Price highlights of 1988: rising pressures on consumer prices

The acceleration in producer prices was not reflected in the Consumer Price Index, where increases remained in the 4-percent range

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For the 12-month period ended in December 1988, the Consumer Price Index for All Urban Consumers (CPI-U) rose 4.4 percent, the same as in 1987. In contrast, the Producer Price Index (PPI) accelerated over the previous year. The PPI for Finished Goods rose 4.0 percent in 1988, compared with 2.2 percent in 1987. The Intermediate Goods index climbed 5.7 percent in 1988, a little more than in the previous year, while the increase in the Crude Goods index slowed to 2.8 percent, from an 8.9-percent surge in 1987. (See table 1.)

In addition to rising materials prices, 1988 saw increasing cost pressures resulting from the fuller utilization of resources. The downward movement (towards 5 percent) in the unemployment rate coincided with an upward move of 4.9 percent in the Employment Cost Index, the largest increase in that measure since 1984. The current high rate of capacity utilization has also exerted pressure on prices.

Consumer prices

While the overall rates of change for the CPI-U were the same in 1987 and 1988, the composition was notably different. Energy costs changed little on average in 1988, after partially rebounding in 1987 from the effects of the 1986 oil glut. Excluding energy, however, the CPI-U advanced 4.7 percent during 1988, compared with a 4.1-percent increase in 1987. Rising food prices were partially responsible for

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this acceleration—food prices were up 5.2 percent in 1988, the most since 1980, reflecting, in part, the adverse summer weather. Shelter costs increased slightly less than in 1987. The index for all items excluding food, shelter, and energy—up 4.7 percent in 1988—continued to accelerate from its 1986 low of 3.3 percent. Prices for both the other commodities and the other services groups accelerated in 1988. Within the other services group, each component contributed to the larger advance, in particular, automobile finance charges and automobile insurance costs. Price increases for clothing and tobacco products accounted for nearly 40 percent of the rise in the other commodities index.

Food

Retail food prices rose 5.2 percent in 1988, the most since 1980. Grocery store food prices advanced 5.6 percent, following a 3.5-percent rise in 1987. All major grocery store food groups contributed to the acceleration, except fruits and vegetables; even these prices continued to advance (up 6.2 percent in 1988), but not as much as the 12.8-percent rise in 1987.

The CPI for meats, poultry, fish, and eggs rose 5.3 percent in 1988, following a 1.0-percent increase in 1987. Poultry and egg prices rose 17.9 and 16.5 percent, respectively, after declining in 1987. Beef and pork prices increased during the first 6 months of 1988, but slowed or declined in the second half, as higher costs for feed increased the slaughter rates of cattle and hogs. For the 12 months ended in December, beef prices rose 5.6 percent, while pork prices declined 3.1 percent.

The indexes for cereal and bakery products, dairy products, and other food at home each registered its largest increase since 1980, in part due to the summer drought. The adverse weather significantly cut the yields of oats, barley, and wheat, contributing to an 8.4-percent rise in prices for cereals and bakery products. Drought conditions reduced the supply of milk and caused higher retail prices. The index for dairy products rose 4.4 percent in 1988. Reduced supplies of beets and soybeans, induced by the drought, were largely responsible for the increases in the sugar and sweets and the fats and oil components, which led to a 4.8-percent rise in the index for other food at home.

The 1988 increase of 6.2 percent in the index for fruits and vegetables is deceiving. Prices of three of the four major components of this index—fresh fruits, processed fruits, and processed vegetables—increased at double-digit rates. Prices of fresh vegetables dropped 5.1 percent, however, reflecting a return to more normal production levels following supply disruptions in 1987 brought on by heat and drought. Lettuce prices declined 36.1 percent in 1988, after they had more than doubled in 1987 because of the effect of the white fly virus on the winter crop.

The index for food away from home (restaurant meals and snacks) increased 4.4 percent in 1988, following a 3.7-percent rise in 1987.

Energy

The energy component of the CPI changed little in 1988, increasing only 0.5 percent. This is in contrast to the volatile behavior of the energy index in the previous 2 years—it declined 19.7 percent in 1986 and increased 8.2 percent in 1987. During 1986, crude oil prices plummeted as the Organization of Petroleum Exporting Countries (OPEC) abandoned production quotas. Energy prices rebounded in 1987 as OPEC tentatively restored some market discipline, even though hostilities in the Persian Gulf continued unabated. In 1988, Iran and Iraq agreed to a cease-fire, but that development tended to exacerbate the failure of OPEC members to observe their quotas while jockeying for comparative advantage. The continued overproduction led to a steady decline in posted prices for crude oil throughout the year, despite the announcements of another production quota agreement.

The indexes for fuel oil and gasoline—energy components whose price fluctuations usually parallel those of crude oil—declined 6.3 percent and 1.8 percent in 1988, after large increases in 1987. The unexpectedly moderate decline in gasoline prices was the result of heavy consumer demand at the gas pump. Gasoline consumption during 1988 was the second highest on record (trailing only 1978), a result of the increase in the number of cars on the road and in the number of miles driven, and higher speed limits in some areas. Both gasoline and fuel oil indexes remained well below their peak levels reached in early 1981. The index for energy services (gas and electricity) rose 3.2 percent in 1988, after a 0.2-percent increase the previous year.

Charges for electricity increased 2.8 percent, while those for natural gas, which is receiving renewed scrutiny as an environmentally benign fossil fuel, rose 3.6 percent.

Shelter

The CPI for shelter rose 4.5 percent in 1988, following a 4.8-percent increase in 1987. Owners' equivalent rent, which makes up more than two-thirds of the weight of the shelter index, increased steadily throughout 1988, rising 4.8 percent. Residential rent, the other major component of shelter, also rose at a steady pace, finishing with an annual increase of 3.6 percent. Each of these indexes felt the greatest upward pressure in the Northeast region.

Prices of the various components of shelter showed similar, moderate movement. Aside from a 6.6-percent increase in lodging while at school (up 0.4 percent from last year's pace), no component rose more than 4.8 percent. The smallest increase, 2.2 percent, occurred in household maintenance and repairs. The index for maintenance and repair services increased 1.5 percent, the smallest annual rise since prices were first published for that series in 1963. Prices of maintenance and repair commodities advanced 3.0 percent.

Among other elements of shelter, insurance costs rose moderately. Household insurance increased 3.5 percent, while tenants' insurance was up 3.3 percent. Prices for lodging while out of town increased 4.1 percent.

Services excluding shelter and energy

The CPI for services excluding shelter and energy services rose 5.6 percent in 1988, compared with a 4.3-percent advance in 1987. Most of the components contributed to the larger 1988 advance. Prices in the medical care services category rose 6.9 percent, after slowing to a 5.6-percent rate in 1987. This acceleration reflected advances in charges for both professional services (up 6.8 percent) and hospital and related services (up 11.0 percent). (See table 2.)

The April increase in postage rates, the first since February 1985, accounted for the acceleration in the index for housekeeping services, although it still rose less than the average for all items. The other components of housekeeping services registered modest slowdowns from their 1987 increases. Among other nonshelter housing services, charges for other utilities and public services accelerated, rising 3.8 percent. In the second year of its deregulation, the cable television industry posted double-digit rates of price increase. Despite continued declines in long-distance toll charges, telephone services prices turned up in 1988, increasing 1.3 percent. Water and sewer maintenance advanced more in 1988 than in 1987, in part because of measures to combat the summer drought.

The index for transportation services increased 6.0 percent in 1988, after slowing to a 4.3-percent rate in 1987. This acceleration largely resulted from increases of more than 8 percent both for automobile insurance costs and

Index	1962	1983	1984	1985	1986	1987	1968
Consumer Price Index						•	
All items	3.8	3.8	3.9	3.8	1.1	4.4	4.4
	1.3	5	.2	1.8	-19.7	8.2	.5
Energy	-5.0	-3.2	-1.8	3.4	-30.5	17.8	-2.3
Energy services	14.1	4.1	3.5	6	-3.3	.2	3.2
•	4.2	4.5	4.4	4.0	3.8	4.1	4.7
Il items less energy		2.7	3.8	2.6	3.8	3.5	5.2
Food	3.1 2.4	4.7	5.2	6.0	4.6	4.8	4.5
Shelter	2.4	4.7	3.2	0.0			
All items less food, shelter, and energy	6.1	5.0	4.3	3.7	3.3	3.8	4.7
Other commodities	5.5	5.0	3.1	2.2	1.4	3.5	4.0
Other services	7.3	4.9	6.0	5.4	5.6	4.3	5.6
Uther services							
Producer Price Index							
The state of the s	3.6	.6	1.7	1.8	-2.3	2.2	4.0
Finished goods	3.6	2.3	3.5	.6	2.8	2	5.7
Finished consumer foods	÷.1	-9.2	-4.2	2	-38.1	11.2	-3.4
Finished energy goods	5.3	1.9	2.0	2.7	2.7	2.1	4.3
Finished goods less food and energy	0.0			ļ			
Intermediate materials, supplies, and components	.2	1.8	1.4	3	-4.4	5.4	5.7
Intermediate foods and feeds	1	9.3	-5.4	-4.2	5	5.5	10.6
Intermediate energy goods	7	-5.5	1	8	-29.0	9.0	-3.7
Intermediate energy goods Intermediate materials less food and energy	.6	2.9	2.1	1	.1	5.2	7.2
O I I I I I I I I I I I I I I I I I I I	.4	4.7	-1.6	-5.6	-8.9	8.9	2.8
Crude materials for further processing	1.5	7.9	-1.2	-6.4	-1.5	1.8	14.2
Foodstuffs and feedstuffs Crude energy materials	2.6	-4.7	-1.2	-4.9	-27.6	10.7	-9.4
Crude energy materials	-7.6	15.5	-3.4	-4.3	1.8	22.6	6.0

automobile finance charges. The index for automobile registration, licensing, and inspection fees registered its largest annual change since 1984. The index for public transportation rose 3.6 percent, as prices accelerated for all its components.

Each year since 1980, the index for personal and educational services has risen faster than the index for all items. The 1988 advance of 6.7 percent was no exception. More than two-thirds of the advance was due to a 7.6-percent increase in charges for tuition and other school fees. A 6.9-percent increase for personal financial services led the advance in the personal expenses category.

Four remaining categories registered advances near or below the rate of advance for all items. Entertainment services rose 4.6 percent, as the index for club memberships jumped 7.3 percent, after rising only 1.7 percent in 1987. The indexes for apparel services and personal care services each rose 4.4 percent, and charges for automobile maintenance and repair services increased 3.9 percent.

Other commodities

The CPI for commodities excluding food and energy moved up 4.0 percent in 1988, compared with a 3.5-percent rise in 1987. Prices of apparel commodities increased 4.8 percent in 1988, following a 4.9-percent rise in 1987, the largest advance since 1980. Increases in apparel prices tend to be clustered during the introductory period of new spring or fall merchandise, with stable or falling prices in the other months reflecting periodic or end-of-season sales. Women's apparel, which accounts for nearly 40 percent of the apparel

commodities weight, exhibited particular volatility during 1988. Rising prices for raw materials as well as the decline of the dollar's exchange value contributed to the recent increases in the apparel index.

New motor vehicle prices advanced 2.2 percent in 1988, after rising 1.8 percent the year before. Because of the strength of major foreign currencies versus the U.S. dollar, there was greater cost pressure on imported automobiles than on domestic models. Indexes for vehicle categories that include a large proportion of imports (such as motorcycles), or for vehicles that already have a great many features built-in (luxury new cars), each increased more than 5 percent, faster than the corresponding measure for any other vehicle grouping. Used car prices moderated from their rapid rate of increase in 1987, rising just 3.4 percent influenced by the large supply of used cars generated from new car sales. (See table 3.)

Prices of housefurnishings moved up 2.5 percent in 1988, compared with 0.4 percent for 1987. The effect of the weakened dollar on imported furniture helped to push the index higher. Among its components, the index for textile housefurnishings jumped 5.8 percent, after rising only 0.2 percent in 1987, and that for furniture and bedding rose 3.5 percent. A 1.4-percent decrease in the costs of television and sound equipment, the seventh consecutive decline, helped to partially offset a 3.6-percent increase in prices of major household appliances.

Costs of medical care commodities continued to increase at a faster rate than the all-items CPI, rising 6.9 percent in 1988, following a 7.1-percent rate the previous year. Pre-

scription drugs showed the greatest increase of any component, with a 7.8-percent surge. Prices of brand name drugs continued to increase more rapidly than those of generic drugs.

The 1988 price change for entertainment commodities was the same as that for the all-items CPI. All components rose between 3.7 and 4.8 percent, except that for photographic equipment and supplies, which was up 5.8 percent. The weak condition of the dollar versus foreign currencies provided upward pressure on prices of photographic items. The indexes for sporting goods and equipment (up 4.4 percent) and toys, hobbies, and other entertainment (up 4.5 percent) registered their largest annual increases since 1981. Within the other goods and services category, tobacco prices continued to accelerate, surging 9.4 percent in 1988 after recording a 7.9-percent jump the previous year.

Producer prices

The moderate acceleration seen in many PPI series signaled the completion of the sixth year of recovery following the last recession in 1982. As in previous years, strong consumer demand laid the foundation for continued economic expansion. Further boosts came from two other

sources: exports and capital investment. The relatively low value of the U.S. dollar against other major international trading currencies stimulated foreign demand for American-made products. Spending on capital investment was encouraged by the strength and durability of the expansion, which has exerted pressure on capacity and prices in a number of industries. The trend towards rising interest rates during much of the latter part of the year had little immediate impact on either capital spending or residential construction, in part because long-term interest rates moved up far less than short-term rates.

The pressure of high foreign and domestic demand was especially keen on several materials-producing industries, particularly nonferrous metals, paper, chemicals, and plastics. As a result, price indexes for both durable and nondurable manufacturing materials climbed at a double-digit pace during 1988. Yet these substantial advances in material costs, for the most part, were not fully passed through into price hikes of finished goods made from those materials. Producers of finished goods absorbed escalating material prices, in part by sacrificing profit margins to maintain market share in the face of intense competition from imports. Moderate changes in labor costs and an emphasis on modifying production procedures to enhance productivity

Category	1983	1984	1985	1986	1987	1988
Services excluding shelter and energy	4.9	6.0	5.4	5.6	4.3	5.6
Other utilities and public services	4.8	8.1	5.0	3.7	1.9	3.8
Telephone services	3.6	9.2	4.7	2.7	-1.3	1.3
Local charges	3.1	17.2	8.9	7.1	3.3	4.5
Interstate toll calls	1.4	-4.3	-3.7	-9.4	-12.4	-4.2
Intrastate toil calls	7.4	3.6	0.6	.3	-3.0	-4.2
Water and sewer maintenance	8.5	5.5	5.6	5.4	5.2	6.1
	0.5	6.1	6.0	3.8	9.5	10.6
Cable television			6.4	9.4	10.2	7.9
Refuse collection	_	6.1	0.4	9.4	10.2	7.5
tousekeeping services	2.5	2.4	3.9	1.8	1.8	4.0
Postage	0	0	10.2	0	0	13.5
Appliance and furniture repair	4.9	5.6	3.2	2.6	3.1	2.7
Moving, storage, freight, household laundry, and drycleaning	6.2	4.9	7.2	3.2	_	
Gardening and other household services		"	=	_	4.9	4.1
Apparel services	5.0	4.9	4.9	3.8	3.9	4.4
Fransportation services	3.8	6.2	4.9	5.8	4.3	6.0
	3.8	3.2	3.2	3.7	3.8	3.9
Automobile maintenance and repair	3.8	7.6	5.3	6.8	5.4	7.8
Other private transportation services		7.8	12.1	11.8	5.8	8.4
Automobile insurance	9.1				5.6 5.9	8.3
Automobile finance charges	-7.9	6.8	-8.3	-7.3	***	
Automobile registration, licensing, and inspection fees	7.7	8.5	2.1	3.3	1.7	6.1
Other automobile related fees	3.6	5.8	4.3	10.0	5.2	5.1
Public transportation	3.8	6.4	5.1	6.0	1.8	3.6
Airline fares	4.8	6.4	6.3	5.3	1.6	3.3
Other intercity public transportation	7.0	10.7	6.3	4.9	2.0	7.1
Intracity public transportation	2.1	6.0	3.5	6.8	2.4	2.9
Medical care services	6.2	5.8	6.8	7.9	5.6	6.9
Professional medical services	7.6	6.3	6.6	6.3	6.3	6.8
Hospital and related services	10.3	7.6	5.1	7.2	7.0	11.0
Entertainment services	5.3	5.8	4.4	5.4	4.3	4.6
Personal care services	3.7	4.9	3.7	2.6	3.8	4.4
Personal and educational services	10.0	9.4	8.0	8.1	6.4	6.7
uition and other school fees	9.4	10.0	8.4	7.8	7.6	7.6
Personal expenses (legal, financial, and funeral)	12.2	6.4	6.1	8.9	4.4	5.1

Table 3. Percentage change in the Consumer Price Indexes for certain commodities with higher than average import proportions, selected periods, 1982–88

Category	December	Deember	Merch	June	December	December
	1982 to	1963 to	1965 to	1986 to	1986 to	1987 to
	December	March	June	December	December	December
	1983	1965	1986	1986	1987	1988
Commodities less food, shelter, and energy	5.0	3.5	0.7	2.0	3.5	4.0
Wine at home Whiskey at home Alcoholic spirits, excluding whiskey	-1.5	.7	2.6	-1.3	3.8	1.6
	1.5	1.3	7.8	.2	1.3	.7
	1.0	2.0	9.7	3	.9	2.7
TV and sound equipment Clocks, lamps, and decor items Tableware, serving pieces, and nonelectric kitchenware Lawn equipment, power tools, other hardware	-2.2	-4.1	-5.1	-3.0	-3.7	-1.4
	2.4	5.0	1.6	-5.8	1.7	3.0
	1.6	.5	2.2	.9	1.3	2.6
	2.3	1.9	-1.9	1.8	1.3	3
Men's and boys' apparel Women's and girls' apparel Infants' and toddlers' apparel Jewelry and luggage Footwear	2.3	2.3	1.3	.9	3.1	6.0
	3.3	2.5	-2.3	5.0	5.9	3.5
	3.5	5.5	4.6	-4.3	2.4	2.4
	3.4	.3	-1.1	5.1	111.5	17.9
	1.0	2.0	-1.4	3.9	3.8	5.9
New vehicles	3.3	3.0	4.1	5.8	1.8	2.2

1 Jewelry only.

NOTE: Data are seasonally adjusted annual rates of change

also helped to offset the need for a full pass-through of higher material costs.

Special factors drove prices for food and energy products in opposite directions during 1988. A severe drought over much of the country led to sharply higher prices for many food-related items. However, the liquidation of some livestock because of climbing feed costs led to a temporary glut that lowered meat prices and thereby offset some of the impact of higher prices for most other kinds of foods. Energy prices were generally on a downward trend through most of the year, principally reflecting continued excess supplies of petroleum. Increases in price indexes for items outside of the food and energy sectors speeded up somewhat at the finished and intermediate stages of processing, but decelerated at the crude level.

Finished goods

Nonfood, nonenergy goods. Price increases accelerated in 1988 among both consumer nonfood, nonenergy goods and capital equipment. The PPI for finished goods other than foods and energy rose 4.3 percent, after advancing 2.1 percent in 1987. Although this rise was somewhat larger than in any of the immediately preceding 5 years, it was still moderate by the standards of other recent times.

The index for consumer goods excluding foods and energy increased 4.8 percent in 1988, compared with a 2.7-percent rise in 1987. Among consumer goods, prices for light motor trucks rose nearly 6 percent in 1988, after virtually no change a year earlier. Prices for passenger cars advanced 3.7 percent for the year, reversing a similar size decline a year earlier. The 1988 rise reflected higher costs for materials such as steel and nonferrous metals. Higher costs for material inputs also contributed to advances of more than 5 percent for leather footwear; prescription drugs; over-the-counter drugs; soaps and detergents; sanitary

papers; newspapers; periodicals; books; household flatware; tobacco products; and mobile homes.

Advances were also registered for tires and inner tubes, apparel, household furniture, floor coverings, and lawn and garden equipment. In contrast, the index for home electronic equipment declined in 1988, once again reflecting lower costs for electronic inputs.

A higher rate of increase in the capital equipment index (3.5 percent versus 1.3 percent a year earlier) reflected a general strengthening of demand for goods in this sector. For example, the nonelectrical machinery industry group showed steady increases in capacity utilization rates over the year, from 77.8 percent in December 1987 to 82.3 percent in December 1988. Price rises reflected pass-throughs of increases for materials and general robustness in the economy. Some industries became more optimistic about the future and boosted productive capacity, despite having operated with very high excess capacity during much of the last recession. In 1988, new investment in capital goods was reflected by significant advances in capacity in the paper, rubber and plastics, chemicals, food products, and nonelectrical machinery industries.

Energy. The PPI for finished energy goods fell 3.4 percent over the year ended December 1988, after rising 11.2 percent a year earlier, and plummeting more than 38 percent in 1986. The volatility of this index has reflected the upheavals experienced in petroleum markets. Indexes turned down for both home heating oil (-12.0 percent) and gasoline (-3.3 percent), following increases of more than 21 percent in 1987.

Home heating oil price movements, for the most part, closely paralleled fluctuations in prices for crude petroleum during 1988. However, prices for gasoline did not follow the sharp downward course of crude petroleum during the

second half of the year. Refiners' prices were sustained, to some extent, by strong demand from motorists, coupled with high operating rates and limited supplies in some areas. (An explosion and fire damaged a major refinery in Louisiana earlier in the year.) The upturn in the index for gasoline during the second half of the year also may have reflected cost increases associated with changes in the average octane ratings and a continued drop in leaded gasoline sales because of environmental legislation from the 1970's.

The PPI for finished consumer foods advanced 5.7 percent over the year ended December 1988, after inching down slightly in the previous year. Much of the acceleration in prices was within the grouping for meats, poultry, and fish. Beef and veal prices climbed 12.7 percent, following a small rise in 1987; prices for processed poultry shot up about 18 percent after falling almost 16 percent a year earlier; however, pork prices were virtually unchanged, following a sharp drop in 1987. Fish prices rose about 8 percent, after an even larger advance in 1987. Fueled by higher ingredient costs, prices also rose significantly in 1988 for bakery products, pasta, shortening and cooking oils, roasted coffee, and processed fruits and vegetables. Eggs were up more than 40 percent in 1988, after plunging more than one-third in 1987. In contrast, prices for fresh fruits fell, and price increases slowed for fresh vegetables.

In 1988, several factors combined to influence prices for agricultural commodities and foods. Prices accelerated for many products early in the year in the face of production shortfalls and curtailed supplies. The situation was exacerbated somewhat by spring when a drought became widespread.

Typically, droughts have a mixed impact on food prices. While many kinds of food items usually register higher prices very quickly, the situation for meats, in particular, is often more complex. In the short run, prices might be expected to fall for some kinds of meats because livestock owners would liquidate their herds prematurely to avoid the steep runup in prices of corn and other feedstuffs resulting from the hot, dry weather. In the longer run, such dumping of supplies would curtail future offerings and, thereby, raise meat prices. Meat prices did decrease in the summer and autumn, but not as much as expected because other factors tended to help raise prices or to minimize declines. In general, the effect of the drought on food prices was pervasive, but limited.

Intermediate goods

The 1988 rise of 5.7 percent in the PPI for intermediate materials, supplies, and components slightly exceeded the increase registered the year before. However, there were significant differences in the components of the increase: For nondurable manufacturing materials and food products, the rate of increase accelerated from a year earlier, while prices for energy turned down after advancing in 1987. The

pervasive pattern of accelerating increases for industrial material inputs is seen in the index for intermediate goods other than food and energy; this category had shown almost no change in 1986, rose 5.2 percent in 1987, and advanced 7.2 percent in 1988.

Much of the manufacturing sector of the U.S. economy continued to expand in 1988, in spite of fears over financial instability, lack of growth in housing construction, and materials shortages in several industries. Data from the Federal Reserve Board showed that the growth rate of capacity utilization was particularly strong in the chemicals and fabricated metals industry groups. Among those industries which had attained utilization rates in the 90-percent-or-more range during the previous year, rates either turned down (textile mill products) or showed little change (primary metals and paper and allied products) during 1988.

Manufacturing materials. For the first time since 1980, the PPI for materials for nondurable manufacturing climbed at a double-digit rate, 11.4 percent. The index for industrial chemicals jumped 16.6 percent, after rising about 9 percent the year before; organic chemicals (especially ethylene and toluene) led the increases. What was notable about the hike in chemicals prices was that historically they have shown a close parallel in direction of movement with petroleum prices; in 1988, however, crude petroleum prices dropped significantly. Capacity utilization in the chemicals sector climbed from 84.8 percent in the fourth quarter of 1987 to 89.8 percent in November 1988, the highest level since 1951. Prices for plastic resins and materials advanced 18.9 percent, even more than in 1987, reflecting cost increases for organic chemicals and strong demand. Likewise, prices rose 14.1 percent for paint materials, and 6.5 percent for synthetic fibers. Prices for gray and finished fabrics rose moderately, as lower prices for cotton partly offset hikes for wool and synthetics.

The paper industry continued to face heavy demand during 1988, as capacity utilization hovered around the 95-percent mark. Woodpulp prices climbed 23.4 percent, more than in any other 12-month period since the early 1980's, after advancing more than 15 percent in each of the two preceding years. The index for paper rose 11.3 percent, more than in the 2 previous years combined; annual increases in the 20-percent range were noted for several types of bond-grade paper. In addition, paperboard prices moved up 10.9 percent, about the same as in 1987.

Other nondurable materials also recorded double-digit advances in 1988. Nitrogenate prices jumped 29.9 percent, largely because of strong demand from foreign buyers taking advantage of the previous decline in the value of the U.S. dollar. Medicinal and botanical chemical prices rose more than 20 percent over the year, and leather prices were up nearly 9 percent.

The index for durable manufacturing materials moved up 10.2 percent, following a slightly larger increase in 1987, as

nearly all major types of metals continued to advance. Primary copper prices again jumped sharply (26.7 percent), reaching record high levels; prices had nearly doubled in the year before, recovering from a long slump. World copper supplies were curtailed by widespread strikes at mines in Peru, one of the world's larger producers, as well as by other production shortfalls. Similarly, copper and brass mill shapes rose less, at 21.7 percent, than in the prior year. Primary aluminum prices moved up 19.7 percent, about two-thirds of the increase recorded in 1987; aluminum mill shapes rose 20.4 percent. Zinc prices soared 66 percent, the most since PPI records for this series began in 1962. Strong demand from producers of galvanized steel coincided with a strike in Canadian zinc mines.

The index for steel mill products rose 6.6 percent over the year, with the most dramatic increases occurring for stainless steel products. A shortage of nickel was due partly to a dispute with the Dominican Republic over export taxes, and more generally to production cutbacks in several countries in recent years. The nickel shortage, added to strong demand, caused prices of stainless steel products to increase between 20 and 50 percent over the year. Prices also advanced notably for hot rolled bars, plates, and structural shapes. Contrary to the overall trend among metals, gold and silver prices fell through most of the year, as investor fears of runaway inflation calmed.

Construction materials. Conditions in the construction industry were quite stable during 1988. Neither residential nor commercial construction activity showed any particular growth trend, and this was borne out by price statistics. Softwood lumber prices moved down 0.4 percent; the absence of any months in which prices changed more than 2 percent was almost unprecedented for this typically volatile product group. Concrete product and plywood prices were also quite stable over the year (plywood prices did fluctuate during the fall). However, sharp price hikes for primary metals were passed through: For example, the index for fabricated structural metal products advanced 8.5 percent, the largest increase since 1981. Also, prices for nonferrous wire and cable jumped 18.7 percent, slightly less than last year, and those for plumbing fixtures and brass fittings increased 8.5 percent. As a result of cost increases for chemicals, prices of plastic construction products rose 7.2 percent. Gypsum product prices continued to decline during the first half of the year (as they had been for the 2 preceding years), and then rebounded somewhat in the second half, ending the year 6.2 percent lower than in December 1987.

Supplies and components. Shortages appeared in a variety of specialized industrial markets as the economic boom continued in 1988. Continued growth in the computer and peripheral equipment industry fostered heavy demand for memory integrated circuits, and prices shot up rapidly for some types of these "chips." Filters and crystal prices also

rose sharply. Notwithstanding these developments, the PPI for electronic components and accessories moved up only 2.7 percent over the year, held back by price declines for microprocessors and other types of components. Ball and roller bearings advanced 11.0 percent because of strong demand and cost hikes for component specialty steel. Prices for electric motors and generators rose 6.2 percent, the most in several years.

Energy. The PPI for intermediate energy goods turned down 3.7 percent in 1988, after rising 9.0 percent during the previous year. Petroleum prices, for the most part, eased during the year, and prices fell about 20 percent for residual fuel and liquefied petroleum gas. Declines of about 13 percent occurred for diesel fuel and jet fuels. Electric power prices staged a sudden upward surge in June because of drought-related shortages of hydroelectric power generation, but then retreated in later months to end the year at a level only somewhat higher than that of a year earlier.

Foods and feeds. The intermediate foods and feeds index advanced 10.6 percent, with most of the increase occurring during the early summer months when the Nation's drought was at its peak. Prices for animal feeds, flour, and crude vegetable oils all registered double-digit hikes for the year as a whole.

Crude goods

Following an advance of 8.9 percent in 1987, the increase in the PPI for crude materials for further processing slowed to 2.8 percent. Crude energy prices turned down strongly after rising in 1987, and prices rose modestly for sensitive industrial materials in the wake of 1987's record increases. Foodstuff prices showed the largest increase in 10 years.

Energy. The crude energy materials index dropped 9.4 percent in 1988, following a 10.7-percent advance in the previous year. After advancing during most of 1987, crude petroleum prices fell in almost every month of 1988, registering an 18.3-percent decline for the year. World market prices were drawn down as overproduction continued to plague OPEC during 1988, despite nominal agreements to limit production. Prices rose briefly in the spring when there was a prospect of a firmer policy of restraint by oil producing countries, including some interest shown by non-OPEC nations. No agreement was reached then, however, and prices slid downward again. Also, the end of the 8-year Iran-Iraq war in the summer allowed crude oil shipments to pass freely through the Persian Gulf once again, which also bolstered world supplies and helped lower prices.

In the fall, Saudi Arabia announced that it would no longer compensate for the excessive oil production by other nations, as it had done in past years by limiting its own output. In November, OPEC set a policy whereby the agreed-upon production limit would be increased, but to a level

below that which was currently being produced. While the true effectiveness of this new accord remained to be seen, it was credible enough to stem the price drop in crude oil at least temporarily.

The natural gas index turned up 0.9 percent, following decreases in the 3 preceding years. Month-to-month movements were quite volatile, however. Several strong forces were acting upon natural gas markets. Prices were pulled downward by competition from falling petroleum prices; the increased prevalence of corporate customers able to obtain discounts by buying directly from producers, rather than from pipeline companies; the prospective end to contracting procedures which require high minimum payments; and continued surpluses. However, some demand is increasing for natural gas as it is coming to be viewed as a fuel which is more efficient and environmentally preferred. Elsewhere within the crude energy category, coal prices continued to decline, but less than in the preceding year.

Basic industrial materials. The PPI for crude nonfood materials other than energy rose 6.0 percent after advancing 22.6 percent in 1987. Although most scrap metal prices continued to increase substantially in 1988, they did not show the marked price surges observed in the preceding year. Price advances slowed for ferrous and aluminum base scrap as increases moderated for the production of steel and aluminum manufactures (which generate scrap as a byproduct). Ferrous scrap prices, in particular, were bolstered by supply problems prompted by inclement weather. The summer heat wave curtailed ferrous scrap processing and demolition activity, which generates scrap. Also, the drought lowered river levels, thus impeding barge transportation of ferrous scrap. Copper base scrap prices followed the lead of primary copper prices, both of which showed a smaller increase in 1988 than in 1987.

Price increases for softwood logs and construction sand and gravel also slowed during 1988, in line with a somewhat sluggish level of residential construction activity. Prices for wastepaper, cattle hides, and raw cotton turned down, following advances in the preceding year. Wastepaper prices fell, as mandatory recycling in the Northeast boosted newsprint supplies and exports to the Far East dropped sharply. Export demand for cattle hides was also down. Raw cotton prices moved down with continued high inventories and good harvests here and abroad; also, demand for some cotton products was slow, and adjustments in the U.S. Department of Agriculture price support program helped to lower prices. In contrast to the overall decelerating trend, iron ore prices showed virtually no change following a decrease in 1987, and leaf tobacco increases were larger in 1988 than in the previous year.

Foodstuffs. The PPI for crude foodstuffs and feedstuffs jumped 14.2 percent, following a 1.8-percent rise in 1987. Price increases accelerated for grains and other feedstuffs, with several commodities showing advances higher than 30 percent for the year. The drought which began across much of the country in the spring caused crop prices to soar in June, July, and August. Coming on the heels of a relatively dry 1987, the 2-year rain deficiency was deemed the worst in four decades by the National Weather Service. Soybean inventories were drawn down heavily in 1988, which helped alleviate the supply shortage in the short term but which may leave soybean markets more vulnerable in 1989. In November, corn prices plummeted from their high summer levels as the U.S. dollar began to weaken, lowering export revenues.

Prices for unprocessed fish rose faster in 1988 than in 1987. Prices turned up for chickens and fluid milk, following declines in the previous year. Demand for chicken from consumers and fast-food chains was up, and demand for fluid milk continued to fall, although not as fast as in 1987, as production remained high. Cattle price advances slowed during 1988, as low production continued. Price increases for fresh vegetables and raw cane sugar also slowed somewhat. Turkey prices fell much faster than in 1987, and fresh fruit prices turned down after rising in the preceding year.