

Producer prices in 2000: energy goods continue to climb

Soaring natural gas prices sparked higher inflation among finished, intermediate, and crude goods, resulting in the steepest increase in the finished goods index in 10 years

William F. Snyders

The Producer Price Index (PPI) for Finished Goods advanced 3.6 percent in 2000, the largest annual gain since 1990. Excluding energy goods, the index for finished goods rose 1.5 percent. The PPI for finished consumer foods was up 1.7 percent in 2000. The index for producer prices for finished goods excluding foods and energy advanced 1.3 percent in 2000, following a 0.9-percent increase in 1999. This index includes both consumer goods and capital equipment.

Price movements for intermediate goods and crude goods followed a pattern similar to that of finished goods. The index for intermediate goods rose 4.1 percent in 2000, following a 3.7-percent gain in 1999. (Intermediate items in the PPI reflect changing prices for material inputs to the manufacturing process, as well as various supplies consumed in the production process.) The crude goods index advanced 35.5 percent, after rising 15.3 percent in the previous year. (Generally, crude goods are unprocessed goods that are outputs from mining industries and agricultural production.) (See chart 1.)

For energy goods at the crude stage of processing, higher inflation was observed in 2000 compared with 1999. However, price increases slowed for both intermediate and finished energy goods, while price advances for crude petroleum and petroleum-based products decelerated from 1999 to 2000.

Prices for foods and food-related materials at the crude and intermediate stages of processing rose in 2000. The intermediate “core” index, which

removes the volatile foods and energy component, slowed to a 1.6-percent increase in 2000, following a 1.9-percent advance a year ago. By contrast, prices for crude core items decreased 5.5 percent, after increasing 14.0 percent in 1999. (See table 1.)

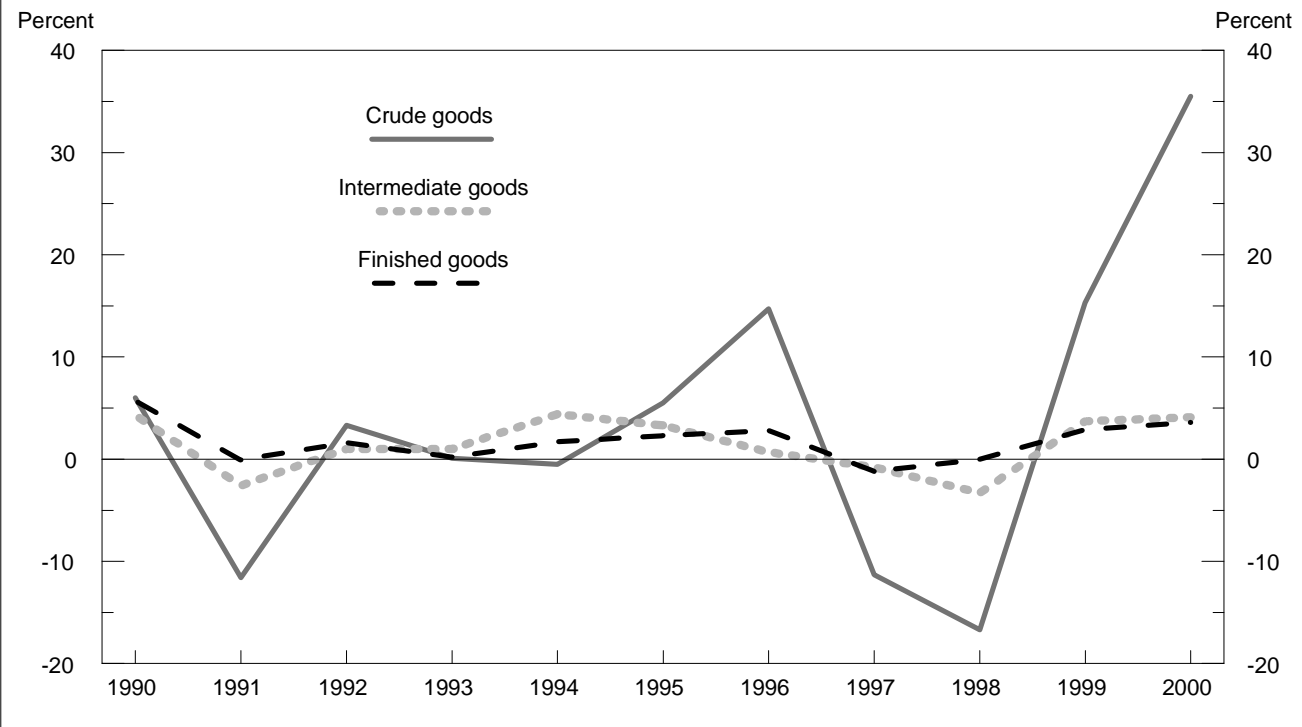
Energy goods

Skyrocketing natural gas prices and double-digit price increases for many crude petroleum-based items helped push energy prices higher for all three stages of processing in 2000. The index for finished energy goods rose 16.6 percent, following an 18.1-percent advance in 1999. Price increases were observed for finished energy items, such as residential natural gas, gasoline, residential electric power, and home heating oil. Prices for intermediate energy goods advanced 19.0 percent, after having increased 19.6 percent a year earlier. The indexes for jet fuels, commercial and industrial natural gases, diesel fuel, liquefied petroleum gas, and commercial electric power continued to increase in 2000. The crude energy goods index jumped 85.6 percent, following a 36.9-percent gain in 1999, as prices continued to rise for natural gas and crude petroleum. (See table 2.)

Natural gas. Decreasing supplies of natural gas, rising crude oil prices, and weather-related demand helped push residential, commercial, and industrial natural gas prices to their highest levels since the publication of these indexes began

William F. Snyders is an economist in the Office of Prices and Living Conditions, Bureau of Labor Statistics.
E-mail: snyders_w@bls.gov

Chart 1. Annual percent changes for stage of processing indexes, 1990–2000



in December 1990. The producer price index for natural gas posted a record 192.6-percent rate of increase, as demand outpaced supply most of the year. June and December registered the two largest gains for the year, rising 38 percent and 42.3 percent respectively. Due to industry regulation, the majority of natural gas utility companies are inhibited from passing along their higher input costs directly to residential and commercial customers. However, natural gas utility companies are able, with little regulatory guidance, to pass on their higher input costs to their industrial customers, who then absorb and pass on these costs indirectly in their own costs of doing business. Residential gas prices increased 41.8 percent, commercial natural gas prices rose 56 percent, and industrial natural gas prices jumped 91.9 percent for the year. (See chart 2.)

By spring and early summer, supplies of natural gas tightened and prices began climbing throughout the rest of the year. Above-average temperatures and reduced electric output from nuclear power plants in the summer of 2000 meant that utilities had to produce more electricity using natural gas. As colder temperatures arrived in December, natural gas usage shifted to heating. The resulting withdrawals from already low inventories pushed prices even higher. As of December 2000, natural gas storage levels stood at 1,720 billion cubic feet; 803 billion cubic feet less than the available stor-

age levels in December 1999.¹

Petroleum-based products. Led by strong global demand, crude petroleum prices continued to rise for most of the year, but at a much slower pace than in 1999. The PPI for crude petroleum increased 11.0 percent from December 1999 to December 2000, after jumping 172.0 percent from December 1998 to December 1999. Throughout the summer, crude petroleum stocks in the United States reached a 24-year low, pushing down domestic supplies.² Petroleum prices declined somewhat, however, at the end of 2000, as a result of the Organization of Petroleum Exporting Countries (OPEC) decision to increase oil production by 800,000 barrels a day and the U.S. decision to tap the U.S. Strategic Petroleum Reserve for 30 million barrels of oil.

Looking closer at refined petroleum goods, the jet fuels index increased 42.6 percent in 2000, due to the rising cost of oil and diminishing supplies. During the first quarter, prices were higher, because supplies were weak throughout that period. Prices then leveled off through the summer as inventories rebounded and prices per crude oil decreased, a result of an increase in OPEC production. By September, enough high demand for jet fuels and the return of rising oil costs helped raise jet fuel prices.

Diesel fuel prices increased 39.8 percent in 2000, a result

Table 1. Annual percent changes for major categories of the Producer Price Index by stage of processing, 1991–2000

Index	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Finished goods	-0.1	1.6	0.2	1.7	2.3	2.8	-1.2	0.0	2.9	3.6
Foods	-1.5	1.6	2.4	1.1	1.9	3.4	-8	.1	.8	1.7
Energy	-9.6	-3	-4.1	3.5	1.1	11.7	-6.4	-11.7	18.1	16.6
Other	3.1	2.0	.4	1.6	2.6	.6	.0	2.5	.9	1.3
Intermediate materials, supplies, and components	-2.6	1.0	1.0	4.4	3.3	.7	-8	-3.3	3.7	4.1
Foods and feeds	-.2	-5	5.5	-4.5	10.3	2.1	-1.7	-7.3	-4.2	3.6
Energy	-11.6	.7	-4.2	2.9	1.1	11.2	-7.0	-12.1	19.6	19.0
Other	-8	1.2	1.6	5.2	3.2	-9	.3	-1.6	1.9	1.6
Crude materials for further processing ..	-11.6	3.3	.1	-5	5.5	14.7	-11.3	-16.7	15.3	35.5
Foodstuffs and feedstuffs	-5.8	3.0	7.2	-9.4	12.9	-1.0	-4.0	-11.0	-.1	7.4
Energy	-16.6	2.3	-12.3	-.1	3.7	51.2	-23.1	-23.8	36.9	85.6
Other	-7.6	5.7	10.7	17.3	-4.2	-5.5	.0	-16.0	14.0	-5.5

of the low supply of distillates and the rising costs of oil. In the first quarter, diesel fuel prices climbed as the supply of distillates plummeted. For the 12 months ended in February 2000, the diesel fuel index more than doubled, which caused a cavalcade of truck drivers to protest by driving through the streets of Washington DC, in search of Federal relief via the immediate removal of diesel fuel taxes. By April and May, prices eased as warmer temperatures decreased the demand for distillates, but then prices increased throughout the third quarter in anticipation of a major winter shortage of distillates and the return of higher crude oil prices.

Gasoline prices increased by 17.2 percent from December 1999 to December 2000, mainly because of an 11-percent rise in the price of oil over the same time period. Crude oil, gasoline, and home heating oil all showed similar movements over the last 2 years. (See chart 3.) Large price increases for gasoline took place in the first quarter of 2000, as rising oil costs and low inventories put upward pressure on prices. Prices

fell in April, when OPEC announced it would increase oil production by 1.7 million barrels per day to counteract rising global oil prices. By early June, however, gasoline prices rose to their highest levels in nearly 20 years due to rising summer demand. By the end of 2000, gasoline prices began to decline as the release of oil from the Strategic Petroleum Reserve helped lower oil costs.

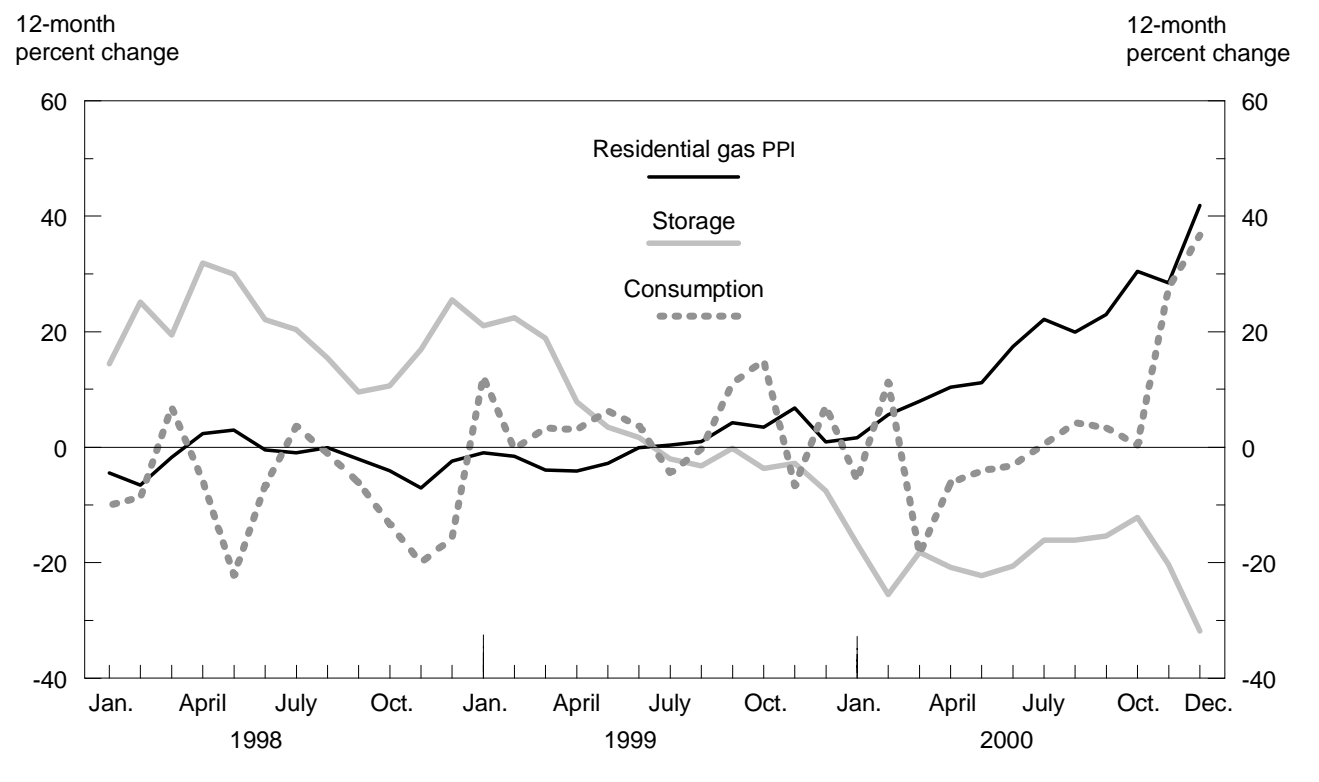
Home heating oil prices increased 37 percent for the 12 months ended in December 2000, driven by rising oil costs, an extremely low supply of distillates, and cold winter temperatures. The high demand and shortage of gasoline in the summer months caused oil refineries to focus all available resources on gasoline production, thereby reducing the buildup of heating oil supplies. Prices climbed throughout the summer, as refiners anticipated winter shortages, but beginning in October, prices declined with the supply assistance of the Strategic Petroleum Reserve.

Among other petroleum products, prices for liquefied pe-

Table 2. Annual percent changes in Producer Price Indexes for selected energy items, 1995–2000

Index	1995	1996	1997	1998	1999	2000
Finished energy goods	1.1	11.7	-6.4	-11.7	18.1	16.6
Residential natural gas	-2.4	11.2	2.4	-2.4	.9	41.8
Gasoline	2.4	27.1	-15.0	-33.1	74.8	17.2
Residential electric power .....	.9	.6	-.2	-2.5	-.5	3.2
Home heating oil	11.9	25.0	-21.7	-36.1	89.4	37.0
Intermediate energy goods	1.1	11.2	-7.0	-12.1	19.6	19.0
Jet fuels	6.1	26.1	-22.3	-35.8	90.9	42.6
Commercial natural gas	-3.9	16.8	.9	-4.7	4.1	56.0
Industrial natural gas	-4.6	22.3	3.1	-9.7	7.4	91.9
Diesel fuels	11.1	26.2	-22.5	-33.8	86.4	39.8
Liquefied petroleum gas	3.9	71.4	-29.3	-32.6	87.0	49.3
Commercial electric power .....	.6	-.1	.0	-1.8	.6	4.4
Industrial electric power .....	.2	.0	.5	-1.3	-.1	4.9
Crude energy materials	3.7	51.2	-23.1	-23.8	36.9	85.6
Natural gas	-.3	92.0	-27.9	-17.8	7.9	192.6
Coal	-.8	-1.1	4.9	-1.2	-9.3	.0
Crude petroleum	10.8	35.8	-28.3	-48.6	172.0	11.0

Chart 2. Residential natural gas, 1998–2000



troleum gas rose 49.3 percent, following an 87-percent increase a year earlier. As for many other energy commodities, the 2000 increase in the index was a result of rising oil and natural gas prices.

Electric power. Residential electric power prices increased 3.2 percent, following a 0.5-percent decline in 1999. Increased weather-related demand and the electricity crisis in California were the main causes for the acceleration. Demand for electricity rose, as many regions of the United States experienced hot summer temperatures and colder-than-normal temperatures throughout the fall. An 83.1-percent jump in prices for natural gas to electric utilities (input costs to electricity industries) also contributed to higher residential electricity prices in 2000. As natural gas prices skyrocketed during the year, many electricity producers increased their rates in the form of fuel cost adjustments. In addition to residential electricity, the high cost of natural gas also was passed on in electricity prices for commercial and industrial uses. The index for commercial electric power rose 4.4 percent, after increasing 0.6 percent in 1999. Industrial electricity prices advanced 4.9 percent in 2000, following a 0.1-percent decline in the previous year.

Food and related products

Producer prices for finished consumer foods advanced 1.7 percent in 2000, following a 0.8-percent gain in the previous year. Nearly one-third of the 2000 increase can be traced to an 8.2-percent rise in beef and veal prices. Moreover, price increases for eggs for fresh use, dairy products, bakery products, and pork contributed to higher finished consumer foods prices in 2000.

Led by rising prices for prepared animal feeds, the producer price index for intermediate foods and feeds rose 3.6 percent in 2000, after falling 4.2 percent a year ago. Prices for crude foodstuffs and feedstuffs advanced 7.4 percent, after edging downward 0.1 percent in 1999. Contributing to this turnaround were price increases for fluid milk, corn, soybeans, and wheat. (See table 3).

Chicken eggs. The eggs for fresh use index soared 46.3 percent in 2000, after falling 27.4 percent in the prior year. In 1999, chicken egg producers experienced a period of gross overproduction, caused mainly by a large oversupply of egg-laying hens. However, by the year 2000, price levels began to rebound as desperate producers lowered egg production by

removing seven million hens from the U.S. flock. This was accomplished by the combination of higher cull rates and drops in the number of egg-laying hens being hatched.

Dairy products. The index for dairy products was up 3.2 percent, after falling 11.1 percent in 1999. Prices for fluid milk rose 7.0 percent for the 12 months ended in December 2000. During the winter of 2000, milk production decreased, as a result of cows suffering stress from cold weather. December milk supplies were also lowered by higher energy prices and power-related problems, especially in California, the largest producer of milk in the country. As the State of California experienced numerous power blackouts, farmers and processors were forced to remove milk that had spoiled. In addition, processors in California, as well as in other areas of the United States, were operating shorter hours to save on energy costs, which ultimately further lowered milk supplies and raised prices.

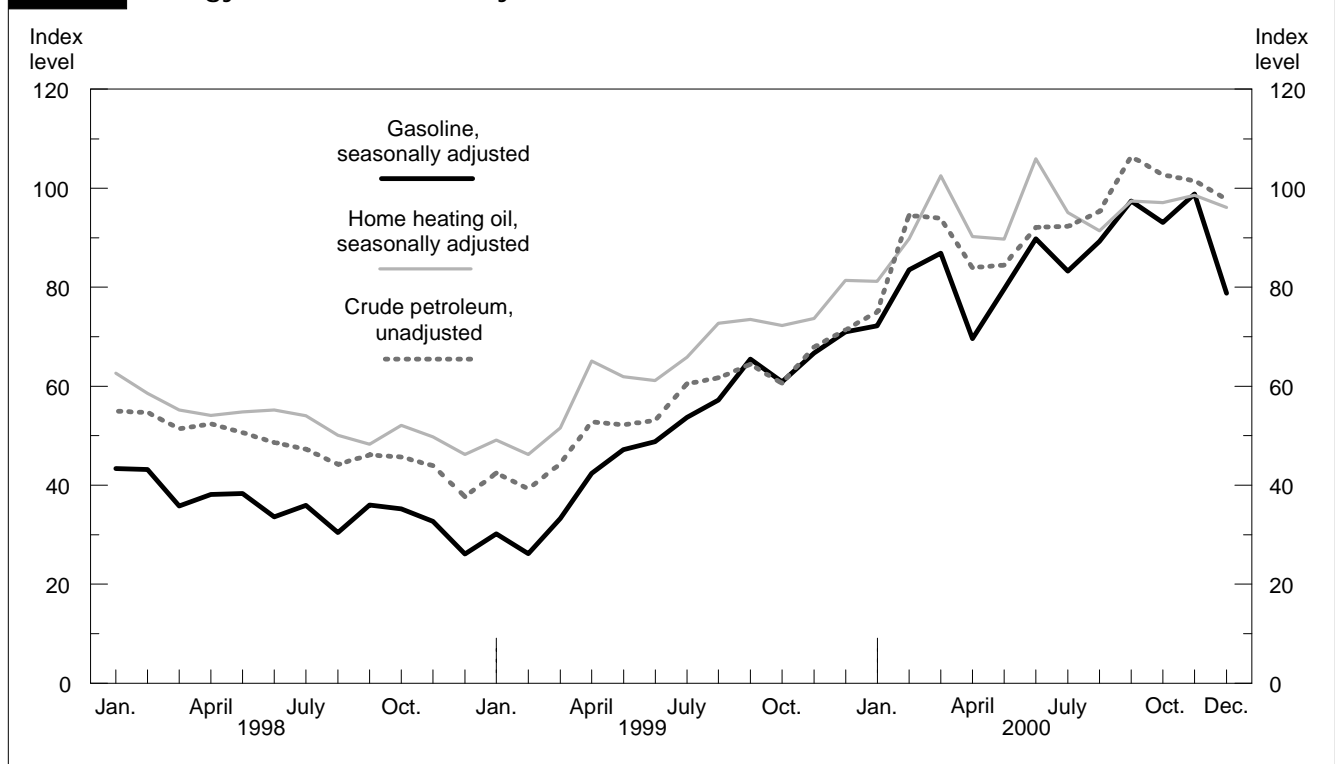
Grains. Corn prices rose 7.8 percent for the 12 months ended in December 2000, compared with a 12.4-percent drop in the previous year. The corn futures market had an extremely volatile year in 2000. Corn production totaled 9.97 billion bushels, up 6 percent from 1999, and was the second largest crop behind 1994's record production of 10.1 billion bushels.³ As

a result, the large crop pushed corn prices lower in June, July, and August. However, corn prices then rebounded throughout the remainder of the year.

Soybean prices advanced 9.9 percent in 2000, following a 17.5-percent decline a year earlier. This turnaround was due to higher demand for prepared animal feeds, a partially-processed commodity of soybeans. Prices were also higher due to strong export demand from the European Union (EU) for products such as soybean meal. The EU has since implemented a total ban on meat and bone meal, and blood meals in animal feeds due to fears of spreading Bovine Spongiform Encephalopathy (BSE), commonly known as "mad cow disease." EU farmers were compelled to increase their use of alternative animal feeds such as soybean meal to sustain their herds.

The index for wheat increased 13.9 percent in 2000, after decreasing at the same rate during 1999. The months of July and August experienced weaker prices, as low corn prices and sharp competition from abroad caused the price of wheat to decline. However, the wheat index rebounded in the fall, posting a 6.3-percent rise in September and a 9.7-percent increase in October. This rally was brought on by rising corn futures caused by unusually high international demand, which influenced wheat trades.

Chart 3. Energy Index levels, monthly, 1998–2000



Collectively, higher prices for grains in 2000 put upward pressure on prices for prepared animal feeds. This index rose 8.3 percent for the year, after decreasing 2.7 percent in 1999.

Flour. The price of flour increased 7.9 percent for the year ended in December 2000, compared with a 7.5-percent decline in 1999. Wheat prices heavily influence flour prices, and the extremely volatile wheat market contributed to the positive annual percent change during 2000, and the negative annual change during 1999. Higher prices for flour helped push up the index for bakery products, which increased 2.7 percent in 2000.

Meats. After a 266.9-percent surge in 1999, slaughter hog prices rose 14.9 percent in 2000. Slaughter hog prices stayed well above the break-even point for most of 2000, an occurrence not realized since 1997. In the finished and intermediate stages of processing, the pork index increased 5 percent in 2000, after jumping 29.8 percent in the prior year. Overall, pork prices continued their climb from the early 1999 levels by virtue of good domestic demand for meat products and an improvement in the export market.

In 2000, prices for slaughter cattle and for beef and veal continued to show upward movements in 2000, rising 9.1 percent and 8.2 percent respectively. These increases were the result of strong domestic demand for beef products, particularly for high quality beef products. While beef production was up 1.5 percent in 2000, prices for choice cuts of beef at retail were a record \$3.06 a pound. Retail beef prices rose

6.5 percent, more than the 1999 average and 4.6 percent, more than the previous record of \$2.93 a pound, set in 1993.⁴

Among other food items tracked in the PPI, price declines were observed in 2000 for fresh and dry vegetables, roasted coffee, fresh fruits and melons, refined sugar, and crude vegetable oils.

Finished goods other than foods and energy

As previously mentioned, the PPI for finished goods other than foods and energy—the “core” index—accelerated slightly from a 0.9-percent rate of increase in 1999 to a 1.3-percent rise in 2000. This acceleration in prices was broadly based. Prices for finished consumer goods other than foods and energy rose 1.4-percent, following a 1.2-percent increase in 1999. Among this category, prices accelerated for such items as alcoholic beverages, prescription drugs, and light trucks. The capital equipment index rose 1.2 percent for the 2000 calendar year, after gaining just 0.3 percent a year ago. Rising prices were observed for producers of civilian aircraft, commercial furniture, industrial material handling equipment, heavy trucks, agricultural machinery, and construction machinery. (See table 4.)

Alcohol and tobacco products. Over the course of 2000, the index for alcoholic beverages increased by 4.2 percent. According to the 1997 Census of Manufactures, beer accounts for 30 percent of the beverage market with \$18.2 billion in sales. Wine, brandy, and distilled spirits accounted for 16.6

Table 3. Annual percent changes in Producer Price Indexes for selected food items, 1995–2000

Index	1995	1996	1997	1998	1999	2000
Finished consumer foods	1.9	3.4	-0.8	0.1	0.8	1.7
Eggs for fresh use	31.5	15.0	-15.6	-6.2	-27.4	46.3
Beef and veal	-1.4	7.4	-5.4	-2.7	10.8	8.2
Bakery products	3.3	3.6	1.1	1.0	1.6	2.7
Processed poultry	8.4	2.6	-6.3	3.8	-3.7	1.1
Pork	15.3	21.9	-13.6	-27.3	29.8	5.0
Dairy products	5.4	2.4	4.7	10.7	-11.1	3.2
Fresh fruits and melons	2.5	37.2	-8.2	-19.0	8.2	-1.3
Roasted coffee	-8.2	-8.4	18.1	-9.5	-9	-6.9
Fresh and dry vegetables	-36.0	-24.3	21.6	8.8	4.4	-23.7
Intermediate foods and feeds	10.3	2.1	-1.7	-7.3	-4.2	3.6
Prepared animal feeds	20.6	5.4	-3.1	-20.4	-2.7	8.3
Flour	20.1	-9.0	-8.2	-5.6	-7.5	7.9
Crude vegetable oils	-14.1	-9.3	13.9	-2.7	-37.5	-16.5
Confectionery materials	1.5	2.2	-15.8	-1.0	1.7	.7
Refined sugar .....	.8	4.2	-4.5	.6	-2.2	-9.6
Crude foodstuffs and feedstuffs	12.9	-1.0	-4.0	-11.0	-1	7.4
Fluid milk	8.4	1.1	2.8	25.6	-31.3	7.0
Corn	49.4	-21.0	2.2	-22.5	-12.4	7.8
Soybeans	26.7	-3.7	1.8	-21.3	-17.5	9.9
Wheat	29.9	-19.3	-11.3	-15.0	-13.9	13.9
Slaughter cattle	-5.2	-2.5	2.0	-12.0	19.4	9.1
Slaughter hogs	40.6	23.2	-21.7	-76.8	266.9	14.9

Table 4. Annual percent changes in Producer Price Indexes for selected finished goods other than foods and energy, 1995–2000

Index	1995	1996	1997	1998	1999	2000
Finished goods other than foods and energy	2.6	0.6	0.0	2.5	0.9	1.3
Finished consumer goods less foods and energy	2.8	.8	.3	4.2	1.2	1.4
Alcoholic beverages	4.2	3.8	–.5	1.5	.6	4.2
Cigarettes	3.7	3.3	10.0	49.4	9.6	1.9
Prescription drugs	4.2	2.0	3.6	20.9	.8	3.0
Light trucks	1.5	.2	–3.6	1.0	.3	1.8
Newspapers	8.8	4.2	.1	1.1	1.4	4.3
Sanitary papers and health products	14.3	–2.6	–2.0	–.6	–1.0	2.7
Books	6.5	3.2	3.3	4.1	1.8	3.4
Home electronic equipment	–1.0	–1.3	–3.2	–1.7	–2.3	–2.2
Household appliances .....	.1	–.5	–2.5	–.3	–.6	–1.7
Passenger cars	1.7	–.8	–2.6	.5	1.2	–.7
Capital equipment	2.2	.4	–.6	.0	.3	1.2
Civilian aircraft	6.1	3.2	.5	.5	2.1	6.7
Commercial furniture	3.4	2.0	1.2	.1	1.2	1.1
Industrial material handling equipment	2.1	1.7	1.4	1.5	.9	1.7
Heavy trucks	4.1	–4.5	.6	3.9	1.4	.7
Agricultural machinery	4.7	1.4	1.4	.7	1.3	1.2
Construction machinery	2.5	1.8	1.9	1.7	1.4	.9
Communication and related equipment .....	.9	1.5	.8	–1.1	–1.9	–1.3
Computers	–12.7	–22.3	–21.5	–26.6	–19.7	–14.2

percent, or \$7.6 billion. Among tobacco products, cigarette prices rose 1.9 percent in 2000, mostly as a result of a 6-cent per pack price hike in August (or \$3 per 1000 cigarettes). Cigarettes make up more than 80 percent of the overall tobacco market, with \$29.3 billion in sales.

Prescription drugs. In 2000, the rate of increase for prices received by pharmaceutical manufacturers was lower than the rate of inflation measured in finished goods as a whole. Producer prices for prescription drugs increased 3.0 percent, a more typical increase than those of the previous 2 years when the index rose 20.9 percent in 1998, but only 0.8 percent in 1999. Drug prices in 2000 rose moderately, as insurance companies, managed care groups, and pharmacy benefit managers tightened reimbursement policies to customers, pressuring consumers to find cheaper generic alternatives to expensive brand name drugs.

Cars and light trucks. Prices for passenger cars fell 0.7 percent during 2000, after rising 1.2 percent in 1999. Total car sales were up for the year, although sales slowed substantially in the second half of 2000, due to a drop in consumer confidence. An 18.1-percent jump in sales of small cars was observed for the year, resulting mostly from a 46-percent increase in sales for imported small cars.⁵ Luxury cars also showed a gain, but both mid-sized and large cars had de-

creases in sales. The light truck price index rose 1.8 percent during 2000, following a 0.3-percent gain in the prior year. Light truck sales for 2000 were 3.8 percent higher than in 1999, due largely to new crossover vehicles. A few segments of the market, such as small pickups and large luxury SUVs, showed over-the-year decreases in sales. Collectively, sales both for cars and light trucks totaled more than 17 million in 2000.

Civilian aircraft. Despite the 4.9-percent decrease in overall aircraft industry sales, the 2000 calendar year was the second-best year on record, with industry profits of approximately \$9.4 billion.⁶ Prices for civilian aircraft advanced 6.7 percent, after increasing 2.1 percent in 1999. Helicopters and general aviation aircraft sales both showed substantial gains in 2000.

Commercial furniture. Steady price increases were observed for producers of commercial furniture. The PPI for commercial furniture increased 1.1 percent in 2000, following a 1.2-percent gain a year earlier. Prices continued to rise moderately, as consumer purchasing remained healthy throughout 2000.

Computers. Due to modern-day advances in technology associated with manufacturing computers and the increases in competition in specific markets, prices in the electronic computer industry continued their downward trend during

2000. Producer prices for overall computers fell 14.2 percent, after decreasing 19.7 percent in 1999. Price declines were registered in 2000 for large-scale and mid-range computers, personal computers/workstations, and portable computers.

Intermediate industrial materials

The PPI for intermediate materials other than foods and energy slightly decelerated, rising 1.6 percent in 2000, following a 1.9-percent gain in the previous year. Price increases also slowed for durable manufacturing materials and construction materials. In contrast, the index for nondurable manufacturing materials rose slightly more in 2000 than it did a year ago. (See table 5.)

Durable manufacturing materials. The index for durable manufacturing materials edged upward 0.2 percent in 2000, after advancing 2.4 percent in 1999. Prices decreased in 2000 from their 1999 increases for building paper and board and for cement. The indexes for copper cathode and refined copper and also for copper and brass mill shapes rose less in 2000 than in the previous year. Price declines were larger in 2000 than 1999 for plywood. By contrast, the index for steel mill products fell at a slower rate, compared with its rate of decline a year earlier.

The index for building paper and board decreased 9.3 percent, while cement prices fell 0.9 percent for the 12 months ended in December 2000. During the same period, the index

for copper cathode and refined copper was up 8.3 percent, after jumping 21.7 percent a year ago. Rising prices for copper and brass mill shapes slowed from 8.6 percent in 1999 to 3.8 percent in 2000. The copper market was boosted by reports of world refined copper being in deficit versus surplus, good demand for the metal, and declining warehouse stocks. Plywood prices declined by 6.2 percent over the course of 2000, after edging down 0.2 percent a year earlier. The downward trend in plywood prices resulted from fewer housing starts in 2000, with residential construction representing 48 percent of the demand for plywood. In addition, the plywood market suffered from oversupply and bad weather, which inhibited construction activities.

The index for steel mill products declined 0.6 percent in 2000, after falling 2.4 percent in the previous year. The continued decline in prices was due to the financial collapse of many domestic steel companies in the second half of the year. Excluding the fourth quarter, 2000 was a solid year for the domestic steel industry in terms of production and sales, with prices up slightly from the year before.⁷ Since the early 1990s, steel mills products were in high demand, but recently mill owners have found it difficult to maintain prices in the face of import competition and surplus global capacity. As a result, many firms in the steel industry filed for bankruptcy in 2000.

Construction materials. Prices for materials and components for construction inched upward 0.1 percent in 2000, after advancing 2.2 percent in 1999. This deceleration was brought

Table 5. Annual percent changes in Producer Price Indexes for selected intermediate and crude materials other than foods and energy, 1995–2000

Index	1995	1996	1997	1998	1999	2000
Intermediate goods other than foods ... and energy	3.2	-0.9	0.3	-1.6	1.9	1.6
Durable manufacturing materials	1.1	-1.4	.0	-5.5	2.4	.2
Building paper and board	-5.1	-5.8	-2.0	-1.3	10.3	-9.3
Copper and brass mill shapes	2.1	-10.6	-6.5	-11.5	8.6	3.8
Plywood	-8.5	-1.3	-1.1	4.9	-2	-6.2
Cement	6.0	5.0	3.5	5.2	1.6	-9
Steel mill products	1.3	-1.4	.5	-6.5	-2.4	-6
Nondurable manufacturing materials ..	5.9	-3.3	.3	-5.3	4.0	4.1
Industrial chemicals	1.1	2.5	-1.1	-5.7	4.1	4.8
Paperboard	16.3	-19.0	5.8	-8.0	13.0	10.6
Nitrogenates	5.8	5.9	-13.5	-19.0	2.2	44.9
Paper	20.5	-14.2	3.8	-4.1	2.8	4.1
Construction materials	1.9	1.8	1.2	.1	2.2	.1
Softwood lumber	-10.3	19.6	-3.8	-10.1	10.1	-14.5
Gypsum products	1.0	6.6	7.1	7.3	23.1	-27.1
Plastic construction products	1.8	-1.1	-2.0	-2.2	5.6	1.6
Nonferrous wire and cable	1.6	-3.1	-2.2	-4.6	.3	4.6
Crude nonfood materials less energy .	-4.2	-5.5	.0	-16.0	14.0	-5.5
Iron and steel scrap	-4.1	-11.1	14.5	-39.9	40.0	-28.8
Wastepaper	-50.9	-1.3	11.6	-28.9	110.5	-18.5
Raw cotton	4.2	-13.0	-11.2	-8.0	-20.8	30.2

on by the downturn in the indexes for softwood lumber and gypsum products. During the same period, rising prices for plastic construction products, millwork, and fabricated structural shapes decelerated from 1999. Conversely, the index for nonferrous wire and cable rose more in 2000 than it did a year earlier.

Construction demand held up well; the value of new construction put in place for the year 2000 was \$807.8 billion current dollars, 6.0 percent more than the \$764.2 billion in 1999. In constant (1996) dollars, the value in 2000 was \$704.3 billion, 2 percent above the 1999 figure of \$692.5 billion.⁸

Softwood lumber prices finished the year 14.5 percent below their 1999 level, taking their biggest hit in May, with a 4.7-percent decrease. Prices declined throughout most of 2000, as the softwood lumber market suffered from oversupply and lower demand from the construction industry. The index for gypsum products dropped a record 27.1 percent, for the 12 months ended in 2001. A year earlier, gypsum prices rose 23.1 percent. By early 2000, new plants came online and the shortage of gypsum products began to recede. With an eventual oversupply of gypsum wallboard, overall prices started dropping sharply. The index for plastic construction products rose 1.6 percent in 2000, following a 5.6-percent gain in the prior year. By contrast, prices for nonferrous wire and cable rose 4.6 percent, after edging upward 0.3 percent in 1999.

Nondurable manufacturing materials. The index for nondurable manufacturing materials increased 4.1 percent in 2000, following a 4.0-percent gain in 1999. Rising prices for industrial chemicals, paperboard, nitrogenates, and paper outweighed price declines for phosphates, inedible fats and oils, and for medicinal and botanical chemicals.

The index for industrial chemicals advanced 4.8 percent in 2000, following a 4.1-percent gain a year ago. This increase can be attributed to a 13.1-percent rise in prices for primary basic organic chemicals. The industrial chemicals market experienced a long period of declining 12-month percent changes that finally turned positive in September of 1999, the result of higher crude oil prices and recovering world demand, both of which put upward pressure on prices for organic chemicals. Among other chemicals, the index for nitrogenates jumped 44.9 percent in 2000, following a 2.2-percent gain in the prior year.

The index for paperboard advanced 10.6 percent in 2000, after rising 13.0 percent a year earlier. Due to a strong economic outlook at the beginning of 2000, paperboard producers implemented several spring price increases, which extended into the summer. By the third quarter, demand dropped somewhat and prices declined for the remainder of the year. Paper prices also accelerated throughout 2000, rising 4.1 percent, following a 2.8-percent increase in 1999. Paper prices

rose steadily throughout the first half of 2000 and then leveled off for the rest of the year, as orders began to drop and inventories slowly began to build.

Crude nonfood materials less energy

After jumping 14.0 percent in 1999, the PPI for basic industrial materials—crude nonfood materials less energy—fell 5.5 percent in 2000. Prices for iron and steel scrap dropped 28.8 percent, following a 40.0-percent surge a year earlier. The indexes for wastepaper, aluminum base scrap, and for softwood logs, bolts, and timber also fell, after rising in 1999. Conversely, raw cotton prices advanced 30.2 percent in 2000, following a 20.8-percent decline in the prior year. (See table 5.)

Iron and steel scrap. Iron and steel scrap metal prices declined 28.8 percent in 2000, as the domestic steel industry was battered by a flood of low-priced imports. The domestic steel industry has struggled to recover from the Asian economic crisis of 1997–98, when low-cost steel had a negative impact on the domestic market.

Wastepaper. The index for the wastepaper in 2000 was down 18.5 percent, compared with a 110.5-percent surge in 1999. After a continual rise in prices for the first 5 months of 2000, the wastepaper industry experienced an extreme “cooling off” period, which began in June and continued throughout the end of the year. The reasons for the fall in paper prices in the second half of 2000 included increased collection, weak export demand from Asia, and weak demand from U.S. mills. Prior to this period, the wastepaper index had not shown a decline since late 1998, when it occurred in a much less dramatic fashion.

Raw cotton. In the last quarter of 1999, the index for raw cotton had reached its lowest level since November 1986. Prices then rebounded in 2000, rising 30.2 percent for the calendar year. Demand for cotton was heavy by March, because merchants and shippers needed cotton to cover commitments to customers located near the processing facilities. Also adding to higher raw cotton prices was the United States Department of Agriculture forecast of lower world production, higher consumption, and lower stocks for 1999–2000. Many cotton producers abandoned their fields in the last half of the year, due to dry weather throughout the growing season, coupled with poor harvest conditions in the fall.

Selected services industries

Rising prices were observed for the majority of services industries tracked in the PPI. The following indexes rose

Table 6. Percent change in Producer Price Indexes for the net output of selected service industries, 1995-2000

sic code	Industry	1995-96	1996-97	1997-98	1998-99	1999-2000
Distribution						
4011	Railroads, line-haul operating	0.0	1.0	0.5	0.1	1.8
4212	Local trucking without storage .....	.0	.2	1.7	1.1	4.2
4213	Trucking, except local	3.5	2.6	3.4	3.4	6.3
4214	Local trucking with storage .....	.1	.6	.5	.5	1.4
4215	Courier services, except by air	3.0	3.8	4.2	3.4	4.4
4221	Farm product warehousing and storage	-1.5	2.0	.6	5.3	1.6
4222	Refrigerated warehousing and storage .....	.5	.1	.5	1.2	1.7
4225	General warehousing and storage	1.4	.7	2.9	2.6	3.0
4311	United States Postal Service .....	.0	.0	.0	2.2	.0
4412	Deep sea foreign transportation of freight .....	.7	-3.7	4.7	22.9	12.8
4424	Deep sea domestic transportation of freight	1.9	-6	.2	1.2	4.8
4432	Freight transportation on the Great Lakes-St. Lawrence Seaway	1.8	1.4	.8	-1	-1
4449	Water transportation of freight, n.e.c.	-10.1	-4	-2.2	8.1	9.8
4491	Marine cargo handling	1.0	1.2	1.8	1.5	2.6
4492	Tugging and towing services	2.4	2.2	2.8	2.9	4.1
4513	Air courier services	4.6	-3.9	3.1	5.1	8.3
4581	Airports, flying fields, and airport services	3.8	3.0	3.0	3.9	5.8
4612	Crude petroleum pipelines	-12.4	-3.7	1.4	-1.7	6.1
4613	Refined petroleum pipelines .....	.4	1.2	-1.1	.3	1.0
4731	Freight transportation arrangement	2.7	-1.4	-6	-2.8	4.5
5411	Grocery stores	-	-	-	-	4.7
5421	Meat and fish (seafood) markets	-	-	-	-	6.9
5431	Fruit and vegetable market	-	-	-	-	5.2
5441	Candy, nut, and confectionery stores	-	-	-	-	5.0
5461	Retail bakeries	-	-	-	-	1.0
5499	Miscellaneous food stores	-	-	-	-	10.0
5511	New car dealers	-	-	-	-	1.0
Communications						
4812	Wireless telecommunications	-	-	-	-	-6.1
4813	Telephone communications, except radiotelephone	-1	-4	-1.7	-3.0	-1.7
4832	Radio broadcasting	10.8	3.1	.8	7.7	4.9
4841	Cable and other pay television services	5.1	4.7	3.7	3.3	5.7
Real estate						
6512	Operators and lessors of nonresidential buildings	-6	2.2	1.2	5.7	1.3
6531	Real estate agents and managers	-5	1.4	2.6	1.5	4.6
Professional, scientific, and technical						
7311	Advertising agencies	1.7	2.5	1.3	2.8	4.0
8111	Legal services	-	4.1	2.5	2.9	3.9
8711	Engineering design, analysis, and consulting services	-	3.1	2.9	3.1	3.1
8712	Architectural design, analysis, and consulting services	-	3.0	5.3	4.9	2.5
8721	Accounting, auditing, and bookkeeping services	2.8	2.1	3.0	3.5	3.3
Health care						
8011	Offices of physicians .....	.7	1.2	2.6	2.1	1.6
8053	Skilled and intermediate care facilities	5.4	4.2	4.4	4.0	6.3
8062	General medical and surgical hospitals	1.5	.5	1.3	1.8	3.7
8063	Psychiatric hospitals	5.0	-6.7	.5	.9	-6
8069	Specialty hospitals, except psychiatric	2.9	.6	2.3	2.7	2.6
8071	Medical laboratories .....	.2	.9	.2	-8	4.6
8082	Home health care services	-	6.2	.5	4.0	1.0
Other						
4512	Air transportation, scheduled	6.5	.9	2.5	6.7	18.6
4522	Air transportation, nonscheduled	2.2	-1.6	2.6	2.0	8.1
4724	Travel agencies	2.6	1.5	-2.3	.3	14.6
6311	Life insurance carriers	-	-	-	-3	-6
6331	Property and casualty insurance	-	-	-	1.1	1.1
7011	Hotels and motels	4.8	4.1	4.2	2.8	5.7
7349	Building cleaning and maintenance services, n.e.c.	2.0	1.4	1.1	2.6	3.9
7361	Employment agencies	1.8	1.0	2.9	2.2	2.4
7363	Help supply services	1.4	1.8	2.2	1.8	1.2
7372	Prepackaged software	-	-	.9	-2.4	2.4
7513	Truck rental and leasing, without drivers	-8	.5	-9	.3	4.5
7514	Passenger car rental, without drivers	-5.0	13.7	-4.0	3.8	2.8

NOTE: Calculations are based on 12-month change from December to December of indicated years. Dashes indicate index was not used in estimation.

throughout 2000: scheduled air transportation, general medical and surgical hospitals, real estate agents and managers, grocery stores, offices of physicians, skilled and intermediate care facilities, legal services, property and casualty insurance, hotels and motels, nonlocal trucking, and for operators and lessors of nonresidential buildings. On the other hand, price declines were registered for telephone communications (except radiotelephone), life insurance carriers, wireless communications, and psychiatric hospitals. (See table 6.)

During 2000, prices for scheduled air transportation increased 18.6 percent, following a 6.7-percent gain in 1999. The reason for this acceleration can be attributed to strong demand for air travel and the continued dramatic rise in fuel prices. Rising fuel cost, the airlines industry's second largest cost after labor, caused airlines to add a passenger fuel surcharge, especially to discounted domestic fares. The surcharges, however, were beneficial for the airlines because while they were subject to Federal taxes, the airlines did not pay commissions to travel agents on the surcharges.

Among health services in the PPI, the index for general medical and surgical hospitals advanced 3.7 percent in 2000; a year earlier, this index increased only 1.8 percent. Prices for offices and clinics of doctors of medicine decelerated, rising 1.6 percent in 2000 and 2.1 percent a year ago. Prices for pediatricians and general surgeons rose the most rapidly among single specialty practices. By contrast, the index for general practitioners and internal medicine specialists increased but at a slower pace in 2000. Prices for skilled and intermediate care facilities accelerated from a 4.0-percent gain in 1999 to a 6.3-percent rate of increase in 2000. By contrast, the index for psychiatric hospitals fell 0.6 percent, after rising 0.9 percent in 1999.

Introduced in January 2000, producer prices in grocery stores increased 4.7 percent throughout the year. Most of this increase resulted from the influence of higher margins among supermarkets, primarily within the volatile produce and bakery departments. Also helping push up the index for grocery stores were rising margins for convenience food/gasoline stores.

The PPI for property and casualty insurance increased 1.1 percent for year 2000, the same rate as in the prior year. Advancing prices were observed by providers of the following insurance programs: homeowners, commercial auto, commercial multiple peril, inland marine, and worker's compensation. Increasing claims cost for homeowners insurance was a main factor in propelling the overall index for property and casualty insurance. Another factor increasing the homeowners insurance index was the attempt by many insurers to combat catastrophic losses through higher premiums,

especially in catastrophe-prone zones.

For the 12 months ended in December 2000, prices for nonlocal trucking services rose 6.3 percent, following a 3.4-percent increase in 1999. This acceleration can be attributed to continued retail sales growth in the strong U.S. economy, driver shortages, and the rising cost of equipment. Another factor in higher trucking prices came from rising diesel fuel prices, which subsequently led trucking companies to increase their fuel surcharges.

The index for operators and lessors of nonresidential buildings advanced 1.3 percent in 2000, as the economic condition created a good opportunity for new construction. Prices increased in both industrial property and office property. Recent industry analysis, for the third quarter 2000, showed that nationwide vacancy rates had declined and that demand had been strong for office space as the economy grew.⁹

Among other services industries that posted inflation throughout 2000, the index for real estate agents and managers advanced 4.6 percent, following a 1.5-percent gain in 1999. Prices for legal services rose 3.9 percent, after increasing 2.9 percent in the previous year. Finally, the index for hotels and motels exhibited a 5.7-percent gain in 2000, continuing from its upward movement of 2.8 percent a year ago.

In 2000, falling prices were registered for telecommunication services. The index for telecommunications (except radiotelephone) decreased 1.7 percent, following a 3.0-percent decline in 1999. Prices for wireless communications dropped 6.1 percent. Specifically, the price for cellular and other wireless voice grade services decreased 6.3 percent, while paging services fell 4.5 percent. Declining prices for cellular services were the result of increased competition and further development of the wireless telecommunication infrastructure. At the same time, more customers gained greater access and wider utility while using the services. Furthermore, prices fell, as carriers formed strategic alliances with other carriers to eliminate roaming charges and, in many cases, long distance charges.

From December 1999 to December 2000, the index for life insurance carriers decreased 0.6 percent, after falling 0.3 percent a year earlier. The 2000 decline is evidence of continued competition due to the ability of other financial services companies to offer similar services. The majority of the overall decrease for life insurance carriers can be accredited to group life insurance policies, which fell 5.4 percent throughout the year. On the other hand, variable-deferred annuities experienced price gains over 2000 due to increases in overall total returns, although, this increase was not enough to offset the price decline in group life insurance policies. □

Notes

¹ See *Natural Gas Monthly*, (Energy Information Administration, May 2001), Table 9, Underground Natural Gas Storage—All Operators, 1995–2001.

² See *Petroleum Supply Monthly*, (Energy Information Administration, 1984 to present), Table S2, Crude Oil and Disposition; and <http://www.eia.doe.gov/pub/energy/overview/aer1999/txt/aer0514.txt> (visited July 12, 2001).

³ See *Agricultural Outlook*, (USDA Economic Research Service, May 2001), Table 17—Supply and Utilization.

⁴ See *Agricultural Outlook*, (USDA Economic Research Service, May 2001), Table 10—U.S. Meat Supply and Use.

⁵ See *Ward's Automotive Report for 2000, U.S. Light-Vehicle Sales*

by *Ward's Segmentation—December 2000*.

⁶ See David H. Napier, Director, *2000 Year-end Review and 2001 Forecast—An Analysis* (Aerospace Industries Association).

⁷ See *Year 2000 Selected Steel Industry Data* (American Iron and Steel Institute, Steel Works).

⁸ See *Value of Construction Put In Place Press Release* (Census of Construction Industries, December 2000).

⁹ See CB Richard Ellis, *U.S. Vacancy Report, 2nd quarter, 2000*, which notes: “Both office and industrial vacancy rates declined significantly in the second quarter of 2000 reflecting the hot US economy, but it is clear that both markets have an element of ‘phantom or Venture Capital’ absorption.”

Where are you publishing your research?

The *Monthly Labor Review* will consider for publication studies of the labor force, labor-management relations, business conditions, industry productivity, compensation, occupational safety and health, demographic trends, and other economic developments. Papers should be factual and analytical, not polemical in tone.

We prefer (but do not require) submission in the form of an electronic file in Microsoft Word, either on a diskette or as an attachment to e-mail. Please use separate files for the text of the article; the tables; and charts. We also accept hard copies of manuscripts.

Potential articles should be mailed to: Editor-in-Chief, *Monthly Labor Review*, Bureau of Labor Statistics, Washington, DC 20212, or by e-mail to mlr@bls.gov
