25.2	31.5	28.5	65.4	9.9	13.0	19.5
Intermediate food and feeds	6.1	8.2	15.3	3.4	7.5	.5	14.1	52.7	.7
Intermediate materials less foods and feeds	93.9	16.7	12.3	96.9	92.5	23.7	6.2	7.8	12.6
Intermediate materials less food and energy	79.8	12.8	10.0	65.2	64.0	17.1	5.8	6.9	11.0
Crude materials from further processing	100.0	16.4	11.9	100.0	100.0	-.3	-.1	55.2	4.4
Crude energy materials ³	24.0	34.9	23.0	44.1	46.4	33.6	19.3	20.4	19.1
Crude foodstuffs and feedstuffs	59.7	10.6	8.6	40.6	43.1	-16.6	-.3	73.9	-4.1
Crude nonfood materials	40.3	26.1	16.7	59.2	56.6	18.9	.2	32.3	17.6
Crude nonfood materials less energy	16.3	15.1	7.5	15.2	10.3	.2	-24.4	54.8	15.1

¹ Percent of overall change attributable to each specific item.

² See "Definitions" and "Notes" preceding tables 22-30 of Current Labor Statistics in this Review.

³ Not seasonally adjusted.

NOTE: PPI data shown above and elsewhere in this article may differ from those previously

reported because: (1) stage-of-processing indexes from January 1976 through December 1980 have been revised to reflect 1972 input-output relationships; (2) seasonal adjustment factors have been recalculated to reflect developments during 1980; and (3) data through September 1980 have been routinely revised to reflect late reports and corrections by respondents. Seasonal adjustment factors have also been recalculated for CPI data.

and Afghanistan. Some members of the Organization of Petroleum Exporting Countries (OPEC) lifted their prices unilaterally; others, such as Saudi Arabia, sought to restrain such increases. Industrial nations reduced their consumption of petroleum as a consequence of the sluggish economy, consumers' resistance to increases in gasoline prices, and the trend toward more energy-efficient technologies. As a result, inventories of crude petroleum grew to record levels as Saudi Arabia continued to export about one million barrels per day above the level it was exporting prior to the Iranian Revolution of early 1979. The surplus of crude oil on world markets inhibited other OPEC members from raising prices substantially during mid-year. However, in late September, oil shipments from Iraq and Iran virtually ceased after their war broke out. Trading on the spot market quickened, and prices rapidly rose to more than \$40 per barrel for the first time since late 1979.²

The United States imported about 20 percent less crude oil in 1980 than in 1979, which helped to moderate the impact of higher costs of foreign crude oil on domestic energy prices. American refineries operated at an average capacity utilization rate of 76 percent during 1980, down from 85 percent in 1979, and 88 percent in 1978. The continuing phase-out of price controls on crude oil encouraged increased production and exploration. As a result, domestic output of crude oil exceeded

1979 levels, despite considerably weakened demand for most petroleum products. As deregulation continued, domestic crude oil prices became increasingly sensitive to world market conditions. Prices for domestic crude petroleum rose substantially during 1980,³ although not as rapidly as in 1979.

Consumer items. Retail gasoline prices rose 18.9 percent in 1980, substantially less than the 52.2-percent surge in 1979. Most of the 1980 increase occurred in the first quarter, as refiners passed through the crude oil price boosts of late 1979 and early 1980. In the spring, the combined effects of the recession, consumer resistance to the earlier price jump, and the increasing proportion of smaller, high-mileage automobiles in use led to a decline in demand for gasoline, resulting in record-high levels of gasoline inventories. Profit margins for retailers were squeezed as competition led to small price decreases during the second and third quarters. But gasoline prices turned up again in the fourth quarter, as the economy strengthened and crude oil costs continued to climb.

Consumer prices for home heating oil moved up 20.2 percent over the year, about one-third as much as in 1979. Again, the largest advances occurred early in the year. Demand was lighter than expected, largely because of the relatively mild winter. As a result, during

Table 2. Changes in retail and producer prices for energy items, 1979-80

Grouping	Index	Relative importance Dec. 1979	Percent change		Compound annual rate, seasonally adjusted, except as noted, for 3 months ended --			
			Dec. 1978 to Dec. 1979	Dec. 1979 to Dec. 1980	1980			
					Mar.	June	Sept.	Dec.
Finished items (sold to consumers)								
Energy items ¹	CPI	100.0	37.4	18.1	64.0	15.2	2.5	0.3
Finished energy goods	PPI	100.0	58.0	27.7	89.2	18.7	3.6	14.5
Gasoline, motor oil, coolants, etc.	CPI	55.3	51.4	18.9	97.6	-5.3	-3.0	10.2
Gasoline ²	CPI	54.5	52.2	18.9	98.9	-5.8	-3.3	10.5
.....	PPI	55.7	61.2	29.5	125.9	16.9	-3.9	10.7
Household fuels	CPI	44.7	23.4	17.0	28.7	20.6	11.5	8.5
Fuel oil ²	CPI	10.3	61.8	20.2	68.4	3.7	1.5	17.9
.....	PPI	14.6	70.4	24.0	81.7	14.1	2.5	11.7
Gas (piped) ^{1, 2}	CPI	13.4	20.1	14.7	14.3	29.3	15.6	1.4
.....	PPI	17.5	38.7	29.9	25.9	25.9	37.9	30.3
Electricity	CPI	19.5	11.2	16.7	18.6	28.1	14.0	7.3
Intermediate materials (sold to businesses)								
Intermediate energy goods	PPI	100.0	44.7	25.2	65.4	9.9	13.0	19.5
Diesel fuel ²	PPI	9.2	74.9	23.5	88.2	9.7	9.6	2.9
Commercial jet fuel ^{1, 2}	PPI	8.1	76.1	29.7	98.6	24.6	13.1	1.0
Residual fuel ²	PPI	14.1	62.8	39.1	95.7	-42.5	65.8	99.6
Liquefied petroleum gas ¹	PPI	5.0	77.5	20.9	63.2	7.4	9.1	34.3
Electric power ³	PPI	32.1	14.5	17.7	20.3	22.6	16.9	10.9
Crude materials								
Crude energy materials	PPI	100.0	34.9	23.0	33.6	19.3	20.4	19.1
Natural gas ^{1, 2}	PPI	28.9	36.7	29.9	25.9	25.9	37.9	30.3
Crude petroleum	PPI	51.0	50.7	26.6	52.1	21.6	17.3	18.4
Coal	PPI	20.1	3.3	3.7	6.1	-2.2	5.4	6.3

¹ Not seasonally adjusted.

² Prices for these items are lagged 1 month in the PPI.

³ Includes commercial and industrial power, but not residential.

the opening months of 1980, primary stocks of distillate fuels (home heating oil and diesel oil) were considerably above 1979 levels.⁴

Retail prices for piped gas rose 14.7 percent, almost as much as in the prior year; this paralleled the pattern of producer prices for natural gas at the wellhead, which climbed almost 30 percent following a 38.7-percent jump in 1979.⁵ Under the provisions of the 1978 Natural Gas Policy Act, price ceilings were raised during the year. In addition, a relatively greater volume of gas from newer or deeper wells was sold in 1980; existing regulations allowed higher prices for gas from such wells. Prices for natural gas imported from Canada (which are based on changes in world crude oil prices) advanced sharply during the first half and then stabilized. Residential electricity rates increased more than in 1979. Most of the 1980 increase occurred in the first half of the year as regulatory agencies permitted higher generation fuel costs incurred in 1979 to be passed through to consumers; rate increases slowed for the rest of the year.

Industrial fuels. Producer prices of energy items used in the production of goods and services also continued to move up in 1980, although the increases were less than in 1979. Prices for refined petroleum products rose sharply early in the year, following increases in OPEC crude oil prices. The petroleum glut which emerged during the middle of the year helped to keep prices for diesel fuel, commercial jet fuel, and liquefied petroleum gas relatively stable until late in the year, when these prices turned upward again. Prices for residual fuel tended to be more volatile, dropping sharply in the second quarter after several utilities and industrial firms switched to less costly fuels, then turning upward dur-

ing the second half of the year.

Charges for commercial and industrial electric power advanced more than during the previous year; this was due to significantly higher fuel costs as well as additional fixed costs incurred by some electric utilities for switching from oil to other fuels. The sharpest increases in electric power rates occurred on the West Coast and in New England, where relatively more oil for power generation is used. Ample supplies resulted in an increase in coal prices of less than 4 percent for the second consecutive year. Potentially strong demand by foreign nations for coal was constrained by the lack of adequate port facilities in this country.

Mortgage interest rates bounce

Following a 13.6-percent advance in 1979, the CPI for services excluding energy increased 14.1 percent in 1980. This increase was largely caused by substantially higher prices for household services other than energy, which moved up 17.2 percent primarily because of a 27.6-percent climb in the index for contracted mortgage interest costs (34.7 percent in 1979). This advance in the contracted mortgage interest cost index was responsible for nearly one-fifth of the 1980 increase in the All Items CPI. The index for residential rent moved up 9.1 percent, compared with 7.9 percent in 1979, reflecting higher charges for heating oil, gas, and electricity. Increases in charges for transportation services also accelerated, while the indexes for medical care, entertainment, and apparel services rose about as much as in the previous year. (See table 3.)

The 17.2-percent increase for household services other than rent and energy reflected home purchase prices (up 11.4 percent in 1980; 15.8 percent in 1979) and mortgage interest rates (up 15.0 percent in 1980; 16.1 per-

Table 3. Changes in consumer services less energy prices, 1979-80

CPI grouping	Relative importance Dec. 1979	Percent change		Compound annual rate, seasonally adjusted except as noted, for 3 month ended —			
		Dec. 1978 to Dec. 1979	Dec. 1979 to Dec. 1980	1980			
				Mar.	June	Sept.	Dec.
Services less energy	100.0	13.6	14.1	20.2	20.0	-0.4	17.9
Rent, residential ¹	14.0	7.9	9.1	8.3	10.0	8.6	9.6
Household less rent and energy ¹	48.7	18.8	17.2	28.6	29.7	-10.8	26.7
Home financing, taxes, and insurance ¹	23.1	27.5	23.3	41.5	43.9	-20.0	41.8
Mortgage interest costs ¹	8.7	34.7	27.6	51.6	55.0	-25.4	51.3
Home maintenance and repairs	7.4	10.6	10.7	18.3	7.0	7.0	11.0
Housekeeping services ¹	5.4	8.4	7.4	8.8	8.6	6.4	5.7
Transportation services	15.1	10.3	14.1	16.2	16.6	13.5	10.3
Auto maintenance and repairs	3.9	10.2	10.9	10.8	11.0	10.9	10.8
Other private transportation services	8.3	8.0	11.8	18.4	18.6	2.1	8.8
Public transportation ¹	2.8	17.9	25.6	17.3	18.6	56.7	14.1
Medical care services	10.7	10.6	10.0	15.3	8.4	8.9	7.7
Entertainment services ¹	4.1	5.8	8.7	12.9	9.2	9.7	3.3
Personal care services ¹	2.4	8.4	8.0	11.3	7.4	6.5	6.8
Apparel services	1.8	12.5	12.4	14.9	13.8	9.2	11.7
Personal and educational services	3.2	8.8	12.3	10.2	9.2	21.7	8.6

¹ Not seasonally adjusted.

cent in 1979). The index for mortgage interest rates accelerated sharply during 1980. In late 1979, the Federal Reserve Board began a series of credit-tightening moves. The resulting climb in interest rates in early 1980 dampened the previously strong demand for houses and home financing. The mortgage interest rate index then decreased sharply in the third quarter. Consequently in the fourth quarter, the demand for houses and house financing rose, in part, because house purchases were still viewed as a hedge against inflation. The Federal Reserve Board continued its restrictive policies, and mortgage interest rates again accelerated to levels approaching the record established in early 1980.⁶

The index for property insurance rose 13.2 percent, a much faster rate than was registered in the preceding year. Insurance premiums for a specified level of coverage increased very little but the additional coverage made necessary by escalating house prices caused most of the overall increase. The property tax index rose 4.6 percent (3.7 percent in 1979). After the strong national trend toward Proposition 13 type legislation in 1978, local taxing jurisdictions have been forced to raise property taxes slowly to offset the costs of the services such taxes provide.

The transportation services index rose 14.1 percent, more than in the previous year. The increase in the public transportation index accelerated from 17.9 percent in 1979 to 25.6 percent in 1980. Sharply higher fuel costs and increased food and labor expenses caused airline fares to soar 33.4 percent, despite the competitive effects of the Airline Deregulation Act of 1978. Intracity mass transit fares increased 20.3 percent, as government subsidies failed to keep pace with increased operating expenses (largely higher wage and fuel costs). Increases in taxi fares reflected the cost of gasoline.

Medical care services rose 10.0 percent, about the same as in 1979, reflecting large increases in professional and hospital services. The entertainment services index moved up 8.7 percent, reflecting increases in fees for participant sports. Price increases for other types of services, including personal care and apparel, rose about the same as in the previous year, while the personal and educational services index increased substantially more, reflecting higher college tuition.

Drought hampers food production

The CPI for food increased 10.2 percent, the same as in 1979. At the producer level, finished consumer food prices increased 7.3 percent in 1980, slightly less than in 1979. (See table 4.) Both the consumer and producer price indexes showed relatively little change during the first half of the year. However, in the third quarter, the CPI recorded its largest quarterly increase since 1973, and the PPI, its largest since 1974. This sharp runup was largely the result of a severe summer drought which helped prices for crude foodstuffs and feedstuffs

to soar at a 120.1-percent annual rate during July and August. At the same time, the increase in crude food prices pushed up producer prices of finished food products at an annual rate of 45.3 percent. Retail food prices consequently advanced at a 19.7-percent annual rate during the third quarter. During the fourth quarter, prices moderated: at the retail level, the moderation was quite small; at the producer level, it was substantial.

Early in the year, live poultry and hog supplies were more than ample; in fact, pork production reached a new high. Competition from decreasing pork and poultry prices forced beef prices down, even though cattle populations were near the low point of the production cycle, which had peaked in 1975. In response to low prices in 1979, pig farmers already had cut back on production plans for late 1980. Meanwhile, hot summer weather damaged pastures and sent hay and manufactured animal feed prices upward, and animal weight gain slowed. As a result, livestock supplies fell and prices soared during the third quarter. The hot weather also hit the poultry industry particularly hard, as millions of chickens succumbed to the heat. However, the fourth quarter showed considerable price moderation.

Fluid milk prices rose 10.0 percent over the year despite large supplies, primarily as the result of higher price supports. Combined with higher processing costs, this raised prices for dairy products about 10 percent at both the processor and retail levels.

Prices for sugar and sweets showed the greatest increase of any food group in the CPI in 1980. The 35.7-percent increase was the largest since 1974, when this index more than doubled. Within this group, the largest advance occurred for the sugar and artificial sweeteners component, which jumped 96.5 percent. Retail sugar prices reached their highest level since January 1975. The PPI showed a similar picture: the price of raw sugar was up 62.2 percent. Poor sugar harvests in several major sugar producing countries, especially Cuba and the Soviet Union, led to a worldwide shortage. The situation was aggravated by increased demand in many developing countries. In addition, intense speculation in commodity markets led to highly volatile price movements throughout the year. Higher sugar prices and tight supplies allowed prices for corn syrup, a widely used substitute sweetener, to soar 75.3 percent. However, prices for other confectionery materials failed to reflect these strong upward pressures. The declining per capita consumption in recent years and the third consecutive year of production surpluses sent the price of cocoa beans down 34.6 percent in 1980, keeping the increase in chocolate coating and candy bars modest, despite their large sugar content.

The CPI for fats and oils increased 8.1 percent in 1980. Nondairy substitutes and peanut butter rose the most, at 20.7 percent. Processor peanut prices more than tripled by the end of the year, as the drought led

Table 4. Changes in retail and producer prices for consumer foods, 1979-80

Grouping	Index	Relative importance Dec. 1979	Percent change		Compound annual rate, seasonally adjusted, except as noted, for 3 months ended —			
			Dec. 1978 to Dec. 1979	Dec. 1979 to Dec. 1980	1980			
					Mar.	June	Sept.	Dec.
Consumer foods ¹	CPI	100.0	10.2	10.2	3.3	5.8	19.7	13.1
	PPI	100.0	7.4	7.3	-9	-1.4	31.0	3.6
Beef and veal	CPI	10.3	21.7	5.0	-3.5	-16.3	48.8	1.4
	PPI	13.4	20.6	-1.8	-13.8	-8.0	35.0	-11.5
Pork ²	CPI	4.7	-8.2	11.8	-4.6	-22.0	87.2	12.0
	PPI	6.3	-12.9	8.8	-30.0	-23.5	171.7	-2.7
Poultry	CPI	2.2	-8	15.0	-8.1	-8.9	89.0	10.3
	PPI	3.3	-1.9	6.8	48.1	-19.4	262.0	-15.3
Cereal and bakery products	CPI	8.6	11.4	11.6	12.6	12.8	7.4	13.8
	PPI	12.5	13.6	11.1	15.0	8.8	7.0	14.4
Dairy products	CPI	9.3	10.4	9.7	8.6	12.3	6.9	11.2
	PPI	13.2	8.4	10.4	9.7	13.9	4.6	13.7
Fresh fruits and vegetables	CPI	5.0	13.2	139.9	-15.0	27.4	53.7	0.3
	PPI	4.7	-4.9	16.1	-12.0	41.3	100.5	-27.9
Processed fruits and vegetables ²	CPI	4.6	6.1	8.0	8.7	7.3	8.4	7.7
	PPI	6.5	1.9	6.5	5.3	7.1	5.7	7.8
Eggs	CPI	1.3	3.6	11.1	-21.2	11.3	31.3	31.8
	PPI	2.0	5.0	9.6	4.7	-19.9	47.9	16.4
Sugar and sweets ³	CPI	2.4	7.4	35.7	34.8	34.8	33.8	39.5
	PPI	4.4	14.6	42.7	61.2	130.5	21.2	-7.7
Roasted coffee ²	CPI	1.0	19.6	-11.6	-2.8	-4.7	-5.7	-30.0
	PPI	4.5	22.8	-14.7	-5.6	-11.7	-20.2	-21.0
Fats and oil products ⁴	CPI	2.0	7.1	8.1	9.6	-2.0	6.5	19.5
	PPI	1.6	8.8	2.8	-0.2	-7.2	11.1	8.6

¹ Includes items not listed. The CPI includes prices of food away from home, which account for about 31 percent of the food index. The PPI for finished consumer foods does not reflect restaurant prices.

² Not seasonally adjusted.

³ "Sugar and confectionery" in the PPI. Not seasonally adjusted in the PPI.

⁴ "Vegetable oil end products" in the PPI.

to the smallest peanut crop since 1964 on top of a poor harvest in 1979. Processor prices of peanut butter were up by a third. Margarine prices rose slightly, as higher processing costs more than offset lower prices for refined corn and soybean oil. Prices for crude vegetable oils were down 9.9 percent despite a 34.9-percent rise in oilseed prices. Both oils and oilseeds showed large price declines during the first half of the year as excellent soybean harvests in Brazil depressed world prices. However, hot, dry weather across much of the United States during the summer resulted in a shortage, especially for soybeans. U.S. soybean production was down 20 percent from 1979 after 3 years of record output. The price of soybeans jumped 25.0 percent in July alone. The price of vegetable cake and meal was up 19.8 percent over the year, creating a strong demand from crushers for oilseeds. Heavy crush resulted in large supplies of vegetable oil, a byproduct of vegetable cake and meal production. Meanwhile, strong demand for corn syrup resulted in large supplies of corn oil, which is a byproduct of corn syrup production. Thus, even with large price increases in the last half of 1980, abundant supplies kept crude vegetable oil prices well below the 1979 level.

Retail prices for roasted coffee dropped 11.6 percent

in 1980, compared with a 19.6-percent increase in 1979. This drop was the direct result of record supplies that led to a 17.3-percent decline in prices for green coffee beans and a 14.7-percent drop in processor prices for roasted coffee. There was little frost damage to the Brazilian crop in 1980; world output was large, despite crop damage in some smaller producing nations. By yearend, the United States had more than a year's supply on hand. In addition, domestic coffee consumption continued to decline. In contrast, world consumption of tea kept pace with record production, leading to a modest 1.9-percent rise in unprocessed tea prices. Higher manufacturing costs were largely responsible for a 9.3-percent boost in the PPI for packaged tea. Packaged cocoa prices increased modestly, as falling cocoa bean prices were offset by rising sugar prices. Soft drink prices were up in both the CPI and the PPI in response to sugar prices.

Cereal and bakery products were up 11.6 percent in the CPI and 11.1 percent in the PPI. Higher wheat prices during most of the second half of the year led to a 5.5-percent increase in the PPI for flour. Costs increased for many goods, especially cookies, cereals, and sweet baked goods because of skyrocketing sugar prices. Despite a record domestic crop, the price of milled rice

moved up, principally because of strong export demand due to poor rice harvests in South America and the Republic of Korea.

At the farm level, grain prices dropped at a 10.8-percent annual rate during the first half of the year as world supplies were generally good. The grain embargo against the Soviet Union in January had only a temporary impact on prices because the Soviets removed an equivalent amount of grain from the world market through purchases from other countries. Hot, dry weather hurt U.S. grain production during the summer, sending grain prices up at a 51.7-percent annual rate during the second half. Corn production was down 16 percent from 1979, after 5 years of record crops, sending corn prices up 26.8 percent in 1980. However, the winter wheat crop was harvested before the drought hit, and damage to spring wheat was not sufficient to prevent a record wheat harvest in 1980. The large domestic supply of wheat counteracted poor harvests of other grains, and strong export demand for wheat resulted in a wheat price increase of less than 1 percent.

Consumer prices for fresh fruits rose 7.2 percent in 1980, despite a 4.3-percent drop in the PPI for fresh fruits. A record harvest and sizable drops in the PPI for citrus fruits and apples did not fully impact retail prices by yearend. Florida orange trees had recovered from the severe frost of January 1977; however, higher costs for transportation, storage, and marketing exerted upward pressure on retail prices. The supply situation for fresh fruits, though, was much more favorable than that for fresh vegetables. The CPI for fresh vegetables rose 20.3 percent in 1980, led by a 43.8-percent increase for potatoes. Fresh vegetable prices fell during the first quarter when supplies were more than ample. U.S. Department of Agriculture statistics indicated that 6.9 percent more acreage was devoted to 14 major winter vegetables over 1979 and production was up 8.2 percent. However, reduced plantings and severe weather took their toll during the summer. Potatoes were especially hard hit, with the smallest crops for sweet and white potatoes since the early 1970's. Planted acreage for 14 fresh fall vegetables was the same in 1980 as in 1979, but yields were down 4.7 percent, limiting the yearend recovery. However, tomatoes, which had suffered damage from heat in the fall of 1979 and were in short supply at the start of 1980, went against the trend and showed a net price decrease over the year.

Processed fruits and vegetables were up 8.0 percent in the CPI and 6.5 percent in the PPI. Processed fruits rose 5.9 percent at the retail level in 1980. The cost of most raw fruits being processed was fairly stable. Most of the increase was due to other raw material and production costs, especially sugar. Processed vegetables experienced a more substantial increase of 10.2 percent. Acreage contracted for the production of seven major processing vegetables was down approximately 12 percent from

1979 levels. In addition, bad weather reduced yields and in turn the quantity packaged. Thus, the 1980 supply was considerably smaller than in 1979. Meanwhile, as with processed fruits, labor, tinplate, energy, transportation, and marketing costs all increased. Prices increased as the large carryover stocks from 1979 were depleted.

Commodities other than food and energy

Consumer goods. Both retail and producer prices for consumer goods other than food and energy increased about 10 percent in 1980, a somewhat larger increase than in the preceding year. Price increases accelerated for a broad range of goods, including used cars, apparel, textile housefurnishings, sanitary papers, cosmetics, drugs, soaps, tobacco products, and sporting goods. Home purchase and gold jewelry prices continued to climb rapidly. Prices for footwear and tires, however, increased considerably less than in 1979. (See table 5.)

The home purchase component of the CPI moved up 11.4 percent over the year, second only to the 15.8-percent annual increase recorded in 1979. The rate of increase in this index slowed significantly in the first quarter of 1980, as record-high mortgage interest rates severely dampened both housing demand and the availability of mortgage credit. A resurgence in the housing market, triggered by a sharp drop in interest rates during the spring, caused the increase in home prices to accelerate through the second and third quarters. By the end of the year, record-high interest rates returned and had the same moderating impact on home prices as in the first quarter.

Retail prices for new cars moved up 7.5 percent in 1980, almost identical to the 1979 increase. Producer prices, however, rose somewhat more than in the previous year (9.0 versus 7.3 percent). The largest increases were registered for compacts and subcompacts while prices for larger cars rose very little or not at all in response to reduced demand for cars with low gas mileage. Prices for imports, which captured approximately 27 percent of the American market in 1980, were sharply higher, both because of the weakness of the dollar compared to the yen and demand that exceeded supplies. Price increases slowed for tires, particularly at the primary market level, largely because reduced domestic production of automobiles depressed demand.

After dropping at an annual rate of 12 percent during the first half of 1980, used car prices exploded in the second half at the second highest rate ever recorded for this index. This turnaround was all the more dramatic because, historically, used car prices have decreased after the introduction of new model-year cars each fall. The unusual upturn in late 1980 could be attributed to a number of factors, including: (1) a continued rise in new car prices, especially smaller, higher-mileage models; (2) an increase in gasoline supplies, which made the purchase of large used cars more palatable; (3) the re-

Table 5. Changes in retail prices for commodities less food and energy, 1979–1980

CPI grouping	Relative importance Dec. 1979	Percent change		Compound annual rate, seasonally adjusted except as noted, for 3 months ended—			
		Dec. 1978 to Dec. 1979	Dec. 1979 to Dec. 1980	1980			
				Mar.	June	Sept.	Dec.
Commodities less food and energy	100.0	8.8	9.9	9.5	7.7	12.9	9.6
Alcoholic beverages	3.0	8.0	7.6	7.4	9.8	8.2	5.2
Home purchase ¹	30.1	15.8	11.4	7.0	14.9	14.9	9.0
Maintenance and repair commodities ¹	2.4	9.2	10.4	9.2	12.5	12.7	7.3
Textile housefurnishings	1.5	6.1	8.2	14.9	7.6	10.4	6
Furniture and bedding	3.5	6.3	7.8	15.7	5.8	7.3	2.7
Appliances, including radio and T.V. ¹	4.4	3.3	3.6	3.8	4.1	5.2	1.1
Other household equipment ¹	2.6	6.5	10.4	16.1	10.3	9.6	6.0
Housekeeping supplies ¹	4.2	7.2	12.4	16.3	13.0	11.2	9.4
Apparel commodities less footwear	10.9	3.8	5.8	14.1	-1.4	8.7	2.9
Footwear	1.9	8.7	6.7	7.6	3.7	9.2	6.1
New cars	10.8	7.4	7.5	10.2	8.7	15.4	-3.4
Used cars	8.2	2.2	18.3	-2.0	-12.1	39.0	62.3
Auto parts and equipment ¹	1.8	13.3	8.6	14.0	3.3	11.7	5.7
Medical care commodities	2.3	7.6	10.0	10.2	10.7	10.2	8.9
Entertainment commodities	6.4	7.7	10.3	15.3	9.2	11.0	6.1
Tobacco products ¹	3.1	6.2	9.7	13.8	10.5	2.2	12.9
Toilet goods and personal care appliances ¹	2.1	8.2	9.9	9.3	10.2	10.5	9.7
School books and supplies5	7.9	9.7	9.5	7.6	27.4	-3.4

¹ Not seasonally adjusted.

cord-high interest rates required for new-car financing; and (4) a smaller supply of good, late-model used cars because weak demand for new cars resulted in a shortage of trade-ins.

Retail prices for apparel commodities other than footwear increased 5.8 percent in 1980. While moderate when compared to most other items in the CPI, this rate was still the largest annual increase since 1974. From 1975 through 1979, these prices had moved up at an average annual rate of just 3.2 percent. Producer price increases for apparel also accelerated from 4.6 percent in 1979 to 8.9 percent in 1980. Major influences included the increased cost of financing inventories due to high interest rates, a substantial advance in cotton prices as a result of a domestic cotton crop that was 20 percent smaller than the year before, and a continued increase in synthetic fiber prices. On the other hand, leather footwear prices rose considerably less than in 1979, particularly at the primary market level, reflecting an easing of leather price boosts.

Gold jewelry prices advanced sharply for the second consecutive year. Most of the 1980 increases occurred early in the year, before gold prices took a sharp dip in the spring. After resurging in the third quarter, producer prices for gold jewelry declined at a 21-percent rate during the final months of the year. Prices accelerated for prescription and over-the-counter drugs—higher petrochemical prices and an increase in labor costs were among the major contributors. Higher prices for tobacco products partly reflected increased costs for leaf tobacco.

Capital equipment. The Producer Price Index for capital equipment moved up 11.4 percent in 1980, the first double-digit advance in this index since the 22.3-percent surge in 1974. The acceleration from an 8.8-percent rise

in 1979 was very broad-based—most major types of capital goods rose considerably more in 1980 than in the previous year. Advances of at least 15 percent were recorded for generators, small aircraft, oilfield machinery, plastic and rubber industry machinery, food products machinery, and chemical industry machinery. Photographic equipment, office and store machines, and commercial furniture were among the few kinds of investment goods which moved up less than 8 percent over the year.

After adjusting for inflation, the real level of capital spending declined about 6 percent in 1980. A number of factors served to discourage capital expansion plans in 1980. The economic downturn in the first half of the year led to both sharply reduced profits and excess capacity in some industries. Energy-intensive industries, which had been hard hit by the steep energy price boosts from late 1978 through early 1980, often found it difficult during the recession to raise output prices to match the climb in input costs. The resulting erosion of profitability severely limited their ability to internally generate investment funds. The unusually high level of interest rates which prevailed much of the year further discouraged potential investment spending.

Mitigating these negative effects somewhat was the relatively quick upturn in business activity after mid-year, as many firms were sufficiently confident to continue their capital expansion projects. Investments by petroleum companies, other energy producers, firms in the aerospace and defense-related industries, metals processors, electrical machinery manufacturers, and transportation equipment companies were especially strong. Companies eager to install more energy-efficient machinery and to meet pollution abatement requirements also tried to maintain their capital spending plans. The fact that real investment spending did not drop as

much in 1980 as it usually does during a recession served to limit the depth and duration of the recession.

Intermediate materials other than food and energy

The Producer Price Index for intermediate materials less foods and energy climbed 10.0 percent from December 1979 to December 1980, a somewhat slower pace than in the previous 12 months. In general, prices for most items within this category tended to rise sharply during the first quarter, moderate during the middle of the year, and resume substantial increases in the fourth quarter. These price movements thus paralleled the sharp changes in the general level of economic activity during 1980. High interest rates during most of the year had a negative impact on material prices; speculation in nonferrous metals and certain crude commodities was discouraged by increased borrowing costs, and the need felt by many firms to cut their material inventories (because of high financing costs) led to reduced demand.

Durable manufacturing materials. The slowdown in the rate of price increases was most evident in the durable manufacturing materials category, which rose 5.9 percent following a 17.2-percent jump in 1979. This comparatively moderate pace was largely due to the depressed markets for housing, automobiles, and some related consumer durable goods. The PPI for finished steel mill products moved up 7.9 percent in 1980, following two years of double-digit increases. Steel industry production was reduced to about half of capacity by midyear and total 1980 shipments of steel products fell 18 percent from 1979 levels, principally because of poor demand from the automotive industry. Competitive price discounts were introduced in July for sheets, strips, and bars to stimulate sales; most of these discounts were removed at the beginning of the fourth quarter, and new increases were included as the economy strengthened. In contrast to the weakness in other steel markets, demand was very strong for steel pipes and other products used by the oil and natural gas industries. Prices for these products rose sharply during 1980.

Price movements for nonferrous metals during 1980 were mixed. Heavy speculative activity led to very steep increases at the beginning of the year for gold, silver, and copper. However, soaring interest rates helped to end the boom by spring, and prices dropped sharply in subsequent months. From June to October, precious metals prices recovered some of these losses, but turned down at the end of the year as interest rates again approached 20 percent. Over the year, copper prices fell 15.5 percent because of poor demand from the construction industries. Prices for lead plummeted 28.7 percent in response to low demand from manufacturers of automobile batteries, the largest market for lead. On the other hand, primary aluminum prices were up 14.4 per-

cent because of strong overseas demand and increased production in the defense and aerospace industries.

Nondurable manufacturing materials. The nondurable manufacturing materials index advanced 12.3 percent in 1980 after rising 18.0 percent in the previous year. Sharply higher world prices for crude oil led to large advances during the early months of 1980 for organic industrial chemicals, plastic resins and materials, and synthetic rubber. These prices changed very little during the rest of the year because of the impact of the recession and the slowdown in crude oil price rises.

Among textile products, synthetic fibers prices rose 13.5 percent, about the same as in 1979, largely because of higher petrochemical feedstock costs. Because producers had reduced their output in response to declining demand, they were able to continue passing through cost hikes. Higher prices for synthetic materials plus rising prices for cotton led to accelerated price increases for processed yarns and threads, gray fabrics, and finished fabrics.

Prices for paper and paperboard continued to move up at double-digit rates in 1980, largely because of higher costs for woodpulp and energy. Woodpulp prices were sharply higher over the year as a result of reduced production of lumber.

Construction materials. The index for construction materials rose about 9 percent for the second consecutive year. The sharp climb in mortgage interest rates in early 1980 led to a steep decline in the rate of new private housing starts. After interest rates receded in the spring, residential construction activity picked up again; this upturn persisted through the rest of the year in spite of renewed increases in interest rates by late fall. Prices for softwood lumber, millwork, and plywood were generally sensitive to demand from the construction industry, falling sharply in the early months of the year and then turning up in subsequent months. Prices for nonmetallic mineral products rose substantially during the first part of the year as producers passed through increased energy costs; prices during the latter part of the year were relatively stable, reflecting the slowdown in energy price increases. Most other construction materials such as fabricated structural metal products moved up moderately during 1980, partly because of smaller advances in steel prices compared to 1979.

Other. Among other intermediate goods, the electronic components index advanced 14.0 percent, more than in any other year on record, as higher prices for gold, aluminum, and tantalum led to increases for such products as capacitors and relays. Because poor economic conditions prevailed during much of the year, businesses were reluctant to invest in new machinery and, instead, invested in replacement parts to extend the usefulness of

existing capital equipment. Large increases were registered for ball and roller bearings, fluid power equipment, mechanical power transmission equipment, and nonfarm tractor parts, among other goods. Prices for photographic supplies rose sharply early in the year, then edged down somewhat, in response to the fluctuating price of silver, which is used in making most types of camera film.

Crude nonfood materials less energy

Producer prices for crude nonfood materials less energy, which tend to be highly sensitive to changes in general economic conditions, dropped at a seasonally adjusted annual rate of 18.4 percent during the first half of the year. These prices then turned up dramatically in the second half, climbing at a rate of 50.5 percent. For the year as a whole, this index rose 7.5 percent, following a 15.1-percent advance in 1979. Prices for nonferrous scrap, wastepaper, and hides and skins tumbled after rising rapidly in 1979, and increases for iron and steel scrap, crude natural rubber, and iron ore were considerably smaller than those of the year before. In contrast, raw cotton prices jumped far more than in 1979, and prices for sand and gravel, leaf tobacco, and potash also recorded larger increases in 1980.

After climbing 36.7 percent in 1979, nonferrous scrap prices were down 3.5 percent in 1980 because of weak domestic and export demand, reflecting the weakness in prices for copper and some other nonferrous metals. Wastepaper prices fell 13.7 percent over the year, principally because of sluggish demand from domestic recycling mills. However, increased exports and good

demand for wastepaper for making insulation materials served to restrain the price decline. Prices for hides and skins moved down in the first 6 months of the year because of poor demand. A surge in demand from domestic tanners and export buyers from Japan, Korea, and Taiwan led to a partial price recovery in the second half; nevertheless, the hides and skins index finished the year 11.5 percent lower than in December 1979. Iron and steel scrap prices were up 7.6 percent for the year. Sharply lower prices during the first half resulted from a marked decrease in steel mill production. Ferrous scrap prices then rebounded in the last half when supplies were tight in the face of increased domestic steel output. Crude natural rubber prices rose much less than a year earlier (5.6 percent versus 21.5 percent), in large part because of weak demand from domestic and foreign tire manufacturers, and because of slower price increases for synthetic rubber.

Raw cotton prices soared 35.5 percent from December 1979 to December 1980. Most of this surge was registered in the third quarter as hot, dry weather in major domestic producing areas reduced the cotton crop by 20 percent from the 1979 level. Unusually strong export demand, particularly from the People's Republic of China, also helped to boost cotton prices. Prices for sand, gravel, and crushed stone were up 14.4 percent for the year as energy-related costs continued to rise. Leaf tobacco prices rose 10.2 percent, partly because of damage to the new crop by the summer drought. Potash prices climbed even more in 1980 (21.8 percent) than the year before (18.9 percent), reflecting tight supplies and firm export demand. □

FOOTNOTES

¹ All previously published data for stage-of-processing indexes from January 1976 through December 1980 have been revised to reflect new stage-of-processing allocations based on 1972 input-output tables published by the Bureau of Economic Analysis, U.S. Department of Commerce.

² At the December 1980 OPEC conference in Indonesia, another general increase in official contract prices was announced. Saudi Arabia raised its standard crude oil price to \$32 per barrel, one-third higher than a year earlier, but still the lowest within OPEC. The highest allowed price within OPEC was set at \$41 per barrel, a \$4 increase over the ceiling price in effect since June.

³ The PPI for crude petroleum does not include prices for uncontrolled categories of domestic production other than low-output "stripper" wells. These excluded categories accounted for a growing proportion of total output during 1980 and by the end of the year

represented about half of total production; therefore, the PPI underestimated the actual average price for domestic crude oil.

⁴ "Primary stocks" refer to petroleum products stored at refineries, in pipelines, or at bulk terminals; inventories of retailers, jobbers, and so forth are excluded.

⁵ The PPI for natural gas has been partly reallocated from the Crude Materials stage-of-processing category to the Finished Goods stage-of-processing category to reflect the proportion of natural gas consumed by households. This change was part of a comprehensive revision of stage-of-processing allocations, which became effective with the release of January 1981 data on February 13.

⁶ The highest recorded average monthly contracted mortgage interest rate occurred in May 1980. On average, there is about a 60-day lag between mortgage rate commitments and home purchase settlements.