

Inflation remained low during 1984

Consumer prices rose only 4.0 percent in 1984, marking the third straight year of moderation; producer prices rose only 1.8 percent

CRAIG HOWELL AND WILLIAM THOMAS

In 1984, a variety of factors reinforced each other to hold inflation substantially in check as was the case in 1983:

- Good harvests for many agricultural crops, both in the United States and abroad;
- Continued weakness in world commodity markets for energy and many basic industrial materials;
- The unusually high value of the U.S. dollar in international currency markets, which encouraged a surge of imports that averted production and labor bottlenecks by siphoning off much of the upswing in domestic demand;
- Weak export demand for most U.S.-made goods, also caused in large part by the strength of the dollar;
- An excellent year for domestic capital investment projects designed to expand capacity with demand;
- Solid U.S. productivity improvements and general wage restraint, both of which held down rises in unit labor costs;
- American monetary policies which gave high priority to maintaining a low rate of inflation; and
- The slowing of the domestic economic expansion in the latter half of the year.

As a result, inflation in 1984 at both the retail and the producer levels rose at a rate of less than 5 percent for the third consecutive year. This moderate performance coincided with the second year of strong economic recovery from a recession that ended in late 1982.

Craig Howell and William Thomas are economists in the Office of Prices and Living Conditions, Bureau of Labor Statistics. They were assisted by Doug Robertson, Andrew Clem, Eddie Lamb, Jessie Thomas, Tom Mosimann, and Mary Lynn Schmidt, economists in the same office.

The 4.0-percent increase in the Consumer Price Index for All Urban Consumers (CPI-U) for the 12-month period ended in December 1984 followed increases of 3.9 percent in 1982 and 3.8 percent in 1983. (See table 1.) While the overall increases were virtually the same in each of the 3 years, the composition of the change was different each year. Specifically, the moderation became more broadly based with each successive year. In 1982, declines in energy commodities—motor fuel, fuel oil, coal, and bottled gas—and small increases in grocery store foods and shelter costs were largely responsible for reducing the all-items increase from 8.9 percent in 1981 to 3.9 percent in 1982. The following tabulation shows the annual increases for selected groupings of CPI expenditure classes, December 1981–84:

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
All items	8.9	3.9	3.8	4.0
Food at home, shelter, and energy commodities	8.5	1.3	2.4	3.5
All items less food at home, shelter, and energy commodities	9.5	6.6	4.8	4.3

After rising 8.5 percent in 1981, the combination of the food, energy commodity, and shelter components decelerated sharply, increasing only 1.3 percent in 1982. All other items in the CPI also moderated that year, but not so sharply, posting an average increase of 6.6 percent after advancing 9.5 percent in 1981. In 1983, the energy commodities, grocery store foods, and shelter grouping advanced 2.4 percent while all other items in the CPI slowed down further

to a 4.8-percent increase. By 1984, the variance in the behavior of the two groups had further diminished: The energy commodities, grocery store foods, and shelter combination increased 3.5 percent, while all other CPI items advanced 4.3 percent.

The Producer Price Index (PPI) for Finished Goods moved up 1.8 percent from December 1983 to December 1984, following an even smaller increase of 0.6 percent in 1983 and a 3.7-percent advance in 1982. Consumer food price increases accelerated modestly, from a 2.3-percent increase in 1983 to 3.8 percent in 1984. Prices for finished energy goods continued to drop (-4.1 percent), although by less than half as much as in 1983: -9.2 percent. Prices received by producers of other kinds of finished goods rose 2.2 percent in 1984, slightly more than the 1.8-percent increase in 1983 but considerably less than 1982's 4.9 percent. (See table 2.)

The 1984 inflation record at earlier stages of processing was also encouraging. The Intermediate Goods Price Index increased 1.3 percent, compared with 1.8 percent a year earlier. This index rose at a seasonally adjusted annual rate of 3.2 percent in the first half of 1984, when the general

economic expansion maintained the exceptionally fast pace of 1983. The ensuing slowdown in the economy was reflected in the 0.6-percent rate of decline in this index during the latter half of the year. Crude material prices, which had advanced 4.7 percent from December 1982 to December 1983, fell 1.3 percent in 1984. This reversal resulted from drops in the indexes for foodstuffs and sensitive industrial materials, both of which had advanced substantially during 1983.

In this article, we will next examine price changes during 1984 for all major expenditure categories within the Consumer Price Index. Then we will focus on price changes for those components of the Producer Price Index which do *not* overlap with categories of the CPI. (Price movements for consumer energy goods—gasoline, home heating oil, and natural gas—are discussed at both the retail and the producer market levels because of important distinctions between what affects the CPI and what affects the PPI for those items.)

Consumer prices: food and housing

Food and beverages. The food and beverage component

Table 1. Percent changes in selected consumer price indexes (CPI-U), 1982-1984

Index	Relative importance, Dec. 1984	Percent change			Contribution			Compound annual rate, seasonally adjusted except as noted, for 3 months ended—			
		Dec. 1981 to Dec. 1982	Dec. 1982 to Dec. 1983	Dec. 1983 to Dec. 1984	Dec. 1981 to Dec. 1982	Dec. 1982 to Dec. 1983	Dec. 1983 to Dec. 1984	1984			
								March	June	Sept.	Dec.
All Items	100.0	3.9	3.8	4.0	100.0	100.0	100.0	5.4	3.2	4.5	3.0
Food	18.7	3.1	2.6	3.8	13.4	12.9	18.0	8.4	-.5	3.9	3.7
Commodities less food and energy	26.3	5.8	5.0	3.1	48.8	34.4	20.6	3.8	3.9	3.8	0.9
Energy	11.5	1.3	-.5	-.2	3.7	-1.5	-.6	1.2	.3	0.1	-.7
Energy commodities	6.8	-5.0	-3.2	-1.9	—	—	-3.4	.8	-3.3	-7.9	3.4
Energy services	4.7	14.1	4.1	3.4	—	—	4.0	1.8	5.9	13.2	-6.3
Services less energy	43.5	3.4	4.8	5.6	34.1	54.2	60.7	6.0	5.2	6.2	5.0
All Items	100.0	3.9	3.8	4.0	100.0	100.0	100.0	5.4	3.2	4.5	3.0
Services	48.2	4.3	4.8	5.4	47.5	59.2	64.7	5.4	5.4	6.9	3.9
Commodities	51.8	3.6	2.9	2.6	52.5	40.8	35.3	5.0	1.3	2.2	2.3
All Items	100.0	3.9	3.8	4.0	100.0	100.0	100.0	5.4	3.2	4.5	3.0
Food and beverages	19.8	3.2	2.7	3.7	14.4	13.9	18.8	8.0	-.3	3.7	3.8
Food at home	12.6	2.2	1.9	3.6	6.6	6.8	11.6	10.5	-3.0	4.1	3.5
Food away from home	6.1	5.0	4.1	4.2	6.8	6.6	6.4	4.1	4.7	3.5	4.6
Alcoholic beverages	1.1	4.0	3.4	2.7	1.0	100.0	.7	1.5	3.1	2.2	4.0
Housing	37.7	3.6	3.5	4.2	44.5	34.8	40.0	4.1	4.4	6.4	1.9
Shelter	21.8	2.4	4.7	5.2	19.7	26.6	28.4	4.0	5.3	7.0	4.6
Renters' costs	7.1	—	5.1	5.9	—	9.3	10.4	4.6	6.5	6.4	5.6
Rent residential ¹	6.2	6.6	4.9	5.8	8.7	7.6	9.0	4.7	6.0	6.6	6.0
Homeowners' costs ¹	14.1	—	5.4	5.1	—	16.6	17.7	4.3	4.6	7.3	4.1
Homeownership ²	—	1.7	—	4.2	9.3	—	—	-7.6	2.2	21.0	-1.4
Fuel and other utilities	8.2	9.7	1.8	5.1	17.3	3.9	8.6	8.5	4.6	7.2	-3.2
Household furnishings and operation	7.7	3.5	2.0	2.0	6.5	4.4	3.0	-.3	1.8	4.0	.5
Apparel and upkeep	5.1	1.6	2.9	2.0	2.0	4.0	2.5	.6	-.8	6.4	1.8
Apparel commodities	4.3	.9	2.5	1.4	.9	2.9	1.6	0	-1.7	6.4	1.3
Apparel services	.8	6.2	5.0	4.9	1.1	1.0	1.0	4.1	4.9	5.4	5.2
Transportation	21.6	1.7	3.9	3.1	8.6	22.4	17.0	5.8	3.5	.4	2.8
Private transportation	20.1	1.4	3.9	2.8	6.4	20.9	14.5	5.4	3.2	0	2.9
Public transportation	1.6	6.5	3.8	6.4	2.2	1.5	2.5	9.4	8.5	4.5	3.4
Medical care	6.3	11.0	6.4	6.1	13.8	10.1	9.4	7.5	6.1	4.8	5.8
Medical care commodities	1.0	9.6	7.6	7.6	2.0	1.9	1.9	8.0	6.6	6.3	9.2
Medical care services	5.2	11.2	6.1	5.8	11.8	8.1	7.5	7.5	6.0	4.6	5.1
Entertainment	4.2	5.6	3.9	4.2	5.2	4.3	4.5	1.1	5.5	5.0	5.5
Other goods and services	5.3	12.1	8.0	6.1	12.6	10.5	7.8	6.7	5.9	6.9	4.4

¹ Not seasonally adjusted.

² Old series CPI-W.

Table 2. Percent changes in selected producer price indexes by stage of processing, 1983-84

Index	Relative importance, Dec. 1984	Percent change		Compound annual rate, seasonally adjusted except as noted, for 3 months ended—			
		Dec. 1982 to Dec. 1983	Dec. 1983 to Dec. 1984	March 1984	June 1984	Sept. 1984	Dec. 1984
Finished goods	100.0	0.6	1.8	6.1	-0.4	0	1.8
Consumer foods	24.4	2.3	3.8	15.2	-7.5	4.5	4.5
Energy goods	11.5	-9.2	-4.1	-5.2	5.0	-19.7	5.7
Consumer goods excluding foods and energy	42.4	1.9	2.2	5.6	.8	2.5	0
Capital equipment	21.6	1.9	2.1	3.9	2.2	2.3	0
Intermediate materials, supplies, and components	100.0	1.8	1.3	4.1	2.4	-1.9	.8
Food and feeds	4.9	9.3	-5.4	3.0	-4.8	-14.7	-3.2
Energy goods	15.1	-5.5	-1	2.6	3.8	-9.2	3.0
Materials excluding foods and energy	80.1	3.0	2.0	4.1	2.0	.9	1.3
Crude materials for further processing	100.0	4.7	-1.3	4.4	-7.7	-3.3	2.1
Foodstuffs and feedstuffs	53.0	8.0	-9	8.9	-19.2	-1.7	12.0
Energy materials ¹	31.7	-4.6	-1.0	-1.6	4.0	.4	-6.5
Nonfood materials excluding energy	15.4	15.5	-3.3	.9	14.3	-15.3	-10.7

¹ Not seasonally adjusted.

NOTE: Data reflect revisions in not seasonally adjusted indexes through September 1984, as well as the recalculation of seasonally adjusted data from January 1980 through December 1984, effective with the release of January 1985 indexes.

of the CPI, whose deceleration predated the overall slowdown in prices, continued its moderate behavior in 1984, increasing 3.7 percent. For the fourth consecutive year, grocery store food prices rose less than 4 percent. The 3.6-percent rise in 1984, however, was nearly double the 1983 increase. While all major grocery store food groups contributed to the acceleration, a turnaround in meat prices was primarily responsible. Following declines in 1983, beef prices rose 3.8 percent and pork prices, 6.0 percent in 1984. The drought in the summer of 1983 had a major impact on those prices in both years. Higher feed costs induced owners to market their livestock early, which resulted in meat price reductions in 1983. These declines were interrupted in early 1984, when harsh winter weather restricted supplies to retail markets and caused a temporary jump in prices. The effect of accelerated slaughtering in 1983, however, led to some liquidation of stocks, lower marketings, and higher prices for pork by early summer and for beef, by the fourth quarter. By contrast, poultry and egg prices, reflecting the effects of the drought and avian influenza, rose sharply in the second half of 1983 and in early 1984 before declining in the last 3 quarters of 1984.

The 1983 summer drought and winter freeze played a major role in the 1984 price movement for fresh vegetables and fruits. Drought-reduced harvests caused fresh vegetable prices to rise sharply in the fall of 1983 and early 1984 before declining in the remainder of 1984. By the year's end, prices were 6.9 percent below the December 1983 level. Fresh fruit prices, which declined in 1983, increased 22.6 percent in 1984. The late 1983 freeze, which severely damaged orchards as well as the early 1984 citrus crop, is likely to have a long-run impact on prices.

Prices for dairy products rose 3.4 percent in 1984, fol-

lowing increases of less than 1 percent in each of the preceding 2 years. The introduction of the U.S. Department of Agriculture's Dairy Diversion Program, which was designed to reduce milk production and government support payments, contributed to the advance in milk prices. The indexes for cereal and bakery products, processed fruits and vegetables, and other foods at home all registered moderate increases in 1984, which were nevertheless larger than in 1982 and 1983.

Housing. The CPI-U housing index rose 4.2 percent in 1984, following a 3.5-percent increase in 1983. Larger increases in the costs for shelter and fuels and other utilities more than offset the smaller rise in household furnishings and operations. Prices for fuel and other utilities rose 4.2 percent in 1984, compared with 1.8 percent in 1983. The sharpest advance in the fuel and other utilities component was the rise in telephone service charges, which coincided with the January 1, 1984, restructuring of the telephone industry. Telephone services, which rose 3.6 percent in 1983, jumped 9.2 percent in 1984 as local charges soared 17.1 percent, intrastate toll charges increased 3.7 percent, while interstate toll charges declined 4.3 percent.

Fuel oil prices, which had decreased sharply during 1983 in the wake of the oil glut—down 10.9 percent—were unchanged in 1984, as oil prices remained stable amid sufficient supplies and moderate heating oil demands. The sharp increases which occurred during the bitter cold of January and February were offset by declines throughout the remainder of the year. Charges for electricity rose 5.6 percent, following increases of 3.2 percent in 1983 and 6.4 percent in 1982. Natural gas prices increased less than a percentage point (0.8 percent) in 1984, well below the 5.2-percent

increase in 1983; this was their smallest increase since 1967. In the 9-year period ended in 1982, annual increases in natural gas prices averaged 17.1 percent a year and never dropped below a double-digit level. The cessation of take-or-pay contracts,¹ together with court-ordered refunds to compensate for overcharges based upon these contracts, helped hold down the 1984 increase.

Shelter costs rose 5.2 percent in 1984. Renters' costs rose 5.9 percent, up slightly from the 5.1-percent rise in 1983. Homeowners' costs also rose slightly more in 1984 (5.1 percent) than they had in 1983 (4.5 percent). However, home maintenance and repair prices slowed from a 5.0-percent increase in 1983 to a 2.7-percent rise in 1984, as charges for maintenance and repair services moderated substantially.

The 1.5-percent increase in the household furnishings and operations index was the smallest annual increase since the series began in 1967. The index for housefurnishings was up only marginally, as price increases in textile housefurnishings (4.2 percent), furniture and bedding (1.9 percent), and other household equipment (1.1 percent) were nearly offset by price declines for household appliances, televisions, and sound equipment. Prices for housekeeping supplies advanced 3.0 percent and services, 2.4 percent.

Transportation and medical care

Transportation. Transportation costs rose 3.1 percent in 1984, following increases of 3.9 percent in 1983 and 1.7 percent in 1982. The 9-percent advance over the past 3 years compares with a 50-percent increase for the 3-year period ended in 1981. The turnaround in gasoline prices and the smaller increases in automobile prices were largely responsible for the slowdown.

Although used car prices decelerated substantially in the last half of 1984, the sharp 7.0-percent rise for the year accounted for nearly half of the total transportation increase. Larger inventories, associated with the increase of trade-ins from strong new car purchases, resulted in downward pressure on used car prices. New car prices rose only 2.5 percent during 1984, the third consecutive small annual increase. The moderate increases in 1983 and 1984, unlike that in 1982, coincided with expanding production and sales.

Again exerting downward pressure on the transportation index, motor fuel prices decreased 2.4 percent during 1984. This decline was slightly greater than 1983's 1.7-percent drop, which included the 5-percent Federal excise tax increase, but it was less than the 6.5-percent decline in 1982. From their peak level of March 1981, gasoline prices had declined 13.2 percent by December 1984.

Among other automotive expenses, automobile finance charges rose 6.8 percent in 1984, after registering sharp declines in each of the preceding 2 years. The cost of automobile insurance—up 7.9 percent—continued to advance. Tire prices, however, declined for the third consecutive year, and automobile maintenance and repair costs—up 3.2

percent—registered their smallest annual increase since 1966.

The public transportation component, which had risen 3.8 percent in 1983, advanced 6.4 percent in 1984. Airline fares, fluctuating throughout the year, showed a net increase of 6.5 percent. Intercity bus fares rose sharply (12.3 percent). By contrast, taxi fares rose only 1.2 percent, the lowest increase since 1964 when the taxi fare index was first published.

Medical care. The 6.1-percent advance in the cost of medical care in 1984 followed an increase of 6.4 percent in 1983 and increases of 10 percent or more in each of the preceding 4 years. The slight deceleration in 1984 reflected a slowdown in prices for medical care services, while prices for medical care commodities rose at the same rate as in 1983. Within the medical care service component, charges for physicians' services rose 6.0 percent, the smallest increase in 11 years. Charges for dental services and other professional services also decelerated in 1984. Following a 9.3-percent increase in 1983, the costs of hospital rooms rose 7.4 percent in 1984, the smallest since 1973. Within the medical care commodities component, the index for prescription drugs rose 9.9 percent, about the same as in 1983. Prices for nonprescription drugs and medical supplies decelerated slightly in 1984, increasing 5.4 percent.

Apparel and other expenses

Apparel. The index for apparel rose 2.0 percent in 1984, declining in the first half of the year before rising sharply in the third quarter. The introduction of higher-priced fall merchandise was responsible for the third-quarter spurt. Clothing sales and promotions were prevalent throughout the rest of the year. Small-to-moderate price increases were recorded for most men's, boys', women's, girls', and infants' clothing items and for footwear. The index for jewelry and luggage declined slightly, reflecting a decline in prices for precious metals. Charges for apparel services (such as laundering and dry cleaning), which rose 4.9 percent in 1984, continued to decelerate from their peak level increase of 12.5 percent in 1978. Most of the 1984 advance was due to higher prices for dry cleaning services.

Entertainment. The index for entertainment, which had decelerated yearly from 1980 to 1983, rose slightly faster in 1984, increasing 4.2 percent. The cost of entertainment services rose 5.7 percent in 1984. Admission fees for movies, theaters, sporting events, and other forms of entertainment rose 7.5 percent on average. Increased charges for membership to fitness centers, health centers, and fees for participant sports averaged 5.7 percent. The index for entertainment commodities—up 3.3 percent—also rose slightly more than in 1983, principally because of larger price increases for photographic supplies and equipment. Prices for reading materials, however, slowed substantially in the past 2 years, reflecting a moderation in printing costs. The 4.0-

percent increase in 1984 was the smallest advance since this series was introduced in 1977. Prices for sporting goods and equipment rose 3.4 percent, as a 5.3-percent increase in sports vehicles was partially offset by near-stable prices for bicycles and sporting equipment.

Other goods and services. The other goods and services index increased 6.1 percent in 1984, the smallest annual increase in this category since 1976. Increases in personal and educational expenses (up 9.1 percent) accounted for half of the 1984 increase in this component. Tuition and other school fees increased 10.1 percent in 1984 after having doubled over the past 7 years. Prices for school books and supplies also continued to advance—up 8.1 percent—but by less than in other recent years. The index for personal expenses rose 6.5 percent, substantially less than in any year since this series was introduced in 1977. The deregulation of banks increased competition for depositors and coincided with the smaller increases in charges for banking services.

The index for tobacco rose 4.9 percent in 1984, following increases of 20.1 in 1982 and 10.1 percent in 1983. Legislation passed in the summer of 1982 and effective January 1, 1983, doubled the Federal excise tax on cigarettes from 8 to 16 cents per pack. Sharp increases were recorded from September 1982 through January 1983 as manufacturers immediately began phasing in the effect of the tax increase. In 1984, two moderate increases in wholesale prices for tobacco were passed on at retail.

Producer prices: energy trends

Prices received for domestic energy products decreased in 1984, following more substantial and pervasive declines in 1983. The indexes for both finished energy goods and crude energy materials continued to fall, although not nearly so much as in 1983; prices for intermediate energy goods were almost unchanged, following 2 consecutive years of decline. Major influences on energy prices in 1984 included unusual weather patterns, climbing foreign exchange rates, heavy inventories of crude oil and refined petroleum products, and the decontrol of natural gas. (Prices for major refined petroleum products and natural gas are lagged 1 month in the Producer Price Index.)

The index for finished energy goods decreased 4.1 percent from December 1983 to December 1984. Indexes for gasoline and home heating oil—both of which had fallen at double-digit rates during 1983—fell again but by considerably less. These declines largely reflected the general oversupply of petroleum and intense competition among refiners to boost their market share. Natural gas prices rose slightly, mostly in response to earlier regulatory adjustments and increased sales of unregulated “new” gas. Natural gas is now essentially competitive with other fuels, as evidenced in declines in the natural gas index in the last 4 months of 1984.

The Producer Price Index for intermediate energy goods was virtually unchanged in 1984, as price increases for most refined petroleum products were largely offset by an advance in the index for electric power. Extreme weather patterns in both summer and winter caused users to increase electricity consumption. The increased costs, particularly for fuels for generating this additional power, were passed on to consumers. Prices for residual fuel moved slightly higher in 1984, when electric utilities opted for this fuel to meet some of the surge in demand during severe weather. Prices continued to decline for liquefied petroleum gas, kerosene, jet fuel, and diesel fuel, reflecting the oversupply of such fuels.

The PPI for crude energy moved down 1.0 percent in 1984, after falling 4.6 percent a year earlier. Prices for domestic crude petroleum fell 3.2 percent, much less than in other recent years. As in 1983, continued global surpluses in energy supplies frustrated attempts by the Organization of Petroleum Exporting Countries (OPEC) to maintain price levels. The index for coal edged up just 0.8 percent. Although coal consumption grew about 8 percent in 1984, producer stockpiles were up significantly over the year in anticipation of a strike that never materialized.

Capital equipment

Business spending on new plant and equipment surged 13 percent in 1984, the largest advance in 18 years. This increase was due to enhanced after-tax returns on investment and widespread optimism about the durability of the general expansion in the economy. Nevertheless, the Producer Price Index for capital equipment continued to rise only modestly—2.1 percent from December 1983 to December 1984, roughly the same as in 1983. Moreover, prices of few major products moved up more than 4 percent during the year. As in 1983, intense competition from imports was a major factor restraining inflation in this sector of the economy.

Prices for machine tools rose about 4 percent, as orders and domestic shipments were sharply higher than a year earlier, although still well below prerecession levels. These types of machinery—key to industrial automation—range from computer-controlled lathes to automated presses that shape metal parts. The level of orders for machine tools is considered an indication of capital spending by the automotive, appliance, aircraft, and other durable goods industries.² Imports controlled an unusually high share of the American market for machine tools, just as they had in 1983. However, the recovery was strong enough in 1984 to allow increased sales by both domestic and foreign manufacturers of machine tools.

Prices for heavy trucks rose 4.2 percent over the year, on the strength of sharply increased sales of 0.26 million units from a low of 0.18 million in 1983. These trucks range from medium-duty general delivery trucks to heavy-duty diesel tractor-trailers. The turnaround in sales reflected the strong recovery in business investment in 1984.

Intermediate goods less foods and energy

After accelerating moderately to a 3.0-percent increase in 1983, the Producer Price Index for intermediate goods other than foods and energy eased somewhat, registering a 2.0-percent rise for the 12 months ended in December 1984. The unusually strong pace of economic growth early in the year enabled manufacturers to raise prices for many goods whose prices had slumped during the preceding 2 years. However, these increases were mitigated by the soaring foreign exchange value of the U.S. dollar, which severely curtailed export demand for American-made industrial goods, and prompted increased imports of products that undercut domestic markets. This unfavorable trade balance, plus a slowdown in the overall economy, caused prices for most intermediate goods to either rise more slowly or decline during the latter part of 1984.

Manufacturing materials. The index for nondurable manufacturing materials moved up 1.3 percent over the course of the year, about half as much as in 1983. Following a small increase in 1983, prices for industrial chemicals turned down 4.0 percent, reaching their lowest level since the end of 1980. Double-digit decreases occurred for vinyl chloride monomer (used in making plastics), as well as for benzene and ethylene, two widely used primary industrial chemicals. These resulted from lower crude petroleum costs, heavy import competition, and uncertain prospects in housing and automotive industries. Lower chemical prices tended to restrain prices for derivative products; synthetic fibers and synthetic rubber showed little net change over 1984, the third consecutive year of flat or declining prices. Price increases also moderated for plastic resins, gray fabrics, finished fabrics, leather, and inedible fats and oils (the last nevertheless still advanced sharply).

A major exception to the moderation of prices of intermediate industrial goods was in the pulp and paper products industry, where strong demand kept manufacturers operating at over 95 percent of capacity throughout the year. Import competition was not very serious because labor disputes reduced output in the Canadian paper industry; this also made it possible for U.S. paper producers to maintain export levels in spite of the strength of the U.S. dollar. As a result, price increases accelerated over the year for wood-pulp and paperboard (recording double-digit advances), as well as for paper.

Reversing the 4.3-percent climb of the previous year, the index of materials for durable manufacturing edged down 0.3 percent during 1984, led by nonferrous metals. The market for aluminum was not as strong as anticipated. American producers reacted to bulging inventories and sagging prices by closing several major smelting-refining operations that together accounted for almost one-tenth of total production capacity. Aluminum prices continued to slide, nonetheless, ending the year about 7 percent below 1983 levels. Copper prices declined for the fifth consecutive year.

The urgent need for foreign exchange to repay debts prompted Chile, Peru, and Zambia to continue heavy exports of copper in spite of minimal profits. The American copper mining industry petitioned the Federal Government for relief against imports, but was denied. Prices for lead, zinc, gold, and silver also fell during the year. Flat glass prices fell 5.1 percent, the first drop since 1972. This resulted from moderation in costs for inputs such as natural gas, as well as uncertainty in the construction industry.

The steel mill products index did register an increase (2.2 percent), but this was only half as much as in 1983. The import share of the U.S. steel market reached a record high of 26 percent during 1984, up from a 21-percent share a year earlier, thereby displacing more U.S. production. Unlike the previous year, when decreases for tubular products and wire partly offset steep increases for sheets and strip, the principal steel categories showed uniformly modest advances in 1984. Moderate increases also took place for hardwood lumber and Portland cement.

Construction materials. The housing construction market began the year on a very strong note, but then generally subsided as mortgage interest rates climbed during the second and third quarters. Correspondingly, softwood lumber prices rose during the first quarter, but subsequently turned down, ending the year 5.2 percent below the December 1983 level. Plywood prices likewise declined 4.6 percent over the year. Continued expansion of lumber and plywood imports from Canada (now accounting for nearly 40 percent of the U.S. market) forced many American sawmills to go out of business during 1984.

Prices for gypsum products (such as wallboard) continued the 1983 rapid increase through the middle of 1984, as shortages persisted in several areas. However, the gypsum industry finally began to catch up with demand as the market softened around mid-year. Prices receded during the second half, to finish the year only 2.1 percent above the December 1983 level, compared with the 27.1-percent surge in the prior 12-month period.

However, sizable increases for certain products tended to offset the moderation observed among other construction materials. Those showing significant advances included wiring devices, asphalt felts and coatings (formerly asphalt roofing), and prepared paint. This mixture of price movements over 1984 resulted in a 2.4-percent rise in the overall index for materials and components for construction, the third consecutive yearly advance of less than 4 percent.

Grains and feedstuffs

During 1984, the Producer Price Index for grains fell 12.8 percent, largely reflecting good harvests in the United States and abroad. Grain prices had climbed more than 20 percent a year earlier because of severe drought in many growing regions, combined with the impact of the acreage reduction prompted by the payment-in-kind (PIK) program.

The PIK program was formally discontinued for most grains before the 1984 growing season.

Wheat prices rose moderately in the first half of 1984, partly because of good export demand, but then retreated in the second half as record harvests occurred in this country and several other major producing nations. The net result was a 4.6-percent drop in prices from December 1983 to December 1984. Corn prices fell in almost every month of the year, for a total decrease of 18.1 percent by the end of 1984. Expanded harvests after unusually low production in 1983, combined with stagnant foreign demand restrained by the continuing climb in the value of the American dollar in international currency markets, were the principal influences behind the drop in corn quotations. Prices for barley, oats, and rye also moved down over the year.

The index for oilseeds declined sharply over the year, largely because of reduced prices for soybeans and peanuts. Soybean quotations fell more than 20 percent, reflecting increased domestic production, lagging demand from Europe and Japan, and increased competition from Argentine and Brazilian exports. A record harvest, made possible by a yield 7 percent greater than the previous record yield in 1982, led to a 17.4-percent drop in peanut prices. Hay prices also moved down in the face of abundant alternative animal feeds and extensive pasture feeding for much of the year.

Price-sensitive industrial materials

The Producer Price Index for crude nonfood materials other than energy, which measures changes in prices of raw industrial commodities usually responsive to cyclical shifts in general economic conditions, dropped 3.3 percent from December 1983 to December 1984. Responding to the vigorous recovery from the 1981–82 recession, this index had climbed 15 percent in 1983 and continued to advance briskly (at a 7.4-percent rate) through the first half of 1984. The impact of the second-half economic slowdown was evident in the behavior of the index for these price-sensitive industrial materials, which fell at a 13.0-percent rate from June to December.

Scrap metals were especially prominent in the 1984 downturn. Iron and steel scrap prices, which had soared more than 50 percent a year before, decreased considerably during most of 1984, ending the year 5.2 percent lower than their December 1983 level. The low output of domestic steel mills, which again were confronted with heavy imports of steel products, lowered ferrous scrap demand and prices. Increased export demand for ferrous scrap kept their prices from falling more. Nonferrous scrap prices dropped nearly 16 percent during 1984, in distinct contrast to the 36.7-percent upward jump in the preceding 12 months. Aluminum base scrap prices were nearly one-third lower by the end of the year than they had been in December 1983, reflecting the unexpected weakness in industrial demand for aluminum products.

Like scrap metals, prices for raw cotton and crude natural rubber fell in 1984 after jumping substantially a year before. Raw cotton prices had climbed 23.8 percent in 1983 and continued to rise in early 1984. These prices fell through the rest of the year, however, to close with a net loss of nearly 19 percent from December 1983 quotations. Demand for some cotton fabrics, notably corduroy and denim, was considerably lower in 1984 than in other recent years, in part reflecting a saturation of consumer markets with blue jeans and other apparel made from those fabrics. Minimal inventory rebuilding by domestic mills, reduced export demand, and recent excellent harvests in this country and China added further downward pressure on raw cotton prices. After advancing about one-third in 1983, crude natural rubber prices dropped nearly one-fourth in 1984, as world supplies expanded more than enough to meet demand.

Prices for cattle hides had surged 36.2 percent in 1983 and continued to advance in most of 1984. However, increased supplies and lagging foreign and domestic demand lowered fourth-quarter prices, resulting in a net rise of just 2.3 percent from December 1983 to December 1984. Prices for leaf tobacco and for construction sand and gravel also rose in 1984, while indexes for logs and wastepaper decreased moderately. □

—FOOTNOTES—

¹Under long-term take-or-pay contracts, natural gas producers required pipelines to pay for a minimum quantity of gas whether it was needed or not. If demand for gas fell, a fixed charge under a take-or-pay contract had to be spread over a smaller volume, leading to rate increases for the

ultimate gas user.

²See John Duke and Horst Brand, "Cyclical behavior of productivity in the machine tool industry," *Monthly Labor Review*, November 1981, pp. 27–34.