Producer price highlights, 1996

Price increases for finished goods accelerated slightly last year; at earlier stages of processing, price signals were somewhat mixed

William D. Thomas

William D. Thomas is an economist in the Office of Prices and Living Conditions, Bureau of Labor Statistics. Tables were prepared by Meredith L. Aber, a summer intern in the same office.

Prices received by domestic producers of finished goods increased 2.8 percent in 1996, following a 2.3-percent rise in 1995 and a 1.7-percent advance in 1994. The index for finished energy goods went up 11.7 percent from December 1995 to December 1996, after an increase of 1.1 percent a year earlier. Prices for foods, such as fresh fruits and melons, pork, and bakery products, rose 3.4 percent in 1996, following a 1.9-percent increase in 1995. However, price increases for finished goods other than foods and energy, which include consumer goods such as passenger cars and apparel, slowed to 0.6 percent in 1996 from 2.6 percent in 1995. (See table 1.)

Price changes were mixed in 1996 at the earlier stages of processing. The index for intermediate goods moved up 0.7 percent in 1996, after showing a 3.3-percent rise in 1995. This index measures the price movements of goods such as flour, steel, lumber, industrial chemicals, diesel fuel, and paper boxes. Price increases for crude goods accelerated to 14.7 percent in 1996 from 5.5 percent in 1995. Crude goods include such products as wheat, scrap metals, logs, crude petroleum, and cotton. Price increases for food-related materials at the intermediate stage of processing slowed from 1995 to 1996; at the crude level, the index for foodstuffs and feedstuffs turned down in 1996 after rising sharply in 1995.

Economic background

Economic growth during 1996 was solid overall, but fluctuated when transitory factors took their toll. For example, unusually severe weather in January and a March strike at a major automobile manufacturer resulted in some sluggishness in the first quarter. However, the economy rebounded in the second quarter and growth moderated in the third quarter. After rising for all of 1995, the unemployment rate edged down 0.3 percentage points in 1996. As measured by the Bureau's Current Employment Statistics program, growth in nonfarm employment was brisk during the first 8 months of the year, but moderated over the last 4 months, reflecting the deceleration in output in the second half. The robust nature of the economy allowed for sustained low rates of unemployment and inflation.

After dropping the interest rate in January 1996, the Federal Reserve kept the Federal funds rate flat for much of the rest of the year. Long-term interest rates moved in sync with the pace of economic activity over the course of the year, increasing through the summer, then decreasing in the fall, only to move up again toward the end of the year.

On the strength of rapid growth in orders for durable goods, consumption expenditures moved up at a 3.4-percent annual rate in the first half of 1996, led by an increase in expenditures for new automobiles in the first 3 months; spending for other durable goods also picked up substantially in the first half. Lower interest rates, along with the rise in household wealth due to the very substantial improvement in stock market prices, helped to stimulate spending on durables. The high level of mortgage refinancing activity in the winter of 1995 also may have contributed to the upswing by reducing mortgage payments. Growth in consumer spending slowed in the third quarter, when intermediate and long-term interest rates moved higher. Real disposable personal income expanded at a significant rate in 1996. Residential investment grew at a fast clip through the first 6

Table 1. Annual percent changes for major categories of the Producer Price Index, by stage of processing, 1992–96

Index	1992	1993	1994	1995	1996
Finished goods	1.6	0.2	1.7	2.3	2.8
Foods	1.6	2.4	1.1	1.9	3.4
Energy	–.3	–4.1	3.5	1.1	11.7
Other	2.0	.4	1.6	2.6	.6
Intermediate materials, supplies, and components	1.0	1.0	4.4	3.3	.7
Foods and feeds	–.5	5.5	–4.5	10.3	2.1
Energy	.7	–4.2	2.9	1.1	11.2
Other	1.2	1.6	5.2	3.2	–.9
Crude materials for further processing	3.3	.1	–.5	5.5	14.7
Foodstuffs and feedstuffs	3.0	7.2	–9.4	12.9	–1.0
Energy	2.3	–12.3	–.1	3.7	51.2
Other	5.7	10.7	17.3	–4.2	–5.5

months, despite harsh winter weather that hampered construction early in the year, and rising long-term interest rates through the late winter and spring. Another bright spot was indicated by measures of household affordability, which were at their highest levels since the late 1970s. Terms of adjustable-rate mortgages greatly increased the pool of potential purchasers. Residential construction picked up by the last 3 months of 1996. And, long-term interest rates declined in the fall, with the result that the rate on conventional mortgages fell, taking back about half of its 1995 increase.

Expenditures for producers' durable equipment were robust in 1996. Investment in computers increased sharply, as companies upgraded their computers, at the same time enjoying increased demand for their products, substantial profits, and technological advances. However, business investment in structures rose only moderately in 1996, reflecting continuing problems of excess supply caused by overbuilding in the 1980s. As in 1995, investment in nonfarm business inventories declined in early 1996, as business firms continued to work off excess stocks. Although inventory investment picked up later in the year, the 1996 inventory-to-sales ratios were lean by historical standards.

The "core" index

The producer price index for finished goods other than foods and energy, often called the "core" index, moved up 0.6 percent in 1996, following a 2.6-percent advance in 1995. (See table 2.) This deceleration in price increases was broad-based. The index for consumer goods other than foods and energy rose 0.8 percent in 1996, following a 2.8-percent increase in 1995. Similarly, prices for capital equipment moved up 0.4 percent in 1996 after rising 2.2 percent a year earlier.

Among consumer goods other than foods and energy, indexes turned down in 1996 after moving up in 1995 for sanitary papers, passenger cars, over-the-counter drugs, tires and tubes, cosmetics, and household appliances. Price increases slowed for light trucks, prescription drugs, newspapers, alcoholic beverages, periodicals, books, household furniture, tobacco products, mobile homes, light trucks, sporting goods, soaps and detergents, girls' apparel, footwear, floor coverings, toys, and lawn and garden equipment. Prices continued to rise modestly for men's and boys' apparel. By contrast, the index for women's apparel turned up after falling in the previous year. Price increases accelerated for textile housefurnishings, costume jewelry, gold jewelry, and household glassware. Prices for home electronic equipment continued to move down.

The producer price index for capital equipment moved up 0.4 percent in 1996, following a rise of 2.2 percent in 1995. Price increases slowed for civilian aircraft, light trucks, commercial furniture, and a wide variety of machinery and equipment. Prices for electronic computers fell even more sharply in 1996 than they had in 1995. Prices turned down after increasing a year earlier for heavy motor trucks, railroad equipment, transformers, truck trailers, and office and store machines. By contrast, price increases accelerated for ships, printing trades machinery, and metal forming machine tools.

Transportation equipment. The producer price index for motor vehicles moved down 0.3 percent in 1996, following a 1.9-

Table 2. Annual percent changes in Producer Price Indexes for selected finished goods other than foods and energy, 1992–96

Index	1992	1993	1994	1995	1996
Finished goods other than foods and energy	2.0	0.4	1.6	2.6	0.6
Consumer goods	1.6	–.2	1.6	2.3	3.6
Passenger cars	.6	3.3	2.1	1.7	–.8
Light trucks	4.8	4.2	3.3	1.5	.2
Prescription drugs	6.4	3.2	3.1	4.2	2.0
Over-the-counter drugs	5.2	2.7	1.7	1.7	–1.7
Tobacco products	6.7	–21.4	.4	3.6	2.6
Books	5.2	.6	5.4	6.5	3.2
Periodicals	4.9	3.1	2.0	3.6	3.3
Newspapers	5.2	4.8	3.9	8.5	5.4
Household furniture	1.6	3.7	2.7	2.7	1.4
Capital equipment	1.7	1.8	2.0	2.2	.4
Heavy trucks	3.1	3.1	3.0	4.1	–4.5
Truck trailers	2.6	3.3	7.7	2.2	–1.4
Metal cutting machine tools	3.2	.6	1.8	4.1	3.1
Metal forming machine tools	1.5	2.6	3.5	2.2	2.6
Computers	–14.9	–12.5	–6.8	–12.7	–22.3
Agricultural machinery	3.0	2.9	2.7	4.7	1.4
Construction machinery	3.1	1.1	2.0	2.5	1.8

percent increase in 1995. From December 1995 to December 1996, prices turned down for both passenger cars and heavy trucks, after advancing over the prior 12 months. Prices for light trucks increased less in 1996 than in 1995. Passenger car prices fell in 1996 due to a smaller-than-usual increase in October, lower overall price changes throughout the 1996 model year, and higher incentives from manufacturers to boost sagging sales. Demand for light motor trucks, including sport utility vehicles, was robust, and no inducements were needed from manufacturers to boost sales. By yearend, there were fears of parts shortages, as some suppliers found it increasingly hard to fill manufacturers' orders. Unlike light truck producers, manufacturers of heavy trucks experienced a slump in sales, and therefore decreased prices and increased marketing efforts several times during the year to reverse the slide. At yearend, however, prices were still falling. Increases in April and October caused the index for ships to move up 5.3 percent in 1996, following a 1.2-percent rise in 1995. Much of the industry operated at near capacity in 1996, and had to raise labor rates to attract and retain the highly skilled labor necessary to complete contracted work. Price hikes for materials early in the year also contributed to the increase in ship prices.

Paper products. Following sharp increases in 1995, prices decreased moderately in 1996 for a wide variety of household paper goods, particularly for tissue stock, despite sharp drops in pulp and wastepaper prices. The overall decline in tissue prices was about 3 percent in 1996. Most producers operated near full capacity as demand continued strong and steady.

Drugs and pharmaceuticals. Price increases slowed from 1995 to 1996 for drugs and pharmaceuticals. Prices for over-the-counter drugs turned down 1.7 percent, after rising as much a year earlier. The index for prescription drugs increased about half as much (2.0 percent) as it had risen a year earlier. As in 1995, the industry continued efforts to contain costs, largely through reengineering of research and development functions, refocusing on smaller segments of the market, and achieving better relations with the managed care industry.

Computers. The index for electronic computers fell 22.3 percent in 1996, after declining 12.7 percent in 1995. Prices plummeted in 1996 for personal computers (–34.7 percent), portable computers (–34.1 percent), and mid-range computers (–16.5 percent). Computer sales were robust in 1996, with growth estimates in the 8- to 12-percent range. Manufacturers of personal computers and work stations benefited from an 80-percent drop in prices for memory devices, and also passed along much of the cost savings associated with the halving of prices for Pentium chips. Falling prices for computer storage devices and monitors enabled producers to pass along cost reductions, or to upgrade components without raising prices. Shipments of personal computers also were strong throughout 1996, as prices for components dropped.

Tobacco products and alcohol. Higher prices for cigarettes and cigars resulted in a 2.6-percent increase in the index for tobacco products in 1996. This index had risen 3.6 percent in the previous year. As in 1995, cigarette manufacturers raised prices between April and May. At yearend, however, the index for cigarettes was still more than 22 percent below its 1993 peak. Cigar consumption jumped 4.8 percent in 1995 and sales continued to improve in 1996. A steadily shrinking domestic market for cigarettes resulted in fierce competition among producers for market share. Most of this battle for market has been at home, and has occurred at the expense of the discount, or generic, segment of the market. Discount or generic products accounted for 36.8 percent of the total U.S. market in 1993, but in 1996, that share shrank to less than 30 percent. With the increased share of premium cigarettes to total domestic market, some manufacturers appeared to feel that they could continue to raise premium prices without losing market share to discounted brands. In addition, producers continued to expand their presence in foreign markets, where restrictions against advertising and personal use are generally less intense than in the U.S. domestic market; strategies for doing so include increasing exports and forming joint ventures abroad.

The index for alcoholic beverages was pushed up 3.8 percent from December 1995 to December 1996 as a result of earlier increases for the main inputs, grains.

Energy

The producer price index for crude energy materials advanced 51.2 percent in 1996 after moving up 3.7 percent in 1995. (See table 3.) The index for natural gas rose steeply, having edged down modestly a year earlier. Domestic prices for crude petroleum advanced much more sharply in 1996 than in 1995. The index for coal fell somewhat more than in the year before.

Natural gas prices increased 92.0 percent in 1996. As a result of the extremely cold winter of 1995–96, inventory levels were low in the early months of 1996, and injections into storage were made to build up supply. Harsh winter weather at the start of 1996 also caused inventories of natural gas to be drawn down earlier than anticipated. Although pipelines moved natural gas at full capacity, disruptions in supply limited transmissions in some parts of the country during the cold spell. Heightened concerns over spot shortages lifted prices. Supplies were low through summer, and when the heating season approached later in the year, it became apparent that storage stocks for the 1996–97 season would not be ample. In 1996, BLS was able to eliminate the 1-month publication lag for the natural gas index. With a new sample that reflects recent restructuring of the natural gas industry,

Table 3. Annual percent changes in Producer Price Indexes for selected energy items, 1992–96

Index	1992	1993	1994	1995	1996
Finished energy goods	–0.3	–4.1	3.5	1.1	11.7
Gasoline	–4.2	–16.8	11.2	2.4	27.1
Home heating oil	–5.4	–10.1	6.9	11.9	25.0
Residential electric power	1.2	.8	1.5	.9	.6
Residential natural gas	4.6	5.4	–2.6	–2.4	11.2
Intermediate energy goods	.7	–4.2	2.9	1.1	11.2
Residual fuels	24.3	–17.8	10.2	–4.7	32.8
Natural gas to electric utilities	2.7	–13.0	3.4	–1.4	6.1
Diesel fuels	–3.8	–15.9	5.9	11.1	26.2
Jet fuels	–5.4	–11.7	4.3	6.1	26.1
Commercial power	1.8	3.2	2.3	.6	–.1
Crude energy materials	2.3	–12.3	–.1	3.7	51.2
Natural gas	7.5	–3.8	–14.0	–.3	92.0
Crude petroleum	–2.4	–27.7	21.1	10.8	35.8
Coal	.2	1.0	–2.1	–.8	–1.1

the index now is designed to measure changes in the selling price at the wellhead (the point at which natural gas exits the ground) of natural gas from producers selling to industrial customers, pipelines (on a very limited basis), marketers, and other purchasers of natural gas.

Prices for domestically produced crude petroleum advanced 35.8 percent in 1996, following a 10.8-percent rise in 1995. Prices were highly volatile in 1996 due to low inventories of crude oil and refined products; increased demand for refined products, particularly home heating oil, as a result of harsh 1995–96 winter weather; and uncertainties surrounding the oil-for-food sale from Iraq. By yearend, Iraq had agreed to a United Nations resolution calling for this humanitarian oil sale. Later in December, Iraq resumed its export of crude oil.

After increasing moderately in both 1994 and 1995, the index for intermediate energy goods advanced 11.2 percent in 1996. Price increases accelerated substantially for gasoline, liquefied petroleum gas, jet fuels, and diesel fuel. Indexes turned up in 1996, following declines in 1995, for natural gas and residual fuel. Price declines slowed for petroleum and coal products (not elsewhere classified). By contrast, prices for electric power and coke oven products turned down after rising a year earlier.

The index for residual fuels, a major component of intermediate energy goods, rose 32.8 percent in 1996, compared to a decline of 4.7 percent in 1995. During the first few months of 1996, there was a modest recovery in prices for residual fuel. Prices moved up during the 1995–96 winter season, as utilities with fuel-switching capabilities elected not to burn more costly natural gas. As demand for natural gas rose, prices for that commodity climbed. The cool weather in late summer resulted in reduced cooling requirements, and thereby lessened demand from electric utilities for lower sulfur residual fuel. Although demand for residual fuels dipped, higher costs for crude oil kept prices up over the year. Demand for jet fuels, particularly kerosene-type, was up 6.3 percent over the 1995 level. Jet fuel inventories trailed those of the preceding year, although production of jet fuels in 1996 exceeded the 1995 level.

Price increases for finished energy goods accelerated from 1.1 percent in 1995 to 11.7 percent in 1996. Prices rose much more rapidly than in the previous year for gasoline and home heating oil. The index for residential natural gas turned up, following a decline a year earlier. However, price increases slowed from 1995 to 1996 for residential electric power; prices fell even more in 1996 than they had fallen in the previous year.

Price increases for gasoline accelerated from 2.4 percent in 1995 to 27.1 percent in 1996 as a result of increased demand, low gasoline inventory levels, higher crude oil prices, and uncertainty about crude oil supplies from the Middle East. In April and May, low crude oil and gasoline stocks and uncertainties about the supply situation drove gasoline prices higher. Higher costs for crude oil, along with strong demand for fuel from the trucking industry, led to higher prices for number 2 diesel fuel. Price increases for home heating oil also accelerated from 1995 to 1996. Home heating oil stocks were at extremely low levels throughout much of the year. Although several refineries shifted away from producing gasoline to producing heating oil in August—earlier in the year than usual—this did not allay fears that inventories would not be sufficient for the approaching winter season.

Foods and related products

Farm prices, as measured by the producer price index for crude foodstuffs and feedstuffs, turned down 1.0 percent in 1996, after increasing 12.9 percent in 1995. (See table 4.) Prices fell in 1996, after rising in 1995, for corn, wheat, soybeans, Irish potatoes for processing, slaughter turkeys, and raw cane sugar. Price increases slowed for slaughter hogs, fluid milk, and slaughter broilers and fryers. By contrast, prices turned up in 1996 after falling a year earlier for Louisiana rough rice and alfalfa hay. Price increases accelerated for fresh fruits and melons and for unprocessed finfish and shellfish. Prices fell less in 1996 than in 1995 for slaughter cattle and for fresh vegetables (except potatoes).

The index for intermediate foods and feeds advanced 2.1 percent in 1996, following a 10.3-percent climb in 1995. In 1996, price increases slowed for prepared animal feeds and for dry, condensed, and evaporated milk products. Prices turned down after rising a year earlier for flour, natural and processed cheese, and malt and malt byproducts. By contrast, price increases accelerated for fluid milk products, pork, refined sugar, chips, confectionery materials, and liquid soft drink bases. Prices declined less in 1996 than in 1995 for crude vegetable oils. The index for butter turned up after falling in the previous year.

Prices received by domestic producers of finished consumer foods rose 3.4 percent in 1996, after moving up 1.9 percent in 1995. The more rapid rise in price increases for foods was led by an acceleration in price increases for fresh fruits and melons. Prices also rose more than in the previous year for pork, processed finfish and shellfish, and bakery products. Following declines in 1995, prices turned up in 1996 for beef and veal and for pasta products. Price declines slowed for fresh and dry vegetables. By contrast, price increases slowed for processed young chickens, dairy products, soft drinks, eggs for fresh use, confectionery end products, and processed fruits and vegetables. Prices turned down in 1996 after rising in 1995 for processed turkeys and milled rice. Prices for roasted coffee and for shortening and cooking oils both fell about as much as they had fallen a year earlier.

Grains and feeds. From December 1995 to December 1996, grain prices fell 20.3 percent, following a 44.4-percent advance in the prior 12 months. Adverse weather during the planting and harvesting seasons, coupled with strong domestic and foreign demand, drove grain prices to historic high levels during the early months of the year. However, market correction forces and increased acreage plantings in the face of higher prices led to bumper crops for corn and a bountiful wheat crop later in the year, which served to drive prices down. Wheat prices fell 19.3 percent in 1996, after increasing 29.9 percent in 1995. Prices increased early in the year due to poor weather during most of the planting and harvesting season, along with strong export demand, particularly from China. Prices slid later in the year due to a combination of factors. Corn prices fell and livestock producers began to switch back from feeding wheat (which had traditionally been a more costly feed) to feeding corn to cattle. High wheat prices in May and June caused many growers to plant more wheat, helping to raise future supply estimates. In addition, the weather was more favorable later in the year.

Table 4. Annual percent changes in Producer Price Indexes for selected food items, 1992–96

Index	1992	1993	1994	1995	1996
Finished consumer foods	1.6	2.4	1.1	1.9	3.4
Pork	–.3	4.3	–11.1	15.3	21.9
Dairy products	–2.2	3.1	–2.0	5.4	2.4
Fresh fruits and melons	–15.7	11.8	–11.2	2.5	37.2
Fresh and dry vegetables	67.4	27.7	25.6	–36.0	–24.3
Roasted coffee	–6.9	5.5	49.8	–8.2	–8.4
Beef and veal	5.9	–6.0	–4.8	–1.4	7.4
Processed poultry	3.6	4.0	–3.7	8.4	2.6
Intermediate foods and feeds	–.5	5.5	–4.5	10.3	2.1
Prepared animal feeds	.6	6.0	–10.6	20.6	5.4
Crude vegetable oils	5.4	34.3	4.1	–14.1	-9.3
Flour	.5	8.6	–1.1	20.1	-9.0
Confectionery materials	–8.1	10.4	2.2	1.5	2.2
Refined sugar	–1.2	–.6	.8	.8	4.2
Crude foodstuffs and feedstuffs	3.0	7.2	–9.4	12.9	–1.0
Slaughter hogs	7.6	–5.0	–21.3	40.6	23.2
Soybeans	3.3	20.1	–18.1	26.7	35.2
Wheat	–1.2	18.6	–5.6	29.9	–19.3
Corn	–10.4	34.7	–22.4	49.4	–21.0
Fluid milk	–7.2	6.7	–5.2	8.4	1.1
Slaughter cattle	8.8	–7.1	–5.3	–5.2	–2.5

Corn prices dropped 21.0 percent in 1996, after rising almost 50 percent in 1995. Early in the year, several factors combined to drive prices up, including exceptionally strong export demand from Asia, disease-plagued crops, severe weather conditions (which convinced some farmers to convert acreage to other crops, such as soybeans), and delayed plantings in the fall of 1995. Later in the year, prices dropped on the expectations of bountiful corn harvests and good weather. Corn farmers also increased their corn acreage substantially. One troubling result of the 1996 experience for corn farmers is that when corn prices skyrocketed, feeders explored alternatives to corn as a feed; demand for feed corn may be reduced in the long run, if such feeders decide not to switch back to corn.

Slaughter livestock and meats. Despite high costs for corn and other feed grains, hog prices were high enough in 1996 that hog farmers enjoyed positive returns all year. There was exceptionally robust demand for pork products from Japan and other foreign markets. Domestic demand also was very strong, as major fast food service outlets introduced new sandwich selections with bacon. Major restructuring of the pork industry in recent years has transformed the United States into one of the world's largest pork exporters. Increased economies of scale for hog production, advances in genetic research, and larger and more efficient slaughter facilities also have contributed to this transformation. Pork prices rose 21.9 percent in 1996, following a 15.3-percent rise in 1995.

In 1996, prices for slaughter vealers, slaughter steers and heifers, and slaughter cows and bulls either dropped or showed no change. Extremely high feed costs and a lack of natural pastures due to persistent drought conditions in the Southwest resulted in a significant sell-off of the Nation's cattle herd, commencing in the autumn of 1995 and continuing into 1996. The resulting surge in supply and lack of demand for animals to feed caused prices to decline sharply in the first 6 months of the year. Cattle producers then began to retain and even build up their herds, offering much lower numbers for slaughter. Prices for beef and veal began to climb in June 1996 and kept rising through November. Export demand, particularly from Japan, was dampened on unwarranted fears of *E coli* contamination.

Strong export demand pushed prices for slaughter broilers and fryers higher in 1996, despite higher feed costs. Exports were estimated to be 18 percent higher in 1996 than in 1995.

Shipments to Russia, China, and South Africa showed strong growth. The index for processed young chickens increased 5.1 percent in 1996; chicken wings continued to sell at premium prices because of the "buffalo wing" phenomenon gripping the country. Prices for chicken eggs increased 16.6 percent in 1996 on the strength of exceptionally strong export demand for both shell eggs and egg products.

Dairy products. Prices for dairy products increased in 1996. Prices for fluid milk rose sharply during most of the first 10 months of the year when supplies were tight, only to decline in the latter months of the year as the supply situation became more balanced. Higher costs for milk and butter caused prices for many manufactured dairy products, such as ice cream and cheese, to increase throughout much of the year.

Intermediate industrial materials

Price increases for intermediate materials other than foods and energy turned down 0.9 percent in 1996 after several years of moderate advances. Indexes for nondurable and durable manufacturing materials, containers, and components for manufacturing all moved down in 1996 after increasing in 1995. Prices for construction materials advanced about as much as they had risen a year earlier. Price increases slowed for supplies.

Table 5. Annual percent changes in Producer Price Indexes for selected intermediate and crude materials other than foods and energy, 1992–96

Index	1992	1993	1994	1995	1996
Intermediate goods other than foods and energy	1.2	1.6	5.2	3.2	–0.9
Nondurable manufacturing materials	.3	–.6	10.4	5.9	–3.3
Inedible fats and oils	16.0	–6.1	48.0	–3.9	2.1
Woodpulp	5.7	–14.0	38.1	40.7	–33.0
Basic organic chemicals	.0	–.7	15.7	.4	3.6
Durable manufacturing materials	1.2	2.5	9.8	1.1	–1.4
Copper	–1.2	–19.7	68.2	–.1	–22.9
Aluminum	7.4	–11.1	64.4	–7.3	–12.8
Lead	–8.5	.0	37.5	9.1	4.2
Zinc	—	—	—	–5.7	–1.4
Construction materials	2.7	5.0	3.9	1.9	1.8
Gypsum	4.4	12.8	30.8	1.0	6.6
Nonferrous wire and cable	–.8	–3.1	13.8	1.6	–3.1
Softwood lumber	23.1	30.8	–9.6	–10.3	19.6
Crude nonfood materials, less energy	5.7	10.7	17.3	–4.2	–5.5
Wastepaper	11.7	–12.3	179.6	–50.9	–1.3
Nonferrous scrap	.9	–14.0	70.3	–10.3	–7.9
Raw cotton	–2.8	12.9	34.9	4.2	–13.0

NOTE: Dash indicates data not available.

Nondurable manufacturing materials. The index for nondurable manufacturing materials fell 3.3 percent in 1996, following a 5.9-percent advance in 1995. (See table 5.) This downturn was led by steep declines in the prices of paper, paperboard, and woodpulp, all of which had advanced sharply in 1995. Prices also turned down after rising a year earlier for phosphates, basic inorganic chemicals, synthetic rubber, alkalies and chlorine, and paint materials. Price increases slowed for other basic organic chemicals, synthetic fibers, processed yarns and threads, finished fabrics, medicinal and botanical chemicals, and nitrogenates. By contrast, prices turned up, after falling in 1995, for primary basic organic materials, plastic resins and materials, and inedible fats and oils. Price declines for leather slowed from 1995 to 1996.

Price declines for pulp and paper products were widespread in 1996, owing to a continuation of the turbulent swings in pulp and paper markets over the past 2 years. Woodpulp prices fell sharply(–33.5 percent) throughout the year, but experienced a comeback toward the end of the year. Market woodpulp capacity declined 1.4 percent in 1996, ending the year at approximately 11 million tons. The outlook for growth in total woodpulp capacity was slim, because pulp mills are increasingly substituting more recovered paper for woodpulp.

Paper prices fell 14.2 percent last year after showing a 20.5-percent increase in 1995. Prices for all grades of paper declined in 1996. Newsprint led the way with a 33.9-percent decrease. Although inventories of U. S. and Canadian newsprint were 74 percent higher in November 1996 than in November 1995, three of the largest North American newsprint producers announced a $75 per metric ton increase for standard 30-pound newsprint, effective February 1, 1997, to reverse the slide in prices. Newsprint prices had not increased since October 1995, and there was much pessimism about the ability of producers to make the proposed price hikes stick. For other paper grades, backlogs grew and there was some evidence that inventories were being depleted. One exception was coated free-sheet, which showed some price improvement as major producers cut back on discounts.

Price changes for paperboard in 1996 mirrored those for paper, as they had in 1995. In the fourth quarter of 1996, the paperboard industry was in disarray, as major integrated producers attempted to maintain a price increase for linerboard and corrugating medium, amid reports of rebates and discounting by some producers. The capacity utilization rate for produces of unbleached linerboard improved significantly in 1996, buoyed by continued strength in exports.

Price increases for basic organic chemicals accelerated from 0.4 percent in 1995 to 3.6 percent last year. In 1996, advances for the primary components (up 20.9 percent) outweighed declines for the intermediate component. Primary basic organic chemicals, whose prices are especially sensitive to gasoline and petroleum costs, include ethylene, toluene, benzene, and other basic organic chemicals. Production of these chemicals also is widely influenced by production in other countries. Over the past 2 years, production of basic organic chemicals has been greatly expanded in Europe, a development that has lowered import prices and raised world stocks.

Competitive price pressures in world markets caused phosphate prices to decline in 1996, after rising sharply in 1994 and 1995. Demand for phosphate was steady in 1996 as domestic rock sources dwindled. U.S. producers discontinued exporting significant quantities of rock for fear that they would deplete their stocks and no longer be able to meet domestic demand. Because the United States is no longer an international force in the supplying of rock, this action did not significantly affect world markets; other countries are now better positioned to supply rock to one another. However, prices set abroad played a major role in the pricing structure of U. S. producers, as they sought to managed their shriveling rock assets.

The index for plastic resins and materials rose 4.2 percent in 1996, mostly due to increases for thermoplastic resins. Plastic resins and materials are petrochemically derived, and as such, they closely react to changes in prices for crude petroleum, which showed sharp upward movements over the past 2 years.

Durable manufacturing materials. In 1996, the index for durable manufacturing materials fell 1.4 percent, about as much as it had risen a year earlier. Prices turned down, after increasing in 1995, for aluminum mill shapes, copper and brass mill shapes, steel mill products, silver, gold, and platinum. Price declines accelerated for copper, aluminum, and flat glass. Price increases slowed for cement, prepared paint, and lead. By contrast, price declines slowed for plywood and zinc. Hardwood lumber prices turned up, following a decrease in 1995.

Copper prices decreased 22.9 percent in 1996, following almost no change in 1995. Rises in London Metal Exchange (LME) inventories and forecasts of surpluses by yearend eroded prices early in the year. At midyear, a large Japanese trading firm announced huge losses due to unauthorized trading by the company's chief copper trader. Panic selling ensued, and copper prices plunged 27.9 percent during June and July on fears of large-scale copper liquidation by the Japanese firm. In addition, there was uncertainty in 1996 over the new capacity scheduled to come on-line over the next several years, because increased smelting and mining operations could lead to overproduction. The copper market recovered from its tailspin in the final 3 months of the year when prices edged up.

Prices for aluminum fell 12.8 percent in 1996 after a decline of 7.3 percent in 1995. As in 1995, a fairly consistent trend of declining prices prevailed last year, as traders focused on sharp upturns in LME inventories. Production outpaced demand for much of the year, as producers added about 200,000 metric tons to the aluminum supply. During the second half of 1996, producers were able to work down their inventories, and visible drops in LME inventories contributed to a price rally during the fourth quarter. With production exceeding demand for much of the year, prices remained low despite the rally late in the year.

Prices for gold, silver, and platinum decreased by 5.3, 7.7, and 11.5 percent, respectively, in 1996, as funds flowed into the stock market rather than into precious metals. Gold prices were buoyed in the first half of the year by strong worldwide economic growth and healthy demand. However, a strong dollar, weak demand, and a robust stock market contributed to a drop in gold prices during the second half. There was optimism that platinum prices would rise if the U. S. Mint produced a platinum bullion coin (a first for the United States) and a near-pure gold coin. By yearend, the Mint had not exercised these options.

Construction materials. The producer price index for construction materials increased 1.8 percent in 1996, about the same as in 1995. The largest increases were for softwood lumber, gypsum products, cement, and millwork, and for plumbing fixtures and brass fittings. Declines were registered for nonferrous wire and cable, plastic construction products, plywood, asphalt felts and coatings, and steel wire.

Prices for lumber rose almost 15 percent in 1996. Timber supplies were tight throughout the year and the lumber industry scampered about for affordable lumber in the face of rather high costs of logs relative to prices received for finished products. Talks intensified in the spring around a pact between the United States and Canada to limit Canadian exports to the United States, sparking a great deal of volatility in lumber prices that were already on a slowly but steadily increasing course. Softwood lumber prices moved up almost 20 percent in 1996 as a result of rapid rises for Douglas fir, southern pine, and rough softwood. Increases for hardwood lumber were much less dramatic. (Most hardwood lumber is used for furniture manufacturing; however, some is used in residential construction, particularly for flooring.) Prices for general millwork (which includes cabinets, vanities, door frames, and sashes) increased 2.6 percent in 1996. In the South, timber cutting regulations and higher stumpage fees forced many mills into a cost-squeeze situation. Lower demand for pulp and paper eased pressure on supplies of logs in that region. In the western States, lumber producers relied predominantly on second-growth private timber. In addition to seeking timber at affordable prices, producers endeavored to procure the correct type and species of logs to meet demand. By contrast, prices for softwood plywood fell 2.5 percent in 1996, having peaked in September. Plywood production gained in 1996 due in part to its increased popularity for pest and rot control in homes, as well as for insulation. In addition, boat manufacturers are using treated plywood almost exclusively of late, particularly in pontoon boats. Treated plywood is used for the deck or sub-floor, then encased with fiberglass.

Price increases for gypsum products accelerated from 1.0 percent in 1995 to 6.6 percent in 1996, on the strength of robust demand from the home improvement sector. Most (uncalcined) gypsum is used to manufacture prefabricated products such as gypsum board. As in 1995, prices for insulation materials, such as building batts, moved up modestly, buoyed by energy conservation efforts. Prices for cement rose 5.0 percent in 1996, following a 6.0-percent rise in 1995. Increased prices for cement, a key input, were mostly responsible for that the second consecutive annual rise of about 3 percent in the index for concrete and concrete products.

Basic industrial materials

The producer price index for crude nonfood materials other than energy fell 5.5 percent in 1996, following a 4.2-percent drop in 1995. This index is usually considered an indicator of the future strength of the economy. Overall, this index has been falling since the second half of 1995, when it decreased at an 18.7-percent seasonally adjusted annual rate. In the first half of 1996, the rate of decline was 8.9 percent; the rate slowed to –1.9 percent in the last 6 months of the year.

In 1996, prices turned down, after rising in the previous year, for copper ores, raw cotton, copper base scrap, pulpwood logs, gold ores, and phosphates. Prices fell more in 1996 than they had fallen in 1995 for iron and steel scrap. The indexes for iron ore and for sand, gravel, and crushed stone both rose less in 1996 than in 1995. By contrast, price declines slowed for wastepaper and aluminum base scrap, and for hardwood and softwood logs, bolts, and timber. Cattle hide prices turned up, following a decline a year earlier. Price increases accelerated for leaf tobacco and for other roundwood products.

Wastepaper prices fell sharply from June 1995 through May 1996, then recovered, only to slide again at the end of the year. Prior to the spring of 1996, wastepaper prices had risen higher and more rapidly than the market could sustain, causing the massive decline that began in June 1995. Overall, by yearend, prices for wastepaper collected at curbside dropped more than those for wastepaper collected from large retailers, supermarkets, converters, and major office programs.

Prices for iron and steel scrap declined 11.1 percent in 1996, after decreasing 4.1 percent in 1995. This usually volatile index showed relatively restrained price movement for most of the year, except for two fairly sharp drops in October and November. At the start of the year, there was optimism that the opening of several scrap-consuming electric arc mills would lead to higher demand and higher prices. Domestic steel production rose, but less than expected, due to production problems at existing mills and startup problems at some of the new mills. A weak world steel market caused a pileup at U. S. export yards. Because many domestic steel mills had already amassed large scrap inventories in anticipation of shortages, a glut situation resulted in domestic markets. There also were indications that supplies of pig iron, a substitute for ferrous scrap, were up substantially, particularly in Russia, further reducing U. S. scrap exports. Prices for aluminum base scrap were lower in 1996 due to an oversupply of aluminum scrap. A prolonged downturn in primary aluminum prices contributed to lower aluminum base scrap prices. Prices also were lower in 1996 for copper base scrap, reflecting falling prices for primary copper and sluggish export demand.

Prices for raw cotton fell 13.0 percent in 1996, following an increase of 4.2 percent in 1995. The 1996 decline resulted from reduced demand from domestic mills and a 25-percent reduction in exports over the 1995 level. Leaf tobacco prices fell in the spring of 1996, ending the year 4.2 percent higher than in 1995. In 1996, supplies were shorter as a result of crop damage from Hurricane Fran in September. High winds damaged crops in the field, and crops already in tobacco-curing barns were affected by power outages.

Selected industries

Mining The producer price index for the net output of total mining industries advanced 40.6 percent in 1996, after falling 2.9 percent in 1995. (See table 6.) Prices for the oil and gas extraction industry group rose more than 50 percent, following a 3.5-percent decline in the previous year. By contrast, prices for the metal mining industry group turned down almost 12 percent, after posting a 6.2-percent advance in 1995. The index for the industry group engaged in mining nonmetallic minerals increased 2.2 percent in 1996, slightly less than in the year before.

Manufacturing. Following a 3.0-percent rise in 1995, the producer price index for the net output of the domestic manufacturing sector moved up 2.2 percent. Although price increases accelerated sharply in 1996 for the industry group producing refined petroleum and related products, and prices for the apparel grouping continued to rise, several other industry groups showed a deceleration in price increases, including food and kindred products; tobacco products; textile mill products; furniture and fixtures; printing and publishing; chemicals and allied products; leather products; nonmetallic mineral products; fabricated metal products; transportation equipment; and measuring and controlling instruments. In addition, prices turned down in 1996, after rising in 1995, for paper and allied products, rubber and plastic products, primary metal industries, machinery (except electrical), and electrical and electronic machinery.

Table 6. Annual percent changes in Producer Price Indexes for the net output of major industry groups, 1992–96

Index	1992	1993	1994	1995	1996
Total mining industries	1.8	–7.9	–1.0	2.9	40.6
Metal mining	–4.7	–6.8	35.5	6.2	–12.7
Coal mining	–1.4	–.1	–2.1	–.8	–.7
Oil and gas extraction	3.0	–10.7	–3.2	3.5	57.9
Mining and quarrying of nonmetallic minerals, except fuels	1.5	1.0	1.4	2.9	2.2
Total manufacturing industries	1.6	.8	2.4	3.0	2.2
Food and kindred products	1.0	2.2	–.3	4.0	3.2
Tobacco manufactures	7.5	–21.7	.3	3.8	3.2
Textile mill products	.5	–.1	.7	2.6	1.1
Apparel and other finished products made from fabrics and similar materials	1.7	.5	.4	.8	2.0
Lumber and wood products, except furniture	11.2	13.6	1.3	–2.6	3.0
Furniture and fixtures	1.5	2.9	3.0	3.0	1.9
Paper and allied products	.7	–.9	10.7	13.1	–10.3
Printing, publishing, and allied industries	3.7	3.1	3.8	7.0	2.4
Chemicals and allied products	1.9	.1	7.4	6.0	1.5
Petroleum refining and related products	–1.4	–12.9	8.9	2.6	22.7
Rubber and miscellaneous plastic products	1.1	1.0	3.6	2.6	.1
Leather and leather products	2.1	1.3	2.5	1.5	1.1
Stone, clay, glass, and concrete products	.7	2.9	4.3	2.7	1.3
Primary metal industries	–1.1	1.6	9.3	3.2	–3.0
Fabricated metal products, except machinery and transportation equipment	.8	1.1	2.4	3.4	.6
Machinery, except electrical	–.1	.1	.9	1.4	–.6
Electrical and electronic machinery, equipment, and supplies	.8	1.2	.3	–.7	-.7
Transportation equipment	2.0	3.0	2.4	2.1	.5
Measuring and controlling instruments; photographic, medical, optical goods; watches, clocks	1.7	1.2	1.2	1.5	.6
Miscellaneous manufacturing industries	1.5	1.8	1.6	2.0	1.4
Services industries:					
Railroad transportation	.9	.9	.4	–.3	.0
Motor freight transportation and warehousing	—	–6.4	2.7	1.7	2.4
United States Postal Service	.0	.0	.0	10.4	.0
Water transportation	–4.3	–.9	2.5	2.4	.2
Transportation by air	—	8.2	–.3	7.4	5.9
Pipelines, except natural gas	.4	.6	10.2	3.4	–8.8
Health services	—	—	—	3.5	1.7

NOTE: Dash indicates data not available.

Services. The index for railroad line haul operations was unchanged in 1996, following a 0.3-percent decline in 1995. Indexes advanced for wood and lumber products, farm products, and transportation equipment, while declines occurred for coal and some other categories. Despite a rise in rail earnings, overall rail freight traffic declined in 1996. During the first quarter of 1996, paralyzing winter weather in the Midwest and Northeast resulted in a backlog in shipments of coal, lumber, grains, and other food-related products. Shipments of highly lucrative coal and automotive equipment picked up in the second quarter. A major industry labor agreement was ratified during the third quarter; the net effect of this pact will be reduced industry-wide labor costs, a major component of operating expenses. Overall, rail traffic was down in the fourth quarter, despite an upsurge in grain shipments in late October. Fourth-quarter rail shipments and rates were affected by increased fuel costs, declining demand for grain shipments, strikes at automobile manufacturing plants, and adverse weather conditions in western States. Consolidation in the rail industry continued unabated in 1996. Ongoing mergers and takeovers caused some disruptions in line haul operations, as companies and their work forces were reorganized and streamlined, and some parallel rail lines were eliminated.

From December 1995 to December 1996, the index for trucking (except local) rose 3.5 percent, following a 0.9-percent increase in 1995. The strength of the trucking industry was evident in steady price increases throughout 1996. Less-than-truckload carriers, in particular, benefited from the rise in demand and posted profits during each calendar quarter of the year. Higher fuel costs and driver shortages combined to exert upward pressure on prices. However, with industry competition very fierce, many carriers were reluctant to pass along all of these associated cost increases to their customers.

The index for scheduled air transportation moved up 5.9 percent in 1996, after advancing 7.4 percent in 1995. Much of the 1996 increase was due to an 8.2-percent rise in domestic airline fares. A relatively strong economy permitted airlines to fill seats and post steady increases during the year. This came on top of an even stronger performance in 1995. Prices for scheduled air cargo transportation increased modestly in 1996, despite higher operating costs, particularly for jet fuel. Competition in the freight market was especially keen. Prices for airline fares fluctuated throughout the year due to a number of factors. Chief among these were the expiration of the Federal excise tax in January, its re-imposition in August, and a 10-percent price hike by major carriers 2 weeks before the tax was re-imposed. The re-imposition of the tax and the price hike had no net effect on the producer price index because taxes are not included in index calculation. Major carriers, citing continued strong traffic, raised domestic prices 2.5 percent in September. In addition, jet fuel costs increased throughout the year, and there were two highly publicized crashes—one affecting a low-cost, mostly nonunion carrier and the other, a major carrier.

The index for airports, flying fields, and airport services rose 3.8 percent in 1996, following a 2.2-percent advance in 1995. Leased space for concessions was up 7.5 percent over the year. This index is subject to large swings; leases for concessions often are based on a percent of gross revenue, and are highly indicative of passenger traffic and spending habits of passengers. Airport managers chose to raise prices for services rendered to air passenger and air cargo carriers during 1996 in order to fund airport improvements. In the past, airports had partially funded operations by collecting Passenger Facility Charges; however, this source is not sufficient to fund the multimillion dollar expansions now going on at many airports.

A 7.8-percent increase in commissions for airline arrangements resulted in a 2.6-percent rise in the index for travel agents in 1996. This followed a decline in 1995, when airlines had capped commissions at $50 for domestic flights. The cap system has severely reduced the amount of commissions received for arranging air travel.

The radio broadcasting index advanced 10.8 percent in 1996, after rising 5.8 percent in 1995. Several major events helped to propel prices higher last year. During the second quarter, the Telecommunications Act of 1996 was signed into law, spurring major consolidations within the radio industry. This law deregulated the industry by allowing broadcasters to own as many radio stations as they desired on a national level. Later in the year, the Olympics being held in Atlanta heightened demand for radio advertising. In the fall, the elections triggered higher demand and prices for radio time. The index for cable and other pay television services increased 5.1 percent in 1996, mostly on the strength of higher rates for subscriber service. Increases resulted from the partial deregulation of the cable industry: new regulations imposed by the Federal Communications Commission allow cable companies to pass along price increases caused by inflationary pressures. Previously, these companies could only increase their rates in response to changes in their programming costs.

The help supply services index increased 1.4 percent in 1996. Increases were registered throughout the industry as business remained brisk, particularly for employee leasing services and temporary help supply services. Unlike other help supply service establishments, employee leasing services are arrangements whereby a businesses transfers employees to the payroll of a leasing firm. In turn, these employees are then leased back to their original employer, where they continue to be under the direct supervision of the client company and work in the same capacity as before, in an ongoing permanent relationship. Industry downsizing of late has boosted demand for employee leasing arrangements, also called contract staffing or employee administrative services. In such arrangements, the employee leasing firm administers payroll, pension, health plans, and other personnel related functions.

The index for accounting, auditing, and bookkeeping services increased 2.8 percent in 1996, reflecting semiannual adjustments in January and July to the billing rates and pricing strategies of industry firms.

Price increases for health care services slowed from 3.5 percent in 1995 to 1.7 percent in 1996. The indexes for both offices and clinics of doctors of medicine, as well as that for general medical and surgical hospitals, mirrored this slowdown. As with hospitals, there was a growing trend toward consolidations of physicians into larger organizations in 1996: doctors increasingly are competing for managed care dollars by creating their own networks to bargain more effectively with health plan providers. In addition, managed care plans exerted even more pressure on the health care industry during the year to lower prices and keep rate increases to a minimum. With the increased presence of health maintenance organizations in the health care industry, physicians are moving away from traditional fee for service arrangements in favor of capitation arrangements, or fixed prepayments per member. Although the producer price index does not capture changes in capitation rates, this form of reimbursement is becoming increasingly popular and has resulted in smaller revenue streams for physicians. As a result of the emphasis placed by managed care organizations on primary and preventing care, demand for specialists has been sharply reduced. Mergers were rife among hospitals in 1996. Forces propelling these consolidations were (1) excess hospital beds, as technological advances and managed care shortened hospital stays; (2) the desire for greater bargaining powere when nogotiating for price sensitive managed care contracts, and (3) the increased attractiveness of comprehensive hospital systems to health plans and insurers.